Department of Defense

Report to Congress on the Indemnification of Contractors Performing Environmental Restoration

Appendices

Office of the Deputy Under Secretary of Defense
(Environmental Security)

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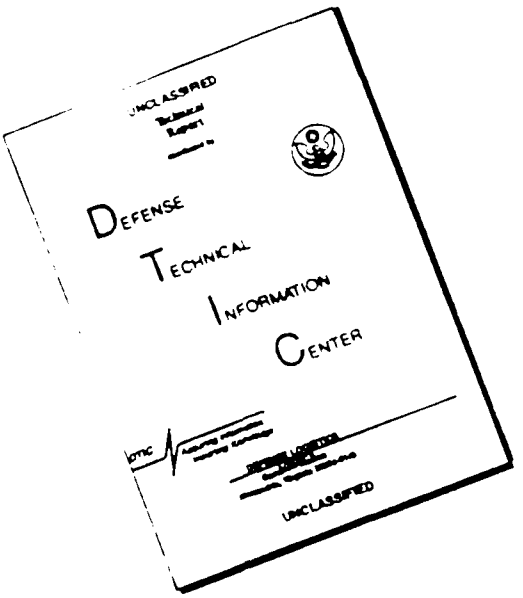

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REPORT to Congress on the Indemnification of Contractors Performing Environmental Restoration

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SEE "EXECUTIVE SUMMARY" in REPORT.

Appendix 1
Material on Indemnification Authorities

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Indemnification of Cleanup Contractors at Federal Facilities

by John F. Seymour*

Estimates of the costs of cleaning up federal facilities are necessarily imprecise. Federal agencies have not yet identified all contaminated facilities or characterized the extent of contamination. Moreover, remediation costs vary greatly depending on the technology employed and the cleanup standard. If regulatory policies require that destructive technologies are used to meet pristine cleanup levels, remediation costs will be far greater than if containment technologies are used to mitigate gross public health threats.

By any estimation, however, the costs of cleaning up contaminated federal facilities will be immense. A recent study by the University of Tennessee Waste Management Research and Education Institute estimated the cleanup program at the Department of Defense (DOD) to cost $30 billion and the Department of Energy (DOE)

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to cost $240 billion.[1/] DOE's most recent estimate of costs for waste management and environmental restoration over the next several decades at its facilities is $50 to $120 billion.[2/]

Most of this remediation work will be performed by private contractors. Historically, federal agencies have used contractors to operate and manage waste activities at federal facilities. This same policy is being applied to cleanup activities. A small cadre of federal employees supervises a much larger group of private contractors to ensure that program goals are met.

The contractor community views federal facility cleanups as a significant growth market through the next several decades. While a few major cleanup contractors (CH2M Hill, NUS, Ebasco, Bechtel, Weston) have dominated the market to date, many other companies are beginning to target defense waste cleanup work. For example, wholly-owned subsidiaries of aerospace

companies such as TRW, Inc., Lockheed Corporation and General Dynamics are beginning to eye the cleanup market and develop subsidiaries to compete for federal facility cleanups. Defense contractors in particular have been hit hard by the current recession and by the defense downsizing. Those firms also view the federal facility cleanup market as a lucrative one that is congruent with their engineering, energy, and environmental expertise.

One major concern of potential participants in federal facility cleanups, however, is their liability for environmental damages arising during the course of work. For example, a contractor conducting remediation activities at a federal facility could be subject to fines and penalties under a variety of federal, state, and local laws for violating solid waste management, air, or water requirements during the course of the work. A contractor could also be subject to federal or state orders compelling the cleanup of property,

including government property, contaminated during the course of work. A contractor could also be held liable for the costs of remediating sites to which hazardous substances generated by the contractor were transported for treatment, storage or disposal. Finally, a contractor can be held liable for damages to third parties under a variety of traditional tort theories, including strict liability, trespass, nuisance, and negligence, for personal injury or property damage occurring during the course of work.

To date, few claims have been brought against cleanup contractors at federal facilities. However, the lack of damage suits to date may be largely attributable to the glacial pace of the federal cleanup program. Relatively few cleanups have been conducted to date, with the bulk of activities devoted to low-risk activities such as site assessment. When remedial work is actually conducted, lawsuits based upon defective designs, improper technologies, and poor construction

techniques are expected to become more common. And even if they remain rare, the amount of a single judgment may be so high as to bankrupt many contractors. Because of the immense scope and unpredictable nature of environmental liability, prospective contractors are beginning to assess carefully the risks of entering into government contracts and to weigh those risks against the benefits of participating in what is perceived to be a profitable industry through the early part of the next century.

Traditionally, companies relied on commercial liability insurance to offset contingent liabilities, including environmental harms. Insurance costs, in turn, were typically reimbursed under government contracts. During the 1980's, however, commercial insurance for pollution damage became prohibitively expensive -- where it was available at all. Where available, the insurance was typically a claims-made policy reimbursing for claims arising during the contract

period. For pollution claims, which often arise decades after the contract has expired, readily available insurance provided little protection.

In response to contractor concerns about liability and warnings that qualified, solvent contractors would not bid on contracts that carried the potential for significant uninsured losses, federal agencies and Congress developed several mechanisms to reduce, if not eliminate, the risks faced by government contractors.

1. Superfund Section 119 Indemnification. During the 1986 reauthorization of Superfund, the contracting community sought indemnification from Congress for damages arising from their work performing remediations under the statute. They contended that the unavailability of insurance would cause prudent qualified contractors to withdraw from the cleanup program, and that the government should protect contractors from catastrophic losses arising from Superfund cleanups. While contractors had been receiving some

protection through indemnification agreements with EPA, they were concerned with the absence of express statutory authority for the grant of indemnification. They were also concerned that the Anti-Deficiency Act,[3/] which prohibits a federal agency from contractually obligating the government to pay amounts which are not appropriated, would bar some claims.

In response to these concerns, Congress enacted Section 119 of CERCLA. Section 119 exempts cleanup contractors entirely from liability under all federal laws for injuries, costs or other damage with respect to a release of hazardous substances, except where the contractor is negligent or engages in intentional misconduct. Thus, after enactment of Section 119, contractors are not exposed to strict liability for violations of federal laws such as CERCLA, RCRA, or other statutes occurring during the course of work under Superfund. Moreover, Congress made clear that Section 119 indemnifications were not subject to the

Anti-Deficiency Act and that payments would be made from the Superfund.

Section 119 also provided EPA and other federal agencies with discretionary authority to indemnify contractors against liabilities for environmental damage arising out of contractor negligence. Contractors would, however, remain liable for damages arising from their gross negligence or intentional misconduct. Moreover, Congress elected not to disturb states' strict liability statutes, and refused to insulate federal cleanup contractors from strict liability under state law.

The discretionary indemnification is qualified in various respects. It can be granted only if the contractor has made a diligent effort to obtain insurance and found that the insurance is unavailable, inadequate, or unreasonably priced. In addition, EPA is authorized to establish limits on the amount of indemnification offered, deductibles, and limits on the

term of coverage. EPA has not yet issued regulations implementing Section 119, although it has proposed guidelines that should be issued in final form shortly.[4/] The issues underlying the scope of Section 119 indemnification (limits on coverage, deductibles, coverage for mixed strict liability/negligence actions, proof of insurance unavailability) proved so contentious that EPA hired a private "facilitator" -- Endispute -- to help it evaluate the concerns of affected parties.[5/]

One significant limitation on the availability of Section 119 indemnification -- particularly for federal facilities -- arises from the statute's definition of "response action contractor." Section 119 indemnification is limited to "response action contractors." Such contractors are defined as parties that enter into a response action contract for the cleanup of a site on the National Priorities List (NPL), or a removal action site. Since few federal facilities are

listed on the NPL and most federal cleanups are undertaken as remedial actions rather than removals, most cleanup contractors will be ineligible for Section 119 indemnification.

Even where cleanups are being conducted at NPL or removal action sites, federal facilities have been reluctant to use Superfund indemnification. In fact, the GAO concluded in 1989 that no federal agencies other than EPA were using Section 119 indemnification for their cleanup contractors. Rather, federal agencies were indemnifying their response action contractors using indemnification provisions in other laws or in general procurement regulations.[6/]

However, it is unclear whether federal agencies are authorized to use indemnifications other than Section 119 indemnification for cleanups conducted under their CERCLA authority. In EPA's most recent policy on indemnification of Superfund contractors, EPA stated that no indemnification other than Section 119

indemnification could be used by EPA to protect response action contractors.[7/] EPA concluded that CERCLA Section 119 is the sole authority Congress provided for CERCLA indemnifications and that other statutory indemnifications or the use of agencies' general procurement authorities is impermissible.

EPA stated further that federal agencies that indemnify response action contractors under CERCLA authority must ensure that their indemnifications are not inconsistent with EPA guidelines. In support of this assertion, EPA referred to CERCLA Section 120(a)(2) which provides generally that all rules, guidelines and criteria established by EPA under CERCLA also apply to federal agency cleanups.

The GAO has agreed that Section 119 authority must be used by other federal agencies to indemnify contractors cleaning up federal facilities under CERCLA. According to the GAO, the specific indemnification authority provided in CERCLA, with the

conditions and limitations stipulated by Congress, supersedes any general indemnification authority under which federal agencies might previously have acted.[8/]

Nevertheless, it appears likely that federal agencies will contest the EPA and GAO view of their indemnification authority. Federal agencies have found other contract authority more flexible and more familiar, and have typically used these authorities to indemnify cleanup contractors -- including response action contractors under Superfund. Moreover, there is no suggestion in SARA's text or legislative history that Congress intended the provisions of Section 119 to be exclusive. It is a fundamental rule of statutory construction that statutes should be reconciled to the extent possible and that where two provisions are capable of coexistence, each must be regarded as effective.[9/] Thus, federal agencies may maintain that they may choose among available sources of

indemnification, and use the one that best addresses the risks at issue.

Finally, while it may make sense for EPA's indemnification authority to be limited to CERCLA Section 119, it does not necessarily follow that the authority of other agencies should be so limited. EPA is always an innocent party with respect to a cleanup. It is not a potentially responsible party and had no role in creating the contamination. On the other hand, federal agencies are potentially responsible parties and caused or were responsible for the contamination at issue. Thus, the appropriate level of risk-sharing may be very different for contractors working for EPA and those working for other federal facilities.

Thomas Baca, the Deputy Assistant Secretary of Defense for Environment, recognized this point in testimony before the House Armed Services Committee's Defense Environmental Restoration Panel. He acknowledged that with respect to contractor cleanups at

federal facilities, "we are not talking about an independent contractor disposing of its own waste, but more an agent of the government dealing with DOD waste, at DOD locations under DOD control. Because of this different situation from EPA, we did not believe that the original EPA formula for Section 119 indemnification was appropriate for our needs. It may well be necessary, because of our unique circumstances, to adopt risk-sharing mechanisms outside of [Section 119]."[10/]

2. Pub. L. 85-804 Indemnity. Another type of indemnity available to government contractors is found under the National Defense Contracts Act, Pub. L. 85-804.[11/] The statutory authorization under the Act provides for the broadest contractual indemnity permissible under federal law, and because it would largely eliminate the risks faced by contractors, has taken on almost mythic proportions. Indeed, Pub. L. 85-804 indemnification has the essential elements of myth --

it is extremely powerful and, at least with respect to cleanup contracts, there is substantial doubt as to its existence.

Executive Order 10789 implementing Pub. L. 85-804 permits the President to authorize any department or agency of the government which exercises functions in connection with the national defense, to enter into contracts whenever the agency deems such action would facilitate the national defense. Unlike most other indemnifications, Pub. L. 85-804 is not subject to the availability of appropriated funds, provided the losses arise out of risks that the agency determines are unusually hazardous or nuclear in nature.

Pub. L. 85-804 indemnification must be approved in advance by an official at the level of the Secretary of the military department, and any contractual provision may require the indemnified contractor to provide financial protection of a type and in an amount determined to be appropriate by the agency. In

making that determination, the official is to take into account the availability, costs and terms of private insurance, self-insurance, and other proof of financial responsibility.

The contractual indemnification itself is very broad and applies to any losses not compensated by insurance, including (a) reasonable expenses of litigation and settlement; (b) third-party claims for death, personal injury or property damage; (c) loss or damage to the property of the contractor; (d) loss to or damage to government property; and (e) claims arising from indemnification agreements between the contractor and its subcontractors. The indemnification agreement between the United States and the contractor will not, however, cover claims or losses caused by willful misconduct or lack of good faith on the part of the contractors' directors or officers.

Very few indemnifications have been granted under Pub. L. 85-804 for any purpose, and the grant of

85-804 indemnification to cleanup contractors is virtually unprecedented. However, there is some evidence that agencies are beginning to use this broad and flexible tool in the context of cleanup contracts. EG&G recently received this indemnification from DOE for non-nuclear environmental risks arising out of its activities at DOE's Rocky Flats plant. Similarly, the Secretary of the Army recently authorized broad Pub. L. 85-804 indemnity for ammunition plant contracts at government-owned-contractor-operated (GOCO) facilities to protect the operating contractors against environmental liabilities.

The increased willingness of federal agencies to use Pub. L. 85-804 indemnification for defense and energy cleanup work has not gone unnoticed. For example, Congressman John Dingell, Chairman of the House Energy and Commerce Committee, rather pointedly criticized DOE's grant of this indemnification for work to be performed at Rocky Flats stating that he was unaware

that DOE cleanups involved a necessary function to facilitate the prosecution of war, as required under Pub. L. 85-804. Nevertheless, it is unclear whether Pub. L. indemnification was intended to be so narrowly confined. In fact, most agencies -- including many with no direct connection with defense activities -- can grant Pub. L. 85-804 indemnification.

The Government Printing Office, Tennessee Valley Authority, General Services Administration, Department of Commerce, and numerous other federal agencies are authorized to grant this indemnification. Indemnity clauses are regularly used in the contracts of the National Aeronautic and Space Administration (NASA) that may potentially involve unusually hazardous risks. Indemnification covers both commercial and defense activities of the government.

Similarly, Pub. L. 85-804 indemnification has been granted by the Federal Aviation Administration (FAA) in its contracts to reprogram computers used by

air traffic controllers. The memorandum decision underlying the authorization for indemnities recognized the potential for major liability arising out of aviation accidents, and acknowledged that the contract would not be undertaken unless indemnity were provided. The FAA's memorandum of decision simply includes a finding that the project to reprogram computers for civil aviation would advance national defense functions. However, the relationship between civil aviation software and defense activities appears more tenuous than the relationship between environmental restoration activities and the national defense.

Federal agencies have historically used considerable discretion and flexibility in determining whether a particular indemnification would advance the national defense, and would address unusually hazardous risks. With respect to federal facility cleanup activities, it seems likely that granting of 85-804 indemnification would be proper. The cleanup of Fernald,

Savannah River, Rocky Flats, and other operating nuclear weapons plants furthers the national defense by improving the facilities and their effectiveness in defense production activities, ensuring compliance with ongoing environmental laws, and re-instilling public trust in defense activities generally. Cleanup activities appear reasonably related to military operations and defense readiness, and activities taken in support of those functions would appear to "facilitate the national defense."

With respect to the nature of the hazard, it seems clear that cleanup activities involve unusually hazardous or nuclear risks. The Senate Report on Pub. L. 85-804 underscored that government contracts may involve "a substantial element of risk, giving rise to the possibility of an enormous amount of claims. It is, therefore, the position of military departments that to the extent that commercial insurance is unavailable, the risk in such a case should be borne by

the United States."[12/] In its annual reports to Congress on contract actions taken pursuant to Pub. L. 85-804, DOD has repeatedly emphasized that indemnifications may be used in cases of claims for injury or property damage arising from such high-risk activities as "performance in hazardous areas."[13/]

It seems likely that federal facility cleanups meet the criteria of unusually hazardous risks as contemplated by Congress. DOD and DOE facilities, particularly those listed on the NPL, are among the most heavily contaminated facilities in the country. Cleanup activities present the risk of harm to workers at the plant, and residents near the plant. In the event of a release, the potential claimants could be numerous, and the potential damages catastrophic and in excess of any reasonably obtainable insurance limits. In addition, claims could arise for years after the activity is completed.

Thus, Pub. L. 85-804 indemnification -- which is not limited in time or by available appropriations -- appears appropriate to cover cleanup risks. The recent DOD and DOE initiatives to grant this indemnification may signal their recognition that it provides a flexible approach to protect cleanup contractors from the risks of liability arising under remediation contracts.

3. Third-Party Liability Clause. Perhaps the most common contractual device used by agencies to protect contractors from liability is not a statutory indemnification, but simply a common provision found in the Federal Acquisition Regulations. In cost-reimbursement contracts, the government ordinarily agrees to reimburse the contractor for certain third-party liabilities. The "Insurance-Liability to Third Persons" clause used in cost-reimbursement contracts provides that the contractor will be reimbursed for uninsured liabilities to third parties.[14/]

In general, the clause provides that the contractor shall be reimbursed for liabilities to third parties for loss of or damage to property or for death or bodily injury not compensated by insurance arising out of the performance of the contract, whether or not caused by the negligence of the contractor. Both DOE and DOD frequently use this clause to provide protection to their cleanup contractors. However, as noted below, this clause does not protect cleanup contractors from all risks of loss.

This clause encompasses claims by private parties against the contractor under traditional tort theories, such as trespass, nuisance, strict liability, and negligence for property damage and personal injury suffered by the claimant. Thus, a contractor would be reimbursed for liabilities associated with claims brought by neighbors whose properties are polluted because of air or groundwater contamination caused by the contractor's activities. This clause would also

reimburse the contractor for injuries to its employees, above workers' compensation, arising from performance of the contract. The clause applies even if damages are caused by the negligence of the contractor.[15/]

However, coverage is limited in other respects. The Third-Party Liability clause does not reimburse the contractor for fines and penalties. Second, the Third-Party Liability clause excludes recovery of amounts for which appropriated funds are not available. As noted earlier, the Anti-Deficiency Act prohibits a federal agency from contractually obligating the government to pay amounts which exceed available appropriations. The Comptroller General has held that an indemnity provision which subjects the government to indefinite and uncertain liabilities violates this Act.[16/] Thus, the liability clause excludes recovery of amounts for which appropriated funds are not available.

Third, a contractor that has completed performance and claims indemnification under this contract clause could face the argument that it was released from its indemnification obligation. The "allowable cost and payment" clause in cost-reimbursement contracts requires the contractor to execute a release discharging the government from all liabilities and claims, with certain specified exceptions. Claims that are not known to the contractor are excepted for a six-year period.[17/]

Under this clause, then, the contractor would not be able to recover costs arising from any liabilities known at the time of the release unless such liabilities have been specifically excepted from the release. To be effective, an exception must be specific as to substance and amount and cannot be vague and general. More important, the contractor will only be able to recover for liabilities which were unknown at the time of the release if proper notice of such

liabilities is given within six years after the release or final payment, whichever is earlier. The six-year time limit is particularly important in light of the delays associated with the development of many illnesses related to exposure to hazardous substances.

Because some losses may not become manifest for 20-30 years after the end of the contract, the contractor's right to reimbursement under the liability clause may be extinguished before a third-party manifests an illness attributable to exposure during contract performance. The six-year limit might also preclude a contractor from recovering losses arising from cleanup costs imposed by third parties, since environmental contamination may not become evident until decades after the work is completed.

Fourth, the third-party liability clause contains an exclusion for liabilities for which the contractor is otherwise responsible under the express terms of the contract. Both DOD and DOE cleanup

contracts often include provisions, tasks, or specifications that expressly place responsibility for some matters -- including environmental compliance -- on the contractor, and thus fall outside the scope of the third-party liability clause.

Fifth, the liability clause is limited to "third-party" claims. One significant potential liability faced by contractors engaged in decontamination activities at federal facilities is not from traditional third-party tort claims, but liability for claims asserted by public entities, such as local, state and federal entities for cleanup of contamination caused or aggravated by the contractor.

It is unclear whether claims by regulatory entities would be considered third-party claims. Although claims brought by state regulatory entities to compel cleanup of property presumably would be viewed as third party claims, it is questionable whether cleanup orders brought by federal entities such as EPA

or DOE would be "third-party" claims subject to reimbursement.

Finally, the clause will only reimburse a contractor for liabilities to third parties for loss of or damage to property. Even if a government agency is viewed as a third-party, it is unclear whether a suit for damages or injunctive relief to require the contractor to clean up property contaminated during the course of work would constitute liability for loss of or damage to property. Some courts might rule, as they have in the context of CERCLA damages, that cleanup costs are not property damages. For example, the courts currently disagree whether cleanup costs constitute damages within the meaning of a liability insurance policy requiring the insurer to pay damages that the insured becomes legally obligated to pay because of property damage.[18/] The principles underlying this controversy may resurface in the context of the third-party liability clause.

4. Nuclear Hazards Indemnity (Price-Anderson Act). Contractors and subcontractors working for DOE are provided broad statutory protection from losses caused by nuclear hazards. The Price-Anderson Amendments of 1988 requires that DOE enter into agreements of indemnification with any person who may conduct activities under a contract with the Agency that involves the risk of public liability.[19/] The term "public liability" is defined broadly by the Act to mean any legal liability arising out of or resulting from a nuclear incident, excluding workmen's compensation claims and certain other risks.

The term "nuclear incident" is defined by the Act to mean any occurrence causing bodily injury, sickness, disease or death, or loss of or damage to property, or loss of use of property arising out of or resulting from the radioactive, toxic, explosive or other hazardous properties of "source," "special nuclear," or "by-product material." These materials

are, in turn, defined by the Atomic Energy Act.[20/] In general, they include nuclear materials used, produced, or made radioactive through nuclear fission.

DOE contractor and subcontractors are indemnified for all legal liability arising out of a contract activity, without any deductible, shared liability, or other condition on recovery. Indemnification extends to all losses, including those arising from innocent non-negligent acts, as well as negligence and willful or intentional acts. Legal costs are included in the amount of indemnification. Finally, the indemnification is not affected by the completion, termination, or expiration of the contract, and indemnification will extend through any period in which a claim can be brought. The cap on a nuclear incident involving commercial plants and DOE facilities is approximately $7 billion.

Price-Anderson

The principal limitation on a contractor's right to recover under the Price-Anderson

indemnification is the requirement that liability must arise out of or result from a nuclear incident. Thus, the applicability of Price-Anderson to waste cleanup activities depends on the event that gives rise to liability. Damages caused by radioactive materials fall fully within Price-Anderson indemnification. If a release of radioactive material causes personal injury or property damage, Price-Anderson applies. Damages that do not arise from radioactive materials are not covered by the indemnification.

Damages arising from environmental contamination caused by a release of mixed hazardous and radioactive materials present a more complicated scenario. Logically, Price-Anderson indemnification should extend to the damage and loss caused by the radioactive material component of the mix. However, statutory treatment becomes less certain where there is a common radioactive/non-radioactive cause. Where there is a release of mixed waste (e.g., radiologically

contaminated metals), damages due to the radiological element probably would be covered while damages due to the non-radiological component would not (assuming that damages can be distinguished). Since there has not yet been a DOE contractor Price-Anderson claim related to waste activities, these mixed waste scenarios have not been tested in courts, nor has DOE addressed these issues in formal guidance.

The scope of the Price-Anderson indemnification is ambiguous in two other respects. First, while Price-Anderson indemnification clearly applies to tort injuries arising from a nuclear incident such as personal injury and property damage, it is not clear whether it indemnifies DOE contractors for environmental cleanup costs. The broad definition of "public liability" in the statute would appear to include cleanup costs. Cleanup costs arguably would be public liability arising out of a nuclear incident that causes damage to or loss of property. Moreover, the

indemnification for DOE contractors expressly includes damage to property at the site. Finally, the apparent legislative intent to indemnify contractors broadly for all nuclear risks incurred during contract activities on behalf of DOE suggests that such liabilities are covered.

Nevertheless, the issue remains unclear. The Act and its legislative history appear to be directed toward indemnifying contractors for common law tort liability, and not liability arising from environmental remediation suits asserted by state and federal agencies. Moreover, the indemnification for damage to government property does not clearly apply to environmental costs such as soil and groundwater contamination. DOE has not addressed this issue in an order or general guidance although it is apparently DOE policy that cleanup costs are not addressed by Price-Anderson indemnification.[21/]

The same uncertainty surrounds fines and penalties. It is uncertain whether fines and penalties arising from a nuclear incident fall within the scope of Price-Anderson. While it is clear that Price-Anderson indemnification does not cover civil and criminal penalties arising from violations of nuclear safety rules, it is unclear whether other fines and penalties that may be levied by state or federal agencies would be considered public liability within the scope of Price-Anderson. Again, DOE has not addressed this issue in any guidance, although DOE's general policy appears to be that indemnification for fines and penalties is contrary to public policy. Instead, DOE appears to address fines and penalties within its rules governing allowable costs. These rules generally make fines and penalties unallowable unless the acts giving rise to them resulted from a term or condition of the contract, or were performed at the direction of the contracting officer. FAR § 31.205-15.

5. Environmental Restoration Management Contractor. Recently, DOE established a new category of environmental restoration management contracts (ERMC) to oversee remediations at its facilities. ERMCs are management-only contractors working with DOE under cost-reimbursement plus award fee contracts. The first ERMC has been proposed for the Feed Materials Production Center (FMPC) near Fernald, Ohio. The contractor will be responsible for management of assessment and remediation tasks, as well as radioactive decontamination and decommissioning.[22/] This contract is expected to play an important role in setting standards and requirements that must be met by future DOE cleanup contractors.

The request for proposal for the ERMC at Fernald includes a variety of mechanisms that limit a contractor's environmental liability. First, the contract responds to longstanding contractor requests for protection from preexisting contamination by

indemnifying the contractor from all liability (including penalties and strict liability suits) arising from acts or failures to act on the part of any person which occurred before the contractor assumes responsibility for the site. To the extent that acts or omissions of the contractor cause any fine or add to the amount of any fine or penalty that resulted from preexisting conditions, the contractor will be responsible. In addition, the contract incorporates the Price-Anderson indemnification. DOE agreed to indemnify the contractor from all public liability arising out of activities under the contract.

The contract does, however, identify certain unallowable environmental costs. In general, environmental costs incurred by the contractor to remedy damage caused by the contractor's activity or inactivity, or for which it has been administratively or judicially determined to be liable, are presumed to be unallowable if DOE was not responsible for the damage. For such

costs to be considered allowable, the contractor must demonstrate that it was performing the contract at the time the conditions requiring cleanup were created and performance of the contract contributed to the creation of the conditions requiring cleanup; that it was conducting its activities prudently and in accordance with appropriate environmental laws; and that it acted promptly and reasonably to prevent and minimize the damage and costs associated with the damage.

Similarly, the contract identifies certain "avoidable" costs which are also unallowable under the contract. For example, avoidable costs include direct costs that are incurred by the contractor without any fault of DOE, exclusively as a result of the contractor's negligence or willful misconduct. Similarly, avoidable costs include losses resulting from damage to, destruction of or loss of government property as a result of contractor negligence or willful misconduct. Such costs must arise from work clearly within the

contractor's sole and exclusive control and result from acts which the contractor could have avoided through the exercise of reasonable care.

Finally, avoidable costs also include certain unallowable environmental costs. Such costs are avoidable when the work is clearly within the sole and exclusive control of the contractor; the increased costs or expenses result from the negligence or willful misconduct of the contractor; and DOE is not responsible in any way for the act or omission which resulted in the additional cost.

While the avoidable and unallowable cost provisions would appear to expose contractors to substantial risk in the event that they deviate from the standard of care which a reasonable contractor would exercise, the contractors' potential financial losses are capped in the contract. Borrowing from a concept from its accountability rule for management and operating (M&O) contractors, DOE decided to place a ceiling on

ERMC's environmental liabilities. The government has limited a contractor's liability for avoidable environmental costs to the amount of the actual award fee earned and the actual basic fee earned under the contract (or the amount of six months of fixed fees in the case of a cost-plus fixed-fee contract) in the evaluation period when the event or events which lead to the imposition of the costs of liabilities occurred. Avoidable costs will first be taken from the award fee and if avoidable costs surpass the award fee, the balance will be deducted from the basic fee.

The Fernald proposal does not provide a rationale for its limitation on liability. However, the structure of the proposal closely resembles DOE's final accountability rule for its M&O contractors. In that rule, DOE also capped the total liability of its contractors, explaining that an indefinite or incalculable exposure would discourage contractors from

undertaking such work.[23/] The ERMC proposal appears to reflect this same concern.

Conclusion

Cleanup contractors view federal facility work as a lucrative growth market but one that carries significant risk. Sites may contain radioactive, chemical and mixed waste that present a significant public health threat. The technologies of hazardous waste remediation are new and evolving. They do not always work and are always subject to second-guessing.

The inherently risky nature of the work is compounded by expansive theories of environmental liability. Under strict joint and several principles, contractors can find themselves liable for all costs arising from environmental contamination, irrespective of the reasonableness of the initial activity. Contractors are often attractive targets of suits because they are solvent and because the federal government

routinely raises claims of sovereign immunity or other defenses to suits.

EPA and federal agencies are struggling to find an appropriate formula to ensure contractor accountability and careful performance, yet also protect the contractor from catastrophic liability.[24/] The parties recognize that existing generic indemnifications are flawed or incomplete and that specially tailored contract provisions which provide a mix of indemnifications, insurance, award fee incentives and allowable cost rules are often appropriate to address environmental liabilities at a site. The new DOE ERMC contract provision (like its predecessor M&O contract provisions) represents the most recent approach to this problem. While it displeases some contractors (who prefer broad Pub. L. 85-804 protection) and Congressional critics (who

prefer CERCLA Section 119 with its attendant limits), it represents the most refined attempt to achieve this balance between accountability and limited liability.

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FOOTNOTES

1/ University of Tennessee Waste Management Research and Education Institute, Hazardous Waste Remediation: The Task Ahead (Dec. 1991).

2/ DOE, Environmental Restoration and Waste Management Five-Year Plan, 60-61 (Aug. 1991).

3/ 31 U.S.C. §§ 1341-1342.

4/ EPA's initial proposed guidelines did not please the contracting community. Coverage was limited to 10 years and a sliding scale of deductibles was imposed. A $10,000 occurrence deductible would buy $1 million in coverage and a $3.5 million deductible would buy the maximum coverage of $50 million. EPA, Proposed Policy on Indemnification of Superfund Contractors, 54 Fed. Reg. 46012 (Oct. 31, 1989).

5/ EPA, Report on the Results of the EPA-Sponsored Consultative Process on the Proposed Guidance for Section 119 of CERCLA, As Amended (Feb. 1991).

6/ United States Government Accounting Office: Superfund: Contractors Are Being Too Liberally Indemnified By The Government (GAO Report) (Sept. 19, 1989).

7/ EPA, Proposed Policy on Indemnification of Superfund Contractors, 54 Fed. Reg. 46,022 (Oct. 31, 1989).

8/ GAO Report at 25-26.

9/ Watt v. Alaska, 451 U.S. 259 (1981); Nevada v. Watkins, 914 F.2d 1545 (9th Cir. 1990).

10/ Testimony of Thomas E. Baca, Deputy Assistant Secretary of Defense for Environment, before the

Footnote continued on next page.

Footnote continued from previous page.

House Arms Services Committee Defense Environmental Restoration Panel (April 24, 1991).

11/ 50 U.S.C. §§ 1431-1435.

12/ Senate Rep. No. 2281, 85th Cong. 2d Sess. 2 (1958).

13/ DOD Annual Report to Congress on Extraordinary Relief Under Pub. L. 85-804 (1990).

14/ FAR § 52.228-7. "Government Property" and "Liability for the Facilities" clauses also provide contractual remedies for some cleanup costs. FAR § 52.245-5(g)(6); 52.245-8(g). However, recovery under these clauses implicates many of the same problems discussed in this section.

15/ While the liability clause provides a basis for the recovery of losses caused by the negligence of any subcontractor employee, or the willful misconduct of low-level employees, liability resulting from "bad faith" or "willful misconduct" of management personnel is expressly excluded. The Board of Contract Appeals in McDonnell-Douglas Corporation, 68-1 B.C.A. (CCH) ¶ 7021 at 32,445 (April 25, 1968), held that "willful misconduct" describes more than gross negligence and requires conscious, knowing disregard of an unreasonable risk.

16/ See Assumption by Government of Contractor Liability to Third Persons-Reconsideration, B-201072, 62 Comp. Gen. 361 (1983).

17/ FAR Section 52.216-7.

18/ See Continental Insurance Companies v. NEPACCO, 842 F.2d 977 (8th Cir.), cert. denied, 109 U.S. 66 (1988).

19/ 42 U.S.C. § 2210(d). DOE also has non-statutory general contract authority to indemnify contractors against liability for uninsured non-nuclear risks. 48 C.F.R. § 950.7011(c). DOE's regulations extend protection for non-nuclear risks through the "Litigation and Claims" clause in 48 C.F.R. § 970.5204-31. This indemnity is, however, subject to the availability of appropriated funds.

20/ 42 U.S.C. § 2014(2) (source material); 42 U.S.C. § 2014(e) (by-product material).

21/ Conversation with Benjamin McCrae of the DOE Office of General Counsel.

22/ DOE, Request for Proposal for Environmental Restoration Management Contractor for the Fernald Environmental Management Project (Dec. 23, 1991).

23/ 56 Fed. Reg. 5068 (Feb. 7, 1991).

24/ DOD has been trying for several years to draft a government-wide cost principle that would identify the circumstances under which contractors could recover environmental costs. A proposed FAR provision has proven controversial and has been withdrawn several times for redrafting.

Congress of the United States
House of Representatives
Washington, DC 20515

September 15, 1992

The Honorable Les Aspin
Chairman
Committee on Armed Services
U.S. House of Representatives
2120 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Sections 313 and 319 of S. 3114, the National Defense Authorization Act for Fiscal Year 1993, would overturn existing law and policies concerning indemnification of Superfund contractors at Department of Defense (DOD) installations. We strongly oppose this unwise attempt to protect contractors at the expense of the taxpayers through unwarranted, expanded indemnification.

Section 313 would grant to DOD contractors performing routine cleanups the extremely generous indemnification historically reserved for national defense efforts. Under Section 313(a), "[e]nvironmental restoration activities at military installations and former military installations shall be deemed to be functions that facilitate the national defense under the provisions of Public Law 85-804 (50 U.S.C. 1431)."

According to a recent legal analysis completed by the Congressional Research Service (CRS), the legislative history of Public Law 85-804 indicates that the exceptional protection it provides was limited to "contracts for products and services clearly linked to national defense." (See enclosure) The CRS legal analysis finds that "Public Law 85-804 does not extend to indemnification of hazardous-waste cleanup contractors where the only nexus between cleanup and the national defense is that the contamination was caused by a defense-related activity, or occurs at a defense-related facility." The legal memorandum concludes that "Public Law 85-804 . . . falls short of reaching contractor indemnification in the usual case."

Neither the Senate Armed Services Committee nor the contracting community has provided a compelling justification for the expansion of this extraordinary, existing authority to cover environmental restoration activities at current and former DOD

installations. Indeed, at the vast majority of these installations, the environmental contamination problems are similar to typical Superfund sites.

We also fear that extending the indemnification authority of Public Law 85-804 to DOD's environmental restoration activities may in fact jeopardize national security. According to Senate Armed Services Committee staff and the DOD's Office of General Counsel, any money needed to pay liability claims lodged under Section 313 would come from the DOD's regular appropriations. Should liability claims reach extreme levels, we are concerned that the DOD's own programs will be threatened. Since the DOD is already cutting back its programs, it can ill afford to use dollars meant for scaled-down programs to pay for liability claims under Section 313.

Given the hundreds of current and former military bases covered by this legislation, there are potentially hundreds of millions of dollars at stake. We fear that expansion of contractor indemnification under Section 313 may create liabilities which will explode in future years like the savings and loan debacle. The DOD's use of this approach would be tantamount to handing someone a credit card with no limits and worrying later if money will be available to pay the bills. The Federal Treasury cannot afford unlimited indemnification for liability from waste cleanups.

Our concerns are compounded by the findings of a recent General Accounting Office (GAO) report to the House Committee on Government Operations. ("DOD Environmental Cleanup: Information on Contractor Cleanup Costs and DOD Reimbursements," NSIAD-92-253FS). This report and recent news articles have revealed that some of the very same contractors who are seeking legislation to escape liability for future misconduct already have shifted to the taxpayers the financial burden of their past activities. For example, Lockheed Corporation has been cited in industry lobbying papers as a major "endorser" of industry efforts to expand indemnification of DOD contractors. At the same time, according to a recent article in The Wall Street Journal, Lockheed Corporation officials have stated that they expect to obtain reimbursement of $127 million in Superfund liability costs from the Defense Department for the cleanup of a single production facility alone in Burbank, California. ("Special Invoice: Why Pollution Costs of Defense Contractors Get Paid by Taxpayers," Bill Richards and Andy Pasztor, The Wall Street Journal, August 31, 1992, A1).

In addition, Section 313 of the Senate bill would overturn the existing statutory framework for indemnification, and would eliminate virtually all of the critical safeguards contained in the Superfund Amendments and Reauthorization Act of 1986 (Sections 119, 120 and 211). These provisions authorize indemnification of contractors against claims that they conducted

their cleanup activities negligently. However, these 1986 amendments also sought to assure contractor accountability by prohibiting indemnification of gross negligence or willful misconduct, requiring the payment of deductibles, and by specifying limits on indemnification.

In contrast, the Senate provision fails to clearly prohibit the indemnification of contractors against gross negligence and willful misconduct. Moreover, Section 313 fails to require the imposition of any deductibles or limits on indemnification. This "open checkbook" approach eliminates crucial incentives that encourage contractors to conduct their environmental cleanup activities in a responsible manner. In its October 1991 report to the Congress, the Environmental Restoration Task Force stated that "[u]nder no circumstances should it [DOD] indemnify contractors above the standard provided in Section 119" of the Superfund law.

According to the Senate report, Section 313 is intended to assure that experienced contractors have sufficient financial incentives to bid on environmental restoration work. However, the DOD itself has stated that it has no demonstrated need for this new indemnification authority. In fact, on March 10, 1992, Mr. Thomas E. Baca, Deputy Assistant Secretary of Defense (Environment), testified before your Committee's Defense Environmental Restoration Panel that "the military departments have not had a problem in obtaining qualified contractors to do the [cleanup] work." To ascertain whether such a problem actually exists, the DOD has announced its intent to undertake a pilot test through its contracting center at Brooks Air Force Base. This pilot test is designed to determine whether the absence of indemnification actually does affect the willingness of contractors to bid for government contracts. In light of this planned pilot test, the enactment of any broad, new indemnification authority at this time is certainly premature.

We also have concerns about Section 319 of the Senate bill, which extends the indemnification authority historically reserved for research and development work to the DOD's environmental restoration activities. This provision would achieve the same basic result as Section 313 -- it would open the door to widespread abuse and subvert the existing statutory framework.

In closing, we note that the House of Representatives, in its version of the defense authorization bill, has chosen wisely to rely on the indemnification provisions of existing law. For all of the reasons cited above, we urge you to support the position of your Committee and the House by opposing Sections 313 and 319 of S. 3114 during any upcoming conferences on the DOD authorization bill for Fiscal Year 1993.

Sincerely,

John D. Dingell
Chairman
Committee on
Energy and Commerce

John Conyers, Jr.
Chairman
Committee on
Government Operations

George E. Brown, Jr.
Chairman
Committee on Science, Space,
and Technology

Mike Synar
Chairman
Subcommittee on Environment,
Energy, and Natural Resources
Committee on
Government Operations

Al Swift
Chairman
Subcommittee on Transportation
and Hazardous Materials
Committee on
Energy and Commerce

Robert E. Wise, Jr.
Chairman
Subcommittee on Government
Information, Justice, and
Agriculture
Committee on
Government Operations

Barbara Boxer
Chair
Subcommittee on Government
Activities and Transportation
Committee on
Government Operations

Howard Wolpe
Chairman
Subcommittee on
Investigations and Oversight
Committee on Science, Space,
and Technology

Enclosure

From Subc

(4)

ONE HUNDRED SECOND CONGRESS

Congress of the United States

House of Representatives

ENVIRONMENT, ENERGY, AND NATURAL RESOURCES
SUBCOMMITTEE
OF THE
COMMITTEE ON GOVERNMENT OPERATIONS
RAYBURN HOUSE OFFICE BUILDING, ROOM B-371-B-C
WASHINGTON, DC 20515-6145

MEMORANDUM

DATE: August 6, 1992
TO: Les Aspin, Chairman, Committee on Armed Services
FROM: Mike Synar, Chairman, Environment, Energy and Natural Resources Subcommittee, Committee on Government Operations
SUBJECT: Contractor Indemnification/Transferee Indemnification Provisions of S. 3114, the National Defense Authorization Act for Fiscal Year 1993

I am writing to call your attention to and express my grave concerns about two provisions in S. 3114, the Senate version of the *Defense Authorization* bill, relating to indemnification of contractors who perform environmental restoration activities at Department of Defense installations and indemnification of transferees of closing Defense Department property.

Section 313 of S. 3114 requires the Secretary of Defense to promulgate regulations providing for risk sharing between DOD and its contractors who conduct environmental restoration activities. Specifically, the legislation envisions indemnification of these contractors, subcontractors or sureties on contracts, even where these contractors were negligent in performance of their duties. I am concerned that the Senate bill's standard of liability for DOD's environmental restoration contractors is a more generous standard of liability than that available to contractors conducting environmental restoration activities on behalf of the Environmental Protection Agency under §119 (a)(2) of the Superfund cleanup program. Since many of the same companies will be conducting environmental restoration activities for DOD and EPA, it only makes sense that contractors working for various Federal agencies should be subject to the same liability standards. I would also note that, in its October 1991 report, the Defense Environmental Response Task Force stated that "DOD should review its indemnification procedure but in no circumstances should it indemnify contractors above the standard provided in Section 119 of CERCLA." Accordingly, I urge that the House Armed Services Committee avoid setting such a poor precedent, and work with the Senate to ensure that DOD contractors performing environmental restoration activities be subject to the liability standards set forth in §119 (a)(2) of the Superfund law.

The Senate's report language also states that DOD "should give considerable attention to the risk sharing provisions adopted by the Department of Energy and...use these provisions as a model for the Department of Defense program." As you know, the Subcommittee has had longstanding problems with the Department of Energy's contractor indemnification program. In hearings held by the Subcommittee on DOE's Savannah River Plant, Rocky Flats and Hanford Reservation facilities, we found that environmental activities conducted by DOE's contractors were, at best, sloppy and, more likely, created a continuing threat to human health and the environment. As a result of these contractors' negligence, the taxpayers have had to pay twice -- once to the negligent contractors who did not do the job right, and again to get the job done right. In short, DOE's contractor indemnification program has not worked to ensure competent performance and should not be relied upon as a model program.

Finally, DOD does not believe the provision is warranted. In a statement before the House Armed Services Committee on March 10, 1992, Thomas E. Baca, Deputy Assistant Secretary of Defense (Environment), testified that the "military departments have not had a problem in obtaining qualified contractors to do [environmental restoration activities]." This is contrary to the suggestion contained in the Senate's report language that responsible contractors may be unwilling to bid on many environmental restoration contracts. Deputy Assistant Secretary Baca also noted that DOD is not aware of any increase in claims by third parties against DOD or its contractors, and that the availability of commercial liability insurance has not changed recently. According to its testimony, DOD would prefer to take time to institute a program designed to identify whether indemnification is necessary.

Section 317 of S. 3114 provides that the Secretary of Defense shall hold harmless, defend, and indemnify in full transferees of closing DOD property from liability associated with contamination resulting from military activities at Defense installations. This provision is unnecessary, duplicative and could create considerable jurisdictional problems for the legislation. I urge the Committee to work with the Senate to eliminate this provision from the Defense Authorization bill.

Similar provisions to Section 317 of S. 3114 were included in a base closure bill sponsored by Rep. Ray in the House, which was jointly referred to the Committee on Energy and Commerce and the Committee on Armed Services. As you know, however, the Energy and Commerce Committee chose instead to report out H.R. 4016, as amended, without any indemnification provisions. I would note that the House Committee on the Judiciary would likely share jurisdiction on any indemnification provisions in the legislation.

The requirements set forth in Section 317 of S. 3114 are unnecessary. Under existing law, the Federal government is already responsible under Superfund's strict, joint and several liability provisions for cleaning up any contamination resulting from its activities on the transferred land. In addition, DOD is required to include in any deed of transfer a covenant warranting that the Federal government will clean up contamination resulting from releases to the environment occurring prior to or after

transfer of the land and which result from DOD's prior use of the land.

DOD also opposes the provisions in Section 317 of S. 3114. When Deputy Assistant Secretary Baca testified before the House Energy and Commerce Subcommittee on Transportation and Hazardous Materials he expressed opposition for separate indemnification provisions for transferees, noting that "[l]egally the provision is unnecessary and could undermine the proven and prudent method of adjudication currently in place. In our view the provision is imprudent." He went on to explain that Rep. Ray's proposal (H.R. 4024) "eliminates any departmental discretion to tailor the indemnification to the particular circumstances of the site in question, and instead provides a broad, indefinite and uncertain standard of liability," and he complained that "the bill's indemnification provision would greatly expand the liability of the United States with no concomitant benefit to the Government...."

Thank you in advance for taking the time to review these provisions prior to a House conference with the Senate. Please do not hesitate to contact me if I may be of any assistance.

From Subc. C & I.

(2)

Congressional Research Service • The Library of Congress • Washington, D.C. 20540

August 27, 1992

TO : Hon. John Dingell
Chairman, Subcommittee on Oversight and Invesigations,
House Committee on Energy and Commerce

FROM : American Law Division

SUBJECT : Whether Public Law 85-804 Authorizes Federal Defense Agencies to Indemnify Hazardous Waste Cleanup Contractors

You have asked, through Jeffrey Crater of your staff, that CRS address the above-captioned issue raised by Public Law 85-804, a statute enacted in 1958 to give federal defense agencies permanent authority to bypass general contracting requirements whenever deemed by the President to facilitate the national defense.

Public Law 85-804 had its genesis in the First War Powers Act, enacted in 1941. Title II of the act stated:

> The President may authorize any department or agency of the Government exercising functions in connection with the prosecution of the war effort, in accordance with regulations prescribed by the President for the protection of the interests of the Government, to enter into contracts ... without regard to the provisions of law relating to the making ... of contracts whenever he deems such action would facilitate the prosecution of the war ....[1]

Though Title II expired by its terms six months after World War II ended,[2] Congress resurrected its authority in connection with the Korean conflict in 1951, to expire in June, 1952. Subsequently the act was further extended, one or two years at a time, until the final temporary extension expired in June, 1958. These short extensions were said to be in recognition of the heavy defense spending necessitated during a period of "international unrest."[3]

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[1] 55 Stat. 839. Other than title II, which was new authority, the First War Powers Act was a reenactment of powers granted to President Wilson during World War I.

[2] First War Powers Act § 401.

[3] H.R. Rep. No. 2232, 85th Cong., 2d Sess. 3 (1958).

Two months later after the final expiration, Congress, in August, 1958, enacted Public Law 85-804. This statute, containing no expiration date, relieved the executive departments of the burden of making annual or biennial requests to Congress for extensions. Committee reports accompanying that enactment explain that in view of then-current military involvements in the Middle East and the unlikelihood that large-scale military procurement would diminish soon, a permanent enactment of 85-804 seemed advisable so long as "a national emergency continued[d] to exist and so long as the legislation is properly administered." In language modified only slightly from the First War Powers Act, Public Law 85-804 instructed that --

> The President may authorize any department or agency of the Government which exercises functions in connection with the national defense, acting in accordance with regulations prescribed by the President for the protection of the Government, to enter into contracts ... without regard to other provisions of law related to the making ... of contracts, whenever he deems that such action would facilitate the national defense.

You inquire whether Public Law 85-804 was intended by Congress to apply to indemnification contracts with contractors hired to clean up hazardous contamination at defense-related facilities. We have been instructed to answer this question as if section 119 of the Superfund Act,[4] also addressing indemnification of cleanup contractors, did not exist.

Our review of pertinent committee reports and floor debate in connection with the First War Powers Act and Public Law 85-804 indicates that as to the latter enactment Congress had in mind only those contracts for products and services clearly linked to national defense. This view arguably excludes indemnification contracts with cleanup contractors where the only nexus to national defense is that the contamination resulted from a defense activity, or occurs at a defense facility.

First War Powers Act, 1941. A review of this statute's scope is pertinent in that Congress made clear in enacting 85-804 that its purpose was to enact into permanent law the authority contained in title II of the First War Powers Act.[5]

Congressional floor debate on what became title II of the First War Powers Act reveals that its key purpose was to remove impediments in general federal contracting requirements that hampered the war effort, galvanized only a week

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[4] 42 U.S.C. § 9619.

[5] *See, e.g.*, Sen. Rep. No. 2281, 85th Cong., 2d Sess. 1 (1958); H.R. Rep. No. 2232, 85th Cong., 2d Sess. 2 (1958).

earlier with the attack at Pearl Harbor.[6] Both the Senate and House reports speak of title II as being needed "to speed up the procurement of war materiel."[7] References in floor debate were to "speed[ing] up production,"[8] to "facilitat[ing] the prosecution of the war"[9] or to "contracts in connection with the prosecution of the war,"[10] and to a "complete blanket authority ... in respect to war contracts."[11]

Of course, title II was not limited to contracts for goods and services of a purely military nature. For example, in 1942 an executive order, pursuant to title II, authorized certain federal agencies to enter into contracts with financing institutions guaranteeing them against losses in connection with loans to contractors doing war-related work.[12] Congress wasted little time in giving its imprimator to this executive order, through a series of appropriation acts.[13]

At the same time, members expressed concern that title II, in its exemption of war-related procurement from most constraints then applicable for protection of the government, was "extraordinary in character,"[14] and susceptible to abuse. Arguably, this congressional concern counsels against an expansive reading of the authority conferred.

Thus, considering the war-related need giving rise to title II, plus Congress' concern over removing so many contracting safeguards, it is difficult to argue that title II extended to contracts, such as cleanup indemnification agreements, not in some direct sense promoting the war effort.

Public Law 85-804. Despite congressional cues that its purpose in enacting Public Law 85-804 was only to make title II's authority permanent, the scope of the two enactments appears not to be identical. Public Law 85-804 applies by terms to periods of declared "national emergency," possibly a concept broader than the shooting war giving rise to title II. Moreover, 85-804 was plainly

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[6] A second purpose of the First War Powers Act, not pertinent here, was to aid the small businessman in obtaining wartime contracts. *See, e.g.*, 87 Cong. Rec. 9838 (Dec. 16, 1941) (remarks of Sen. Van Nuys).

[7] Sen. Rep. No. 911, 77th Cong. 1st Sess. 1 (1941); H.R. Rep. No. 1507, 77th Cong. 1st Sess. 2 (1941).

[8] 87 Cong. Rec. 9838 (remarks of Sen. Van Nuys).

[9] 87 Cong. Rec. 9839 (Dec. 16, 1941) (remarks of Sen. Danaher).

[10] 87 Cong. Rec. 9860 (Dec. 16, 1941).

[11] 87 Cong. Rec. 9842 (Dec. 16, 1941) (remarks of Sen. Vandenburg).

[12] Exec. Order No. 9112, 7 Fed. Reg. 2367 (March 28, 1942).

[13] *See* 40 Opinions of the Attorneys General 304, 305 (1944).

[14] 87 Cong. Rec. 9864 (Dec. 16, 1941).

broadened by substituting "national defense" for "prosecution of the war." Finally, a committee report declares that 85-804 is "broad in its scope."[15]

Notwithstanding the above, the sounder view appears to be that Public Law 85-804 still falls short of reaching cleanup-contractor indemnification in the usual case. Section 1 of the statute indicates that two criteria must be met before it applies: the department must "exercise functions in connection with the national defense" and, *as a separate matter*, the action of extending 85-804 to the contract must "facilitate the national defense." As explained by the Senate report --

> [T]he President ... is limited by this bill ... to those departments and agencies ... which exercise functions in connection with the national defense. Furthermore, once a department or agency has been designated by the President to exercise these powers and procedures, *such department may only use them whenever the action would facilitate the national defense.* The authority contained in this bill is not, therefore, authority by which the departments and agencies of Government may dispense aid solely for the benefit of contractors or subcontractors. ... [T]he primary consideration is ... whether such aid will facilitate the national defense.[16]

Otherwise put, not *all* contracts of national-defense agencies, such as DOD or DOE, can be assumed to "facilitate the national defense" and come under 85-804. Some contracts are plainly excluded, despite the fact that the contracting agency is engaged much of the time in defense activities. We think it likely that contracts for indemnification of cleanup contractors at federal facilities fall into the excluded category -- except for those instances where cleanup can be plausibly viewed as facilitating the operation of a facility.

Our conclusion does *not* rest upon the apparent absence of any express mention of environmental cleanup contracts in the legislative history of the First War Powers Act or 85-804. This silence has little significance given the pre-environmental era when these statutes were enacted.

Similarly, we do not rely upon the Senate report's discussion of the use of indemnification clauses under precursors of 85-804:

> The need for indemnity clauses [under 85-804] in most cases arises from the advent of nuclear power and the use of highly volatile fuels in the missile program. The magnitude of the risks involved under procurement contracts in these

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[15] Sen. Rep. No. 2281, 85th Cong., 2d Sess. (1958), *reprinted at* [1958] U.S. Code Cong. & Ad. News 4048.

[16] *Id.* at 4044-45 (emphasis added).

> areas have rendered commercial insurance either unavailable or limited in coverage. [Existing indemnification authority] does not extend to production contracts .... Nevertheless, production contracts may involve items, the production of which may include a substantial element of risk ....[17]

Though the report's discussion confines itself to "production contracts," which presumably exclude cleanup contracts, it doubtless should not be read as an exhaustive statement of 85-804's coverage.

In sum, the better argument is that Public Law 85-804 does not extend to indemnification of hazardous-waste cleanup contractors where the only nexus between such cleanup and the national defense is that the contamination was caused by a defense-related activity, or occurs at a defense-related facility. In contrast, where a cleanup has some arguable linkage to "facilitat[ing] the national defense" -- as, for example, where conducive to the safe functioning of a defense facility -- Public Law 85-804 likely does allow indemnification of cleanup contractors.

Whatever position the Administration takes as to the scope of Public Law 85-804, please note that a reviewing court likely will not ask whether the court would have interpreted the act in the same way, but only whether the Administration's reading is a reasonable one.[18] Indeed, judicial deference to the Administration's interpretation is arguably especially appropriate under Public Law 85-804 in light of the "whenever [the President] deems" phrase quoted above and the President's commander-in-chief responsibilities. Thus, the degree of linkage to national defense argued here to be required for 85-804 coverage doubtless could be attenuated somewhat if the Administration so chose without provoking judicial rejection.

Robert Meltz
Legislative Attorney
American Law Division

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[17] *Id.* at 4045.

[18] Chevron, U.S.A. v. Natural Resources Defense Council, 467 U.S. 837, 842-844 (1984).

From Subc of I

(3)

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

September 8, 1992

TO : House Energy and Commerce Committee
Subcommittee on Oversight and Investigations
Attention: Jeff Crater

FROM : Mark Holt
Specialist in Energy Policy
Environment and Natural Resources Policy Division

SUBJECT : Past Indemnification of Federal Contractors Under P.L. 85-804

This memo discusses the record of Federal agencies' use of P.L. 85-804 -- a 1958 statute that allows general contracting requirements to be bypassed for national defense purposes -- to indemnify contractors against liabilities they may incur in carrying out a contract. Such liabilities may include damages caused to Government property, the contractor's property, or third parties.

Because the Subcommittee currently is examining only the indemnification authority of P.L. 85-804, this memo does not get into the many other actions authorized by the law, such as the modification of contracts that contractors cannot fulfill. Such contractual relief apparently accounts for the vast majority of contractor assistance awarded under P.L. 85-804, reportedly more than $1.4 billion through early 1985.[1] Only a small portion of that appears to result from contractor indemnification.

An informal CRS survey of Federal agencies authorized to provide P.L. 85-805 indemnification found that only the Department of Defense (DOD), the National Aeronautics and Space Administration (NASA), and the Department of Energy (DOE) had used that authority. No caps on liability payments under the act were found. DOD accounted for the vast majority of the cases. Annual reports provided by DOD and NASA indicated that DOD has paid about $800,000 in indemnification claims and NASA none. DOE, which has rarely indemnified its contractors under P.L. 85-804, also has paid no claims, according to DOE procurement officials.

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[1] Atkinson, Rick, and Hiatt, Fred. Contracting Conducted Over Golden Safety Net. Washington Post. March 31, 1985. p. A1.

Agencies Authorized to Use P.L. 85-804

Executive Order No. 10789, as amended, gives a dozen Federal agencies the authority to indemnify their contractors under P.L. 85-804:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of the Interior
- Department of Transportation
- Department of the Treasury
- Atomic Energy Commission (abolished in 1974; most of its functions are now carried out by the Department of Energy)
- Federal Emergency Management Agency
- General Services Administration
- Government Printing Office
- National Aeronautics and Space Administration (NASA)
- Tennessee Valley Authority

Although CRS found P.L. 85-804 indemnification was used only by DOD, NASA, and DOE, this informal survey may have missed some past uses of the authority, because it was based primarily on the recollections of present procurement officials. A more formal search of agency records, probably requiring written requests to the agencies, could be initiated if the Subcommittee believes it would prove helpful.

Department of Defense

The overwhelming majority of contracts that include P.L. 85-804 indemnification come from DOD. According to DOD's annual reports on P.L. 85-804 contractual actions, the Department included P.L. 85-804 indemnification provisions in 2,535 contracts from calendar year 1959 through 1990. The DOD reports show three cases in which the Department denied contractor requests to include indemnification provisions in their contracts.

As Table 1 (on p. 5) indicates, DOD reports two years, 1973 and 1975, in which it made payments resulting from contractor indemnification. The 1973 case involved DOD indemnification of Fairchild Industries Inc. against damages including "loss of or damage to the Contractor's equipment," which occurred when an airplane being tested crashed in Thailand. In 1974, DOD paid 15 claims totaling $600,000 to Air America Inc. for the loss of an aircraft and damage to other aircraft while the contractor was delivering rations to combat areas. According to DOD, the liability payments were covered as part of the contract costs.

Not included in the DOD totals are numerous Military Airlift Command contracts with Civil Reserve Air Fleet private carriers, all of which include P.L. 85-804 indemnification clauses, according to DOD's annual reports. That indemnification takes effect only upon activation of the Civil Reserve Air Fleet,

which had never occurred until the rapid deployment of large numbers of troops during the the recent Persian Gulf War. Statistics on any indemnification payments that may have been made to the Civil Reserve Air Fleet resulting from those operations were not readily available. The Air Force currently is preparing a new "airlift indemnification package" under P.L. 85-804 for use after the current standard contract expires Sept. 30, 1992.[2]

National Aeronautics and Space Administration

NASA provided its annual P.L. 85-804 reports to Congress for calendar years 1988-1991; earlier reports are being sent but have not yet arrived. Most of NASA's reported indemnification involves contracts for the Space Shuttle system, pursuant to a January 19, 1983, decision by the NASA Administrator that those activities qualified for P.L. 85-804 contingent liability coverage. That NASA finding has been extended several times and currently runs through FY1994. NASA's procurement office was not aware of any P.L. 85-805 indemnification of any of the agency's contractors before 1983.

According to the NASA annual reports for its P.L. 85-804 activities, four contracts contained indemnification provisions in 1988, 22 contracts in 1989, three in 1990, and three in 1991. One of the 1991 contracts involved indemnification of Halliburton Environmental Technologies Inc. for environmental cleanup work at NASA Ames Research Center. According to NASA's June 11, 1991, decision approving the indemnification, the contractor faced potentially huge liabilities in carrying out the project, which involved potential contamination of a vast aquifer used for drinking water by nearby communities. An unknown number of contracts containing P.L. 85-804 indemnification were approved by NASA between 1983 and 1988.

At least one of NASA's indemnification agreements protects a non-cleanup contractor from liability involving pre-existing environmental contamination at contractor-operated sites. Under a December 17, 1990, NASA decision, Lockheed Missiles and Space Co., Inc., is indemnified for cleanup costs and third-party damages involving any environmental contamination that might have existed at four NASA facilities before Lockheed began operating them under the contract. That indemnification also was allowed to "flow down" to a Lockheed subcontractor, Aerojet ASRM Division.

NASA's annual reports indicate no liability payments under P.L. 85-804, and the agency's procurement office knew of no past payments. According to the office, settlements of lawsuits following the 1986 explosion of the space shuttle Challenger did not involve P.L. 85-804.

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[2] Telephone conversation with Air Force attorney John Dodds, Sept. 3, 1992. For further details, he can be reached at (703) 697-3900.

Department of Energy

DOE has rarely used P.L. 85-804 indemnification authority, relying primarily instead on the Price-Anderson Act, which provides indemnification authority for nuclear risks, and DOE's general contracting authority, under which almost all contractor costs are reimbursed subject to appropriated funds. New DOE contracting regulations make contractors liable for certain costs and damages that they could have avoided, with such liability capped at the level of the contractor's profit on the contract.[3]

The most recent use of P.L. 85-804 by DOE is for indemnification of EG&G Rocky Flats for operating the Rocky Flats Plant near Denver, Colo., a contract provision approved August 20, 1991. Such indemnification also has been considered for the environmental restoration management contractors (ERMCs) that DOE plans to hire for cleaning up its facilities, but it was not used in the initial ERMC contract, recently awarded for the DOE plant at Fernald, Ohio.

DOE briefly relied on P.L. 85-804's indemnification authority during a hiatus in Price-Anderson authority in 1987-88, while Congress was working on a reauthorization bill. Four facility management contracts expired during that period, and the new contracts included P.L. 85-804 indemnification until the Price-Anderson bill was enacted.

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[3] U.S. Department of Energy. Interim Final Rule for 48 CFR Parts 915, 950 and 970. Federal Register. February 7, 1991. p. 5064.

TABLE 1. DOD Contracts With Contingent Liability Provisions			
Year	Number of contracts	Liability payments	Liability denied
1959	19		
1960	22		
1961	37		
1962	42		
1963	67		
1964	80		
1965	135		
1966	85		
1967	113		
1968	100		
1969	108		
1970	108		
1971	112		1
1972	176		
1973	107	189,996	1
1974	128	600,636	
1975	157		
1976	94		
1977	88		
1978	75		
1979	127		1
1980	66		
1981	77		
1982	93		
1983	53		
1984	50		
1985	56		

1986	52		
1987	30		
1988	34		
1989	25		
1990	19		
Totals	2,535	790,632	3

*excludes contracts for Civil Reserve Air Fleet
Source: DOD annual reports on contracting actions under P.L. 85-804

STATE INDEMNIFICATION REPORT

Prepared for:

U.S. Environmental Protection Agency
Office of Waste Programs Enforcement
CERCLA Enforcement Division
401 M Street, S.W.
Washington, D.C. 20460

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NOTICE

This document was prepared for the U.S. Environmental Protection Agency by DPRA Incorporated (DPRA). It represents DPRA's independent judgment and should not be construed to represent Agency policy.

ACKNOWLEDGEMENTS

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EPA would like to acknowledge the assistance of the Association of State and Territorial Solid Waste Management Officials for announcing the initiation of this effort in their monthly newsletter and those state officials that provided invaluable information on state indemnification practices.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report provides the U.S. Environmental Protection Agency's (EPA) Office of Waste Programs Enforcement with information on each state's current response action contractor (RAC) indemnification practices. The information included in the report was generated from a review of applicable state statutes, the preparation of individual discussion points, and telephone discussions with appropriate state officials. This report was prepared in conjunction with the Economic Impact Analysis currently being conducted to evaluate the costs and economic impacts associated with EPA's RAC indemnification guidelines.

REGULATORY BACKGROUND

Section 119 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) contains two major provisions governing the liabilities faced by contractors working at Superfund sites. Section 119(a)(1) extends liability protection "to any person for injuries, costs, damages, expenses, or other liability (including but not limited to claims for indemnification or contribution and claims by third parties for death, personal injury, illness or loss of or damage to property or economic loss) which results from such release or threatened release" at hazardous sites. Section 119(a) does not apply in the case of a release caused by conduct of the RAC that is negligent, grossly negligent, or that constitutes intentional misconduct.

On October 6, 1987, EPA issued interim guidance (OSWER Directive 9835.5) providing an interim indemnification policy. The interim guidance, which remains in effect, sets forth a discretionary program in which RACs seeking Federal indemnification are required to provide proof of diligent effort to obtain pollution liability insurance. On October 31, 1989, EPA published a proposed indemnification policy (53 FR 46012, October 31, 1989) for the purpose of soliciting public comment. The EPA is currently developing final policy guidelines for indemnification based on the comments received on the proposed indemnification guidelines. The final guidelines will replace the interim indemnification guidelines issued on October 6, 1987.

METHODOLOGY

A multiple-step process was used to assemble and evaluate the information presented in this report. The process involved a review of applicable state statutes, the development of discussion points tailored specifically to individual states, and telephone discussions with appropriate state contacts to confirm preliminary analyses. Matrices were developed to summarize information about state indemnification practices. In addition, state narratives were written to describe fully the individual state indemnification practices.

EPA conducted a test on the statutes provided from an earlier contractor effort on state indemnification practices to verify that all statutes pertaining to RAC indemnification or immunity were included in the statute package and that the statutes were current. The results of the test indicated that while all the relevant statutes were included, they were not all current. Consequently, EPA reviewed each state's statutes and replaced the outdated statutes with current versions. Concurrent with the "statute test," letters were mailed to officials at each of the 50 states to inform them that they would be contacted to verify EPA's analyses of the statutes and to request their cooperation in providing the name and phone number of the individual(s) most knowledgeable of their state's indemnification practices.

FINDINGS

Ten states have the statutory authority to offer indemnification to state-employed RACs. Only eight of these states (Florida, Illinois, Massachusetts, Oregon, Nevada, New Jersey, Texas, and Washington) currently offer indemnification. Louisiana and California have the authority to offer indemnification, but have not done so. Although eight states indemnified RACs since 1987, no claims were filed against any state-indemnified RAC to date.

While only 8 states currently offer indemnification, it was learned that 14 states provide their RACs with *immunity* from damages and injuries resulting from hazardous material releases. Nevada is the only state that offers indemnification *and* provides immunity. The provision of immunity is significant as it protects a RAC from civil actions whereby the RAC cannot be sued for any injuries or damages resulting from their response activities. Additionally, it may be argued that immunity is more comprehensive than indemnification in that there are typically no maximum limits, deductibles, or coverage periods associated with immunity. Many of these states may offer immunity rather than indemnification in an effort to recognize RAC concerns, yet not incur additional liability. This reason was cited by a Delaware official.

Only 17 states currently require RACs to obtain pollution liability insurance. This includes the States of California, Florida, Oregon, Texas, and Wisconsin, which also require RACs to name the state as an additional-insured party on pollution liability insurance policies. The State of Texas previously required all state-employed RACs to obtain pollution liability insurance, but currently only requires pollution liability insurance on a case-by-case basis.

A significant finding revealed during discussions with state officials is that almost all of the states that tried to obtain RAC services were able to do so, despite the fact that they do not offer indemnification. However, the Connecticut Department of Environmental Protection contends that although RACs are currently conducting Remedial Investigation/Feasibility Studies (RI/FS) in Connecticut, the RACs will not enter into design or remediation contracts with the state unless Connecticut provides them with immunity or indemnification.

Additionally, it was learned that states have not observed a reduction in the pool of qualified RACs, an increase in the cost of RAC services, or a delay in site cleanups as a result of not

offering indemnification. Several states have never hired RACs, as either they were successful in making responsible parties conduct the work or the EPA and its contractors performed the response activity.

Only one state official was able to discuss the role that the size of the cleanup played in the RAC's willingness to work without pollution liability insurance or indemnification. A Florida official indicated that RACs are more willing to work at a large cleanup site if the value of the contract is significant enough to offset potential risk. Consequently, RACs are more likely to turn down smaller value contacts that may not offset the risks associated with emergency and remedial response activity.

No correlation can be drawn between the states not offering indemnification and the number of RACs responding to RFPs for response action contracts. A state's geographic location and budget for response action contracts are most responsible for the number of responses received to a RFP.

UNIQUE PROGRAMS

States Offering Indemnification

The State of Illinois is unique in its funding of indemnification costs. The state established the Response Contractors Indemnification Fund with monies diverted from response action contracts. Five percent of the contract value for each response action contract is paid directly into the fund by the state instead of being paid to the RAC. RACs are expected to add this five percent into the total proposed cost during the contract procurement process.

Under the State of New Jersey's original indemnification program, indemnification was offered to state-employed RACs from 1986 until January of 1990, when its authority to offer indemnification expired. A new indemnification law was enacted on January 9, 1992, reinstating the state's authority to offer indemnification. New Jersey's original indemnification program was innovative in that indemnification was employed as a competitive factor when soliciting bids from RACs. Those RACs that did not obtain pollution liability insurance and thus requested indemnification were penalized in the bidding process. New Jersey's current indemnification law only provides preferential treatment to those RACs able to obtain occurrence-based pollution liability insurance. This current law is also innovative in its surety bond provisions and application of deductibles and co-payments. The law guarantees that surety liability will not extend to claims for damages and that a surety bond can not be construed as liability insurance. While the other states offering indemnification have flat deductibles, if any, New Jersey's current indemnification law requires RACs to pay a deductible and a co-payment for any claim that exceeds the deductible.

The State of Texas has two indemnification statutes, one of which also limits a RAC's liability pursuant to violations of Texas hazardous waste laws. Section 104.002 of the Civil Practice and

Remedies Code (as amended by House Bill 1762 in 1991) indicates that the state is liable for indemnification of a person when damages result solely from that person's signing an industrial solid waste or hazardous waste manifest during the performance of contractual activities. Section 361.405 of the Texas Health and Safety Code indicates that the Texas Water Commission (TWC) is authorized to indemnify RACs through the RACs' contracts with the TWC. This indemnification is contingent upon several conditions, including the federal government's agreement (in a contract or cooperative agreement) to in turn indemnify the TWC. Since the federal government does not indemnify states, Texas has not offered indemnification to any RACs pursuant to this statute.

California and Louisiana have the authority to offer indemnification, but have not done so to date. California's stringent indemnification requirements prevent RACs from requesting indemnification, let alone obtaining it. These requirements include a determination by the California Department of General Services that there is no other qualified RAC and that no other RAC possesses pollution liability insurance. Louisiana's indemnification statute allows the state to enter into an indemnification agreement with a RAC if a contract can not otherwise be obtained. To date, Louisiana has not offered indemnification to any RAC.

Illinois, Massachusetts, and New Jersey are required by state statute or law to monitor the insurance markets within their respective states. The Illinois Director of Insurance is required to adopt a rule in the event that pollution liability insurance becomes available to RACs at reasonable terms. This directive suggests that indemnification will not be offered if the Director issues a final declaration of insurance availability. Massachusetts's statutes require the Massachusetts Commissioner of Insurance to publish an annual report on the availability of insurance for RACs. This statute also requires that the information contained within the report be used to ensure that "the liability covered by the indemnification agreement exceeds or is not covered by insurance available to the response action contractor at a fair and reasonable price when entering into the response action contract, and adequate insurance to cover such liability is not generally available at the time the response action contract is entered into." New Jersey's current indemnification law requires the New Jersey Department of Environmental Protection (NJDEP) to submit a report assessing the current availability and affordability of pollution liability insurance within 24 months of the law's enactment (i.e., January 1994).

States Providing Immunity

Delaware's immunity statute is of interest, as it indicates that RAC actions using generally accepted practice and state-of-the art scientific knowledge create "a rebuttable presumption that the acts or omissions were not negligent." No other state immunity statutes include such lenient language to establish RAC negligence standards.

Although Connecticut does not currently have legal provisions for RAC immunity, it did have a bill before the 1991 legislative session. The bill, which was not passed, would have required the third party to prove negligence or misconduct before a suit could be filed against a RAC.

This requirement would have been unique in that no other state places such burden of proof on the third party.

Other Unique Provisions

The States of Missouri and Arizona do not offer indemnification or provide immunity but have instituted by statute other means to limit RAC liability. Missouri established RAC liability limits equal to $1 million for any one person or $3 million for all persons for a single occurrence. Arizona's response action contracts include joint liability provisions whereby the state accepts a RAC's liability and the RAC accepts the state's liability.

The State of New Hampshire instituted a program whereby it enters into hold harmless agreements with developers of contaminated properties. These agreements specify that New Hampshire will not pursue the developer for claims on any pre-existing conditions, while in exchange, the developer will cleanup the site. These hold harmless agreements do not, however, restrict third parties or the EPA from pursuing the developer for liability claims.

States do not offer indemnification for a variety of reasons. Some of the more noteworthy reasons include the following: state constitutions that prohibit indemnification (Arizona, Michigan, Minnesota, and Wisconsin), statutory requirements for the state to operate on a balanced budget (North Carolina), and maintenance of sovereign immunity (Connecticut and North Dakota). Additional information regarding anti-indemnification statutes is provided in Chapter 3 of this report.

LIMITATIONS

This report focuses on only the most salient issues pertaining to state indemnification practices. Some information presented in the report is limited because state officials were consistently unable to provide supporting data. This information includes the RAC's willingness to work without pollution liability insurance, the impact of cleanup size on the RAC's ability to obtain insurance, and the limits, exclusions and costs of pollution liability insurance policies obtained by state-employed RACs.

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CHAPTER 1

INTRODUCTION

1.1 REGULATORY HISTORY

The Superfund program, enacted with the passage of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), gave the U.S. Environmental Protection Agency (EPA) a broad mandate and a $1.6 billion fund to cleanup hazardous waste sites and to respond to emergency releases of hazardous substances. The 1986 Superfund Amendments and Reauthorization Act (SARA) extended the program for five years and expanded the EPA's responsibilities to seek permanent solutions to contamination problems at hazardous waste sites.

Prior to SARA, response action contractors (RACs) relied on commercial liability insurance, together with indemnification, to offset their liability risks. The EPA provided indemnification through its general contracting authority as a means to supplement commercial insurance. The Federal government indemnified RACs above an initial $1 million for CERCLA liabilities and defense expenses. The indemnification agreement was void in cases of gross negligence or willful misconduct. The RAC community, however, viewed EPA's indemnification as inadequate because affordable pollution liability insurance was not available, and by itself, EPA indemnification was not an adequate substitute for liability insurance since EPA lacked explicit statutory authority for RAC indemnification and funding was subject to the availability of funds from the overall EPA budget.

Section 119 of CERCLA as amended by SARA contains two major provisions governing the liabilities faced by RACs. Section 119(a)(1) extends liability protection "to any person for injuries, costs, damages, expenses, or other liability (including but not limited to claims for indemnification or contribution and claims by third parties for death, personal injury, illness or loss of or damage to property or economic loss) which results from such release or threatened release" at hazardous waste sites. CERCLA Section 119 also establishes a funding mechanism for indemnification. Section 119(a) does not apply in the case of a release caused by a RAC's conduct that is negligent, grossly negligent, or that constitutes intentional misconduct.

On October 6, 1987, EPA issued interim guidance (OSWER Directive 9835.5) providing an interim indemnification policy. The interim guidance, which remains in effect, sets forth a discretionary program in which RACs seeking Federal indemnification are required to provide proof of diligent effort to obtain pollution liability insurance. The guidelines were written with the expectation that they would remain in effect for a very short period of time. The interim guidelines do not set a limit on the amount of indemnification available or on the period of coverage. On October 31, 1989, EPA published a proposed indemnification policy (53 ER 46012, October 31, 1989) for the purpose of soliciting public comment. The EPA is currently developing final policy guidelines for indemnification based on the comments received on the proposed indemnification guidelines issued October 31, 1989. The final guidelines will replace the interim indemnification policy issued October 6, 1987.

1.2 BACKGROUND

This report was prepared to provide the Office of Waste Programs Enforcement with information on current RAC indemnification practices at each of the 50 states. The report contains information obtained from a variety of sources including a review of applicable state statutes, response action contracts, and telephone discussions with appropriate state officials.

While EPA attempted to provide comprehensive information for each of the 50 states, it was not always possible since a significant portion of the data was obtained from state officials. Consequently, the information is only as comprehensive as the knowledge of the individuals providing the information. There was an occasional lack of knowledge demonstrated by the contract specialists and individuals implementing the regulations with respect to the legal implications associated with their states' immunity and indemnification provisions. It should be stressed, however, that EPA often spoke with several individuals, including legal staff, at each state to ensure that the various issues associated with indemnification were discussed with the most knowledgeable person.

EPA was unable to collect information on some issues because state officials consistently were unable to provide information with a great level of confidence. These issues include a RAC's willingness to work without pollution liability insurance; the impact of cleanup size on a RAC's ability to obtain insurance; and the limits, exclusions and costs of pollution liability insurance obtained by state-employed RACs. When possible, EPA validated the information provided by the state officials through an analysis of the state's statutes.

Definitions

Response action contractor (RAC), *indemnification*, *immunity*, and *surety firm* are four important terms used throughout this report. Because of their importance, these terms are defined below.

> Response Action Contractor: Any person who enters into a response action contract with respect to any release or threatened release of a hazardous substance or pollutant or contaminant from a facility, and is carrying out such contract; and any person, public or nonprofit private entity, conducting a field demonstration pursuant to Section 311 (b); and any person who is retained or hired by the persons described above, to provide any services relating to a response action; and any surety who after October 16, 1990, and before January 1, 1983, provides a bid, performance or payment bond to a response action contractor, and begins activities to meet its obligations under such bond, but only in connection with such activities or obligations (SARA Section 119 (e)(2)).

Indemnification: Is an agreement whereby one party agrees to reimburse a second party for losses (in this case liability losses) suffered by the second party (OSWER Directive 9835.5, October 6, 1987).

Immunity: Protects a RAC from civil actions/lawsuits whereby the RAC cannot be sued for any injuries or damages resulting from their response action. Immunity does not provide a means for the RAC to compensate third parties for damages or injuries incurred (Adapted from Black's Law Dictionary, 1990).

Surety: A surety is a financial agreement, and not a form of insurance, that is only activated upon a RACs failure to fulfill its contractual agreement. The definition of a RAC was expanded to include sureties under the November 15, 1990, amendment to SARA (Adapted from Ryan, W.F., and R.M. Wright, "Hazardous Waste Liability and the Surety," The Journal of Tort and Insurance Law).

Acronyms

Numerous acronyms are used throughout this report. These acronyms, and their meanings, are listed below for the reader's reference.

ADEQ	-	Arizona Department of Environmental Quality
ADPC & E	-	Arkansas Department of Pollution Control and Ecology
ASTSWMO	-	Association of State and Territorial Solid Waste Management Officials
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act
CTDEP	-	Connecticut Department of Environmental Protection
DNR	-	Department of Natural Resources
EPA	-	United States Environmental Protection Agency
FLDER	-	Florida Department of Environmental Regulation
LADEQ	-	Louisiana Department of Environmental Quality
LUST	-	Leaking Underground Storage Tank
NJDEP	-	New Jersey Department of Environmental Protection
NPL	-	National Priorities List
OEPA	-	Ohio Environmental Protection Agency
ORC	-	Ohio Revised Code
ORDEQ	-	Oregon Department of Environmental Quality
ORDOJ	-	Oregon Department of Justice
OSHA	-	Occupational Safety and Health Administration
OSWER	-	Office of Solid Waste and Emergency Response

PRP	-	Potentially Responsible Party
RA	-	Remedial Action
RAC	-	Response Action Contractor
RCRA	-	Resource Conservation and Recovery Act
RFP	-	Request for Proposal
RI/FS	-	Remedial Investigation/Feasibility Study
SARA	-	Superfund Amendments and Reauthorization Act
SARSS	-	Site Assessment and Remediation Support Services
TWC	-	Texas Water Commission

CHAPTER 2

METHODOLOGY

A multiple-step process was used to compile and evaluate the information presented in this report. The process involved a review of applicable state statutes, development of discussion points tailored specifically to individual states, and telephone discussions with appropriate state contacts to confirm preliminary analyses. Three matrices are included in this report that summarize information about state indemnification practices. Details on individual state indemnification practices are presented in individual state narrative discussions.

This project was initiated by conducting a test on the statutes provided from an earlier contractor effort examining state indemnification practices. The statutes of 10 states were randomly selected and tested to verify that all statutes pertaining to RAC indemnification or immunity were included in the statute package and that these statutes were current. A WestLaw Computer Search was conducted on the following terms: *contractor, hold harmless, immunity, indemnification, liability, negligence,* and *hazardous waste/material,* to verify that all relevant statutes were reviewed. The results of this test indicated that the statute package was complete with all relevant statutes for the 10 states. The results of the test to determine if the statutes were current, however, identified several outdated statutes. Consequently, EPA reviewed each state's statutes and replaced the outdated statutes with current versions. Approximately 20 statutes were replaced with updated versions. Concurrent with these update efforts, illegible copies of approximately 30 additional statutes were replaced with legible copies. In total, 74 statutes were reviewed for this study.

Concurrent with the "statute test," letters were mailed to officials in each of the 50 states. The Directory of State Officials, compiled by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), was used to identify the name, phone number, and mailing address of the most appropriate waste management official in each state. The letters informed the officials that they would be contacted and requested their cooperation in providing the name and phone number of the individual(s) most knowledgeable of their state's indemnification practices. A model of the letter mailed to the state officials is included as Attachment A of this report. An announcement also was included in ASTSWMO's September 1991, Monthly Package informing the ASTSWMO officials that they would be contacted.

To ensure consistency in approach among project staff, a training package was developed and distributed to those conducting the telephone discussions. The package included specific guidelines for conducting phone discussions, developing individualized discussion points, completing the matrices, and writing narratives on the state contacts and statutes.

Project staff were assigned a selected number of designated states and provided with the applicable statutes, name and phone number of the state waste management official for the assigned state, and model discussion points. Staff subsequently reviewed the statutes and developed tailored discussion points for each of the assigned states. Attachment B includes the model discussion points used as a basis in creating individualized discussion points. The staff

crossed out the non-applicable items, expanded upon relevant issues, and added additional questions, as necessary.

State waste management officials were then contacted to obtain the name and phone number of the individual or individuals most familiar with their state's indemnification practices. These individuals were then contacted to discuss the specifics of the state's indemnification practices. It was often necessary to contact several individuals within each state. Most often, information was obtained from individuals with the state's legal division, contracts division, or Attorney's General Office. Attachment C provides the name and phone number of each individual, by state, who provided information for this report.

Subsequent to the telephone discussions, information was summarized in matrices and fully outlined in written narratives. When completing the matrices, EPA regarded information received during the telephone discussions as secondary information, in the event it differed from EPA's interpretation of the state statutes. All conflicts are fully documented in the individual state narratives. These narratives and the matrices are included in Chapter 3.

CHAPTER 3

FINDINGS

The results of EPA's analysis of state indemnification practices are presented in this chapter. The information is summarized in three matrices, while comprehensive information for each state is provided in individual state narratives presented at the end of this Chapter. The information included in the matrices is primarily limited to information consisting of "yes," "no," "not applicable," and "numeric entries." On occasion, it was necessary to include "unknown" as an entry. "Unknown" was only entered when the information could not be obtained from the state: for example, where the state did not know the information and could not identify an alternate source for the information, or when the state did not maintain information relevant to the question. Supplemental comments are provided for each of the three matrices. The comments are listed by state and located on the pages following each matrix. Superscript letters in the matrices are used to cross reference the associated comments.

3.1 GENERAL OVERVIEW

This section provides general information on each state including an indication of whether the state offers indemnification or immunity to RACs; whether the state requires RACs to indemnify the state; and information on state insurance requirements and the attainability of pollution liability insurance. This section functions as a guide in directing the reader to the States Offering Indemnification (Section 3.2) and the States Not Offering Indemnification (Section 3.3) for additional information on a state's indemnification practices. The information discussed in this section is summarized in the General Overview Matrix that begins on page 3-2.

Indemnification

Ten states have the authority to offer indemnification to RACs (i.e., California, Florida, Illinois, Louisiana, Massachusetts, Nevada, New Jersey, Oregon, Texas, and Washington). Forty states indicated that they do not currently have the statutory authority to offer indemnification to RACs. Several of the states that do not offer indemnification indicated that their state's constitution prohibits the indemnification of RACs.

Immunity

Fourteen states provide RACs with immunity from damages and injuries resulting from hazardous materials releases. Only one of these states, Nevada, also offers indemnification to state-employed RACs. The provision of immunity is significant since it protects a RAC from civil actions whereby the RAC cannot be sued for any injuries or damages resulting from their

GENERAL OVERVIEW MATRIX

State Name	State Offers Indemn.	State Provides Immunity	Protection Offered by States	RACs Required to Indemnify the State	RACs Required to Obtain Pollution Liability Insurance	Pollution Liability Insurance Obtainable	RACs Work Without Pollution Liability Insurance and Indemn.	Potential for State to Offer Indemn. in the Future
Alabama	No	Yes	Yes	No	No	Unknown[a]	Yes[b]	No
Alaska	No	Yes	Yes	Yes	No	Unknown[a]	Yes[b]	No
Arizona	No[a]	No	No	Yes	No	Unknown[b]	Yes	No
Arkansas	No	Yes	Yes	Yes	Yes[a]	Unknown[a]	Yes	No
California	Yes[a]	No	Yes	No	No	No	Yes	NA[a]
Colorado	No	No	No	Unknown[a]	Yes[b]	Yes[b]	No[b]	No
Connecticut	No	No	No	Yes	No	Unknown[a]	Yes	No[b]
Delaware	No	Yes	Yes	Yes	No	Unknown[a]	Yes[b]	
Florida	Yes	No	Yes	Yes	Yes	Yes[a]	No	NA
Georgia[a]	No	No	No	NA	NA	NA	NA	Possibly
Hawaii	No	Yes[a]	Yes	Yes	No	Yes	Unknown[a]	No
Idaho	No	No	No	Yes	No	Unknown[a]	Yes	No
Illinois	Yes[a]	No	Yes	Yes	No	Yes[b]	No	NA
Indiana	No	No	No	No	No[a]	Yes	Yes	No
Iowa[a]	No	No	No	NA	NA	NA	NA	No
Kansas	No	No	No	Yes[a]	Yes	Yes	No	No[b]
Kentucky	No	No	No	No	No	Unknown[a]	Unknown[a]	No
Louisiana	Yes[a]	No	Yes	Yes	Yes[b]	Yes	Yes	NA[b]
Maine	No	No	No	Yes	No	Unknown[a]	Unknown[a]	No[b]
Maryland	No	No	No	Yes	No	Unknown[a]	Unknown[a]	Nc
Massachusetts	Yes	No	Yes	Yes	No	Yes[a]	Yes	N/
Michigan	No	No	No	Yes	No	Unknown[a]	Yes	N
Minnesota	No	No	No	Yes	No	Unknown[a]	Unknown[a]	N
Mississippi	No	Yes	Yes	No	Yes	Yes	No	
Missouri	No	No	No	Yes	Yes	Yes	No	N

GENERAL OVERVIEW MATRIX
(continued)

State Name	State Offers Indemn.	State Provides Immunity	Protection Offered by States	RACs Required to Indemnify the State	RACs Required to Obtain Pollution Liability Insurance	Pollution Liability Insurance Obtainable	RACs Work Without Pollution Liability Insurance and Indemn.	Potential for State to Offer Indemn. in the Future
Montana	No	Yes[a]	Yes	No	Yes[b]	No	Yes[b]	No
Nebraska[a]	No	No	No	NA	NA	NA	NA	No
Nevada	Yes[a]	Yes	Yes	Yes[b]	No	Unknown[a]	No	NA
New Hampshire	No	No[a]	No	Yes	Yes	Yes	No	No
New Jersey	Yes[a]	No	Yes	Yes	Yes	Yes	Yes	NA
New Mexico	No	No	No	Yes	Yes	Yes	No	No
New York	No	Yes	Yes	Yes	Yes[a]	Yes[a]	Yes[a]	No
North Carolina	No	No	No	Yes	No	Yes[a]	No[a]	No
North Dakota[a]	No	No	No	NA	NA	NA	NA	No
Ohio	No	Yes[a]	Yes	Yes	No	Unknown[b]	Unknown[b]	No
Oklahoma	No	No	No	No	Yes	Yes	No	No
Oregon	Yes	No	Yes	Yes	No[a]	Unknown[b]	Yes	NA
Pennsylvania	No	Yes	Yes	No	Yes	Yes	No	No
Rhode Island	No	No	No	Yes[a]	No	Yes[b]	Yes[b]	No
South Carolina	No	Yes[a]	Yes	Yes	No	Yes[b]	Yes[b]	No
South Dakota	No	Yes[a]	Yes	No[b]	No	Unknown[a]	Yes	No
Tennessee	No	No	No	Yes	No	Yes	No	No
Texas	Yes[a]	No	Yes	Yes	Yes[b]	Yes	No	NA[a]
Utah	No	No	No	Yes	Yes	Yes	No	No
Vermont	No	No	No	Yes	Yes[a]	Yes[a]	No[a]	No
Virginia[a]	No	No	No	NA	NA	NA	NA	No
Washington	Yes	No	Yes	Yes	No	Unknown[a]	Unknown[a]	NA
West Virginia[a]	No	Yes[b]	Yes	NA	NA	NA	NA	No
Wisconsin	No	No	No	Yes	No	Yes[a]	Unknown[b]	No
Wyoming[a]	No	No	No	NA	NA	NA	NA	No

COMMENTS

Alabama

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

(b) The state has an immunity statute that provides RACs with protection from liability.

Alaska

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

(b) The state has an immunity statute that provides RACs with protection from liability.

Arizona

(a) The state constitution prohibits the indemnification of RACs.

(b) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

Arkansas

(a) The state currently requires RACs to obtain pollution liability insurance on a case-by-case basis. In the future, pollution liabilit insurance will likely be required on all new response action contracts.

California

(a) Although the state has the authority to indemnify RACs and their subcontractors, RACs have been unable to meet the state's stringent requirements.

Colorado

(a) Information on indemnification could not be obtained from the state.

(b) Colorado's response action activities are limited to one Federally-funded state-lead site. Pollution liability insurance is require at this site. The annual premium is being paid by the EPA.

Connecticut

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insura

(b) The Connecticut DEP plans to request limited immunity for RACs from the state legislature if RACs are unwilling to v pending design contract without immunity.

Delaware

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

(b) The state has an immunity statute that provides RACs with protection from liability.

Florida

(a) State offic. 's indicated that to their knowledge only one RAC has obtained economically viable insurance.

Georgia

(a) The state has never hired a RAC to conduct response action work.

(b) The governor accepted a proposed law to establish a State Superfund program that includes indemnification provisions. The proposed law will be submitted to the state legislature for approval in the 1992 legislative session.

Hawaii

(a) Hawaii state statutes appear to provide RACs with immunity, although the state representative contacted indicated that it wa the state's intent to provide immunity to state-employed RACs.

(b) The state official indicated that the state has no special provisions relevant to pollution liability insurance.

Idaho

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance

Illinois

(a) The state established the Response Contractors Indemnification Fund to fund indemnification of RACs.

(b) Claims-made is the only type of insurance available to RACs at this time.

Indiana

(a) The state does not have the legal authority to require pollution liability insurance, but in practice, the state only considers those RACs that have insurance.

Iowa

(a) The state has never hired a RAC. As of October 1, 1991, there are no state-lead Superfund sites.

Kansas

(a) The state requires RACs to indemnify the state only on PRP consent orders.

(b) The state will not offer indemnification to RACs unless RACs pressure the state for indemnification in the future.

Kentucky

(a) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

Louisiana

(a) The state has the authority to include a hold harmless clause in RAC contracts, but has not done so to date. The state interprets the hold harmless clause as a form of indemnification.

(b) Pollution liability insurance is only required when the risk of further contamination exists at the site.

Maine

(a) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

(b) The state will not offer indemnification unless RACs are unwilling to work without indemnification.

Maryland

(a) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

Massachusetts

(a) The commissioner of insurance's report indicates that errors and omissions insurance was available at the time the report was written in 1987.

Michigan

(a) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

Minnesota

(a) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

Montana

(a) The state provides immunity to RACs only if they are not negligent. If the RAC is found to be negligent, they are responsible for their own actions.

(b) The state requires RACs to obtain pollution liability insurance; however, RACs are allowed to work without insurance if they can prove that insurance is unobtainable.

Nebraska

(a) The state has never hired a RAC to conduct response action work; however, the state is coordinating six pre-remedial contracts under the direction of the EPA.

Nevada

(a) The state offers limited indemnification to RACs up to $50,000. Indemnification is provided on a site-specific basis for small-scale projects only.

(b) RAC indemnification of the state is required on a contract-specific basis as determined by the state.

(c) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance.

New Hampshire

(a) The state, in very limited cases, provides developers "hold harmless" protection from pre-existing conditions in exchang[redacted] cleaning up property they develop.

New Jersey

(a) The state offered indemnification under its original program from 1986, through January 1990, when its authority expired. Th state currently offers indemnification in accordance with a new law enacted January 9, 1992.

New York

(a) The state requires RACs to obtain pollution liability insurance. The state will pay the premium for liability insurance as a bid item in RAC contracts. The state allows RACs to work without insurance if the RAC can prove that they are unable to obtain insurance.

North Carolina

(a) The state hired only one RAC last year. The RAC was able to obtain pollution liability insurance.

North Dakota

(a) The state has never hired a RAC to conduct response action work.

Ohio

(a) The state maintains that state law in combination with the eleventh amendment to the U.S. Constitution provides immunity to the state and state-employed RACs. The Third Circuit Court of Appeals ruled against the provision of immunity per the eleventh amendment in United States v. Union Gas Co.

(b) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

Oregon

(a) The state does not require pollution liability insurance at present; however, a state official indicated that insurance will likely required when RACs begin conducting removal and emergency response activities.

(b) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insu[redacted]

Rhode Island

(a) Although the state requires RACs to indemnify the state, the state has been unsuccessful in including indemnification provisi in RAC contracts.

(b) A state official indicated that pollution liability insurance is available; however, it is very expensive. RACs claim that they not able to obtain this insurance due to the high cost.

South Carolina

(a) Although RACs may receive immunity under the State of South Carolina Tort Claims Act, immunity is decided on a case-b case basis by the state court.

(b) State officials believe pollution liability insurance is obtainable; however, no data are available to support this assumption.

South Dakota

(a) Immunity is provided to RACs in emergency situations at the request of any emergency and disaster service agency. In the past, the state has made several contractors state employees to protect them from liability.

(b) The state includes a "hold harmless" clause in RAC contracts establishing a RAC's responsibility for negligence and willful acts.

(c) State officials do not know if RACs are able to obtain insurance since the state does not require pollution liability insurance

Texas

(a) Texas is authorized to indemnify RACs under two separate statutes. Pursuant to Section 104.002 of the Civil Practice and Remedies Code (as amended in 1991) Texas is liable for indemnification of a person for damages that result solely from th person's signing of an industrial solid or hazardous waste manifest during the course of performing contractual activities. Under Section 361.405 of the Texas Health and Safety Code, the state has the authority to indemnify RACs, however, no indemnification has been offered because the state's authority is contingent upon the federal government's indemnification state.

(b) Pollution liability insurance is currently required on a case-by-case basis at the discretion of the TWC project manager. In the event that insurance is required, the RAC is required to name the state as co-insured on its insurance policy.

Vermont

(a) The state currently requires RACs to obtain pollution liability insurance. Due to the high cost and limited coverage of current policies, the state may eliminate this requirement in the future.

Virginia

(a) The state has never hired a RAC to conduct response action work.

Washington

(a) State officials do not know if RACs are able to obtain insurance or if they work without it since the state does not require pollution liability insurance.

West Virginia

(a) The state has never hired a RAC to conduct response action work.

(b) West Virginia's "Good Samaritan Law" appears to provide RACs with immunity.

Wisconsin

(a) A state official indicated that only the larger firms have been able to obtain pollution liability insurance.

(b) State officials do not know if RACs work without insurance since the state does not require pollution liability insurance.

Wyoming

(a) The state has never hired a RAC to conduct response action work.

response action. Additionally, it may be argued that immunity is more comprehensive than indemnification in that there are typically no maximum limits, deductibles, or coverage periods associated with immunity. It is important to note that all of the states that provide immunity do so with significant restrictions and sometimes limit immunity to certain types of response action work.

Immunity is most often provided by state statutes that specifically address RACs. In South Carolina, however, immunity is provided under the state's Tort Claims Act, whereby immunity is decided by the state court on a case-by-case basis. Hawaii's Environmental Response Statutes appear to provide RACs with immunity, although the state representative indicated that it was not Hawaii's legislative intent to provide immunity to state-employed contractors. The immunity statute has not been fully tested since the state only has contracted with emergency removal RACs to date.

The State of New Hampshire does not provide RACs with immunity; however, the state does enter into hold harmless agreements with developers of contaminated properties. These agreements specify that a developer will cleanup a site; in exchange, New Hampshire will not pursue the developer for claims on pre-existing conditions.

Although most states have Good Samaritan Statutes, these statutes are not applicable to RAC activities since they specifically exclude those persons who perform services for profit. West Virginia's Good Samaritan Statutes appear to provide RACs with immunity; however, West Virginia has never hired any RACs to date.

Anti-Indemnification Statutes

Anti-indemnification statutes were not specifically addressed during EPA's review of state statutes and conversations with state officials. However, some information regarding anti-indemnification statutes was obtained when state officials were asked why their state does not offer indemnification to RACs. It was learned that the constitutions of four states (i.e., Arizona, Michigan, Minnesota, and Wisconsin) prohibit them from offering indemnification to RACs. Similarly, the State of North Carolina is prohibited from offering indemnification to RACs because the state is required by statute to operate on a balanced budget. Additionally, the States of Connecticut and North Dakota maintain sovereign immunity and therefore do not offer indemnification.

Although EPA identified only five states with anti-indemnification provisions, two articles suggest that approximately 80 percent of the states may in fact have anti-indemnification statutes. It is unclear, however, whether these statutes apply to RACs. The first article provides a state-by-state listing of anti-indemnification statutes.[1] This listing indicates that 39 states have anti-

[1] "Construction Risk Management, Contractual Risk Transfer," October 1986.

indemnification statutes. Twenty-six of these statutes void indemnification agreements in construction contracts which purport to indemnify contractors for sole negligence or willful misconduct. An additional four statutes prohibit indemnification agreements in contracts (not limited to construction) purporting to indemnify any party for its sole negligence or errors and omissions. Eight state statutes allow only comparative fault indemnification agreements, three of which apply to contracts for drilling for oil, gas, water, or minerals, and two of which apply to architects, engineers, or surveyors. One state has an anti-indemnification statute that prohibits agreements that require a subcontractor to indemnify others for injuries or property damage not caused by the subcontractor.

Ryan and Wright also provide a state-by-state listing of anti-indemnification statutes.[1] Their article lists 38 anti-indemnification statutes and one statute that may be considered anti-indemnification. Consistent with the first article, the majority of these statutes (i.e., 33) prohibit indemnification agreements in construction contracts which indemnify the contractor for its sole negligence. Three additional statutes prohibit indemnification agreements in contracts that purport to indemnify a contractor for its sole negligence. Of the remaining two anti-indemnification statutes, one is reportedly not applicable to RACs, and one voids agreements by subcontractors to indemnify others for injuries not caused by the subcontractor.

The majority of these statutes have not yet been tested in court so their applicability to response action contracts has not been determined. The first article did indicate that most indemnification agreements contain a provision making them applicable to the fullest extent provided by state law. According to the article, this language will ensure that indemnification, as provided for by a state indemnification law, will be allowed and will reduce the chances of the court nullifying the entire indemnification provision as being contrary to a state's anti-indemnification law.

Protection Offered by States

Twenty-seven states do not offer indemnification or provide immunity to RACs. Seven (i.e., Georgia, Iowa, Nebraska, North Dakota, Virginia, West Virginia, and Wyoming) of the 27 states, however, have never employed a RAC's services. Officials from these states acknowledged that RAC services were not needed for several reasons, including that the state did not have a Superfund program or that all Superfund related work in the state is conducted by responsible parties or the EPA.

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[1] "Hazardous Waste Liability and the Surety," written by William F. Ryan, Jr. and Robert M. Wright (Whiteford, Taylor & Preston), Tort & Insurance Law Journal.

PROTECTION OFFERED BY STATES		
Indemnification	Immunity	No Immunity or Indemnification
10*	14*	27
* The State of Nevada offers immunity and provides indemnification.		

States Requiring RACs to Indemnify or Hold Harmless

Thirty-three states require state-employed RACs to indemnify or hold the state harmless against liability resulting from the RAC's activities. Seventeen of the 33 states that do require RACs to indemnify the state also offer indemnification or provide immunity to RACs. Most states regard this as reciprocal indemnification or immunity, whereby the state and RACs are each responsible for actions caused by their own negligence. Most of the states requiring RACs to indemnify the state are not mandated to do so under state statutes. This indemnification requirement is typically included in response action contracts. Of the remaining 17 states, 9 states do not require the RACs to indemnify the state, 1 state official did not know, and 7 states do not hire RACs and therefore are not applicable.

STATES REQUIRING RACS TO INDEMNIFY OR HOLD HARMLESS			
RACs Required to Indemnify or Hold Harmless	RACs Not Required to Indemnify or Hold Harmless	No RACs Used	Unknown
33	9	7	1

Pollution Liability Insurance Requirements

Only 17 states currently require RACs to obtain pollution liability insurance. During discussions with state officials, it was learned that states often require insurance for only specific types of activities, such as remedial actions or other activities where there is the risk of contaminant migration. Officials from several states indicated that while they do not currently require pollution liability insurance, they will require RACs to purchase insurance when they begin conducting remedial action activities. It also was learned that at least two of the states (i.e., Montana and New York) that require pollution liability insurance will allow RACs to work without insurance if the RAC cannot obtain it. Indiana officials indicated that while it is not a written requirement that RACs obtain pollution liability insurance, it is the state's practice only to consider those RACs that have insurance. The State of Texas currently requires pollution liability insurance on a case-by-case basis at the project manager's discretion. Prior to 1992, all RACs were required to obtain pollution liability insurance.

The States of California, Florida, Oregon, Texas, and Wisconsin require RACs to name the state as an additional-insured party on all insurance policies. This is significant in the case of Texas since the state is prohibited from purchasing insurance coverage for itself.

POLLUTION LIABILITY INSURANCE REQUIREMENTS	
Insurance Required	**Insurance Not Required**
17	33

Attainability of Pollution Liability Insurance

State officials generally could not indicate if pollution liability insurance is obtainable unless the state requires RACs to obtain this type of insurance. Officials from 24 states indicated that RACs were able to obtain insurance, while officials from 17 states did not know. Additionally, most of the states, even those that require insurance, are unfamiliar with the limits, costs and exclusions of available insurance, as well as the impact the size of a cleanup has on the RAC's ability to obtain insurance. In the 17 states that currently require RACs to obtain pollution liability insurance, RACs working in 15 of those states were successful in obtaining insurance.

Although several states cover a RAC's insurance costs, very few states are familiar with the cost of pollution liability insurance purchased by RACs. One possible reason for the states' not being familiar with the cost and limits of the insurance is that the RACs do not bill the states for the cost of these policies as direct line items in their invoices.

No conclusive information was obtained as to whether the size of the cleanup is a factor in the RAC's ability to obtain pollution liability insurance. Only two state officials were able to discuss this issue. An Arkansas official indicated that RACs would likely consider the larger sites to have greater risks. A Missouri official indicated that the size of the cleanup did not impact the RAC's ability to obtain pollution liability insurance since the insurance companies priced the insurance according to the size of the contract.

The State of Florida is in the process of hiring a consultant to evaluate the availability of pollution liability insurance and its cost-effectiveness. The study also will determine if it is appropriate for the state to reimburse contractors for the cost of the insurance. Florida is conducting the study to evaluate alternatives to indemnification because there is concern within the state that the provision of indemnification is subjecting Florida's Water Quality Assurance Trust Fund and Inland Protection Trust Fund to substantial risk. This study is scheduled for completion early in 1992.

ATTAINABILITY OF POLLUTION LIABILITY INSURANCE			
Insurance Obtainable	Insurance Not Obtainable	Don't Know if Insurance is Obtainable	Insurance Not Applicable
24	2	17	7

RACs Working Without Pollution Liability Insurance and Indemnification

Officials in 19 states indicated that RACs work without pollution liability insurance or indemnification. This includes RACs from 14 states that do not require pollution liability insurance and RACs from 5 states that only require insurance for specific projects (e.g., remedial action projects). It is important to note that immunity is offered in 8 of the 19 states where RACs are currently working without insurance or indemnification. It is likely that immunity plays a significant role in the willingness of these RACs to work without insurance.

A Florida state official was the only individual with information as to whether the size of the cleanup plays a role in a RAC's willingness to work without insurance. The official indicated that the size of the contract is the most important factor, because RACs are more willing to work on a large cleanup site if the value of the contract is significant enough to offset potential risks. RACs are more likely to turn down smaller value contracts that cannot offset the risk associated with the site cleanup.

RACS WORKING WITHOUT INSURANCE AND INDEMNIFICATION	
Work Without Insurance and Indemnification	May Not Work Without Insurance and Indemnification
19	31

Potential for States to Offer Indemnification in the Future

The state of Georgia does not currently offer indemnification, but may begin offering indemnification in the near future. Georgia recently proposed a law to establish a State Superfund program that includes indemnification provisions.

While it is unlikely that Kansas and Maine will begin offering indemnification in the near future, officials in these states did indicate that their states only would offer indemnification if they determine that RACs will not work without it.

POTENTIAL FOR STATES TO OFFER INDEMNIFICATION IN THE FUTURE		
Not a Possibility	Possibility to Begin Offering Indemnification	Indemnification Currently Authorized
39	1	10

3.2 STATES OFFERING INDEMNIFICATION

This section presents information on the ten states (i.e., California, Florida, Illinois, Louisiana, Massachusetts, Nevada, New Jersey, Oregon, Texas, and Washington) that have the authority to offer indemnification. This section includes information on whether the states indemnify subcontractors of the prime RAC; specifics on indemnification limits, associated deductibles, and their application; the length of the indemnification coverage offered by the states; the number of claims filed to date against an indemnified RAC; and an indication if the state requires documentation of diligent efforts to obtain pollution liability insurance. The Indemnification Matrix, which begins on page 3-14, summarizes the information presented in this section.

Indemnification Currently Offered

Ten states *currently* have the statutory authority to offer indemnification to state-employed RACs. These states include California, Florida, Illinois, Louisiana, Massachusetts, Nevada, New Jersey, Oregon, Texas, and Washington. California and Louisiana, however, have not offered indemnification to any RACs to date. A California official indicated that the state has not yet offered indemnification because RACs have not been able to meet all of the necessary requirements. The State of Louisiana has the authority to include a hold harmless clause in response action contracts when an agreement with the RAC cannot otherwise be obtained. The Louisiana official indicated that this situation has not occurred and therefore, the state has not offered any indemnification to date.

The State of Texas has two indemnification statutes, one of which also limits a RAC's liability pursuant to violations of Texas hazardous waste laws. Section 104.002 of the Civil Practice and Remedies Code (as amended by House Bill 1762 in 1991) indicates that the state is liable for indemnification of a person when damages result solely from that person's signing of an industrial solid waste or hazardous waste manifest during the performance of contractual activities. Section 361.405 of the Texas Health and Safety Code indicates that the Texas Water Commission (TWC) is authorized to indemnify RACs through the RACs' contract with the TWC. This indemnification is contingent upon several conditions, including the federal government's agreement (in a contract or cooperative agreement) to in turn indemnify the TWC.

INDEMNIFICATION MATRIX

State Name	Indemnification Currently Offered	Year State Received Authority to Provide Indemnification	Indemnification Offered to All Types of RACs	Subcontractor Indemnified	Liability Limitations			Indemnification Length	No. of Claims Filed	Diligent Effort Documentation Required
					Liability Cap/ Limit Amount	Associated Deductible Levels	Deductible Applications			
California	No[88]	1986	NA	Yes[89]	$25,000,000	Twice the amount of the work assigned to the RAC	NA	Not Established	NA	No
Florida	Yes	1987	Yes	Yes	$5,000,000[90]	$50,000	Occurrence	Indefinite	0	Yes
Illinois	Yes	1987	Yes	Yes	$2,000,000 per single occurrence	$0[91]	NA[92]	Indefinite	0	No
Louisiana	No[93]	1984	NA	Yes[94]	NA	NA	NA	Not Established	NA	
Massachusetts	Yes	1987	No[95]	Yes	SARSS Contracts: $1,000,000 per single occurrence; $3,000,000 aggregate for all occurrences	$0	NA	Limited, but not defined[96]	0	Yes[97]
					Emergency Response Contracts: $300,000 per single occurrence; $1,000,000 aggregate for all occurrence	$50,000	Not Specified			
Nevada	Yes	1965	No[98]	No	$50,000	$0	NA	2 - 6 years[99]	0	No

INDEMNIFICATION MATRIX
(continued)

State Name	Indemnification Currently Offered	Year State Received Authority to Provide Indemnification	Indemnification Offered to All Types of RACs	Subcontractor Indemnified	Liability Limitations			Indemnification Length	No. of Claims Filed	Diligent Effort Documentation Required
					Liability Cap/ Limit Amount	Associated Deductible Levels	Deductible Application			
New Jersey	No	1986	No[m]	Yes	$10,000,000[n] $25,000,000 for a single occurrence, $50,000,000 per contract[o]	$0 10% of claim and 30% of contract amount[o]	NA Occurrence	10 years[n] Claimant is required to file notice within 90 days or one year following accrual of the claim	0	Yes
[illegible]ron	Yes	1987	No[m]	No	$50,000, $300,000[m]	$0	NA	Indefinite[n]	0	No
Washington	Yes	1984	Yes	Yes	NA	NA	NA	Indefinite	0	No
Texas	Yes[m]	1987/1991[m]	No	Yes[n]	NA	NA	NA	Indefinite	0	Yes[m]

COMMENTS

California

(a) The state is authorized to indemnify RACs and their subcontractors; however, RACs have been unable to meet the stringent requirements to receive indemnification.

Illinois

(a) The state has not established a deductible.

Florida

(a) The $5 million limit includes the following: $1 million for personal injury or death or an aggregate limit of $3 million for personal injury or death; an aggregate limit of $1 million for property damage; and an aggregate limit of $1 million for defense costs.

Louisiana

(a) The state has the authority to include a hold harmless clause in RAC contracts, but has not done so to date. The state interprets the hold harmless clause as a form of indemnification. The prime RAC is required to guarantee the same coverage to its subcontractors.

(b) Documentation is not required since RACs are able to obtain pollution liability insurance when required.

Massachusetts

(a) Indemnification is offered only to Emergency Response contractors and Site Assessment and Remediation Support Service (SARSS) contractors.

(b) The state limits the length of indemnification to the period of statutory repose, which could not be defined by the state officials contacted.

(c) State requires SARSS contractors to submit documentation indicating if the RAC has error and omissions insurance and, if not, documentation that this insurance is not available or affordable.

Nevada

(a) The state offers indemnification, on a case-by-case basis, to contractors working on small-scale projects under the state's direction.

(b) While the state operates under the practice that indemnification ends when the contract ends, the statute of limitations in Nevada can vary from 2 to 6 years depending on the claim.

New Jersey

(a) Indemnification previously was offered only when qualified RACs were unable to obtain insurance.

(b) New Jersey's original indemnification program allowed the state flexibility in defining liability limits and periods of indemnification. However, $10 million was the maximum liability coverage allowed. The indemnification period was limited to 10 years.

(c) The state's current indemnification law increases the maximum indemnification limit to $25 million for a single occurrence and $50 million in the aggregate. Deductibles are applied at 30% of the contract amount, not to exceed $1.5 million on a per occurrence basis. Additionally, the RAC is required to pay a co-payment equal to 10% of the claim amount in excess of the deductible, not to exceed the indemnification limit specified in the RAC's indemnification agreement. The current law does allow the NJDEP to lower these deductibles and co-payments on a contract-by-contract basis, based on the availability of pollution liability insurance, the number and quality of bidders, or on other factors that it deems relevant.

Oregon

(a) The Oregon Constitution and Oregon Tort Claims Act limit the amount of indemnification to $50 thousand singularly or $300 thousand in the aggregate.

(b) The state's contractual language indicates indemnification continues beyond the term of the contract in perpetuity.

Texas

(a) Texas is authorized to indemnify RACs under two separate statutes. Pursuant to Section 104.002 of the Civil Practice and Remedies Code (as amended in 1991) Texas is liable for indemnification of a person for damages that result solely from the person's signing of an industrial solid or hazardous waste manifest during the course of

performing contractual activities. Under Section 361.405 of the Texas Health and Safety Code the state has the authority to indemnify RACs, however, no indemnification has been offered because the state's authority is contingent upon the federal government's indemnification of the state.

(b) The Texas Civil Practice and Remedies Code states that the state is liable for indemnification of "a person" for damages resulting solely from that person's signing an industrial solid or hazardous waste manifest during the performance of contractual activities. Therefore, subcontractors would be indemnified against damages resulting solely from their signing of a manifest during the performance of contractual activities.

(c) Pollution liability insurance is currently required on a case-by-case basis at the discretion of the project manager. In the event that insurance is required, the RAC is required to name the state as co-insured on its insurance policy.

Because the federal government does not indemnify states, Texas has not offered indemnification to any RACs pursuant to this statute.

The State of New Jersey used its authority to offer limited indemnification to RACs, up until January of 1990, when its authority expired. The state's authority was reinstated on January 9, 1992, when a new indemnification law was signed.

INDEMNIFICATION STATUS	
Have Authority and Use It	Have Authority and Don't Use It
8	2

Reasons States Offer Indemnification

Only 4 of the 9 states (i.e., Florida, Massachusetts, New Jersey, and Illinois) that have the statutory authority to offer indemnification experienced difficulties obtaining RAC services or determined that RACs were unable to obtain pollution liability insurance. Florida indicated that it began offering indemnification because of difficulty obtaining RAC services without limiting a RAC's potential liability. The Commonwealth of Massachusetts began offering indemnification because all of the RAC respondents to the first site assessment and remediation support services procurement were unable to meet the commonwealth's pollution liability insurance requirement. Massachusetts was forced to reject each of the three proposals received because they contained a pollution exclusion clause. New Jersey first began offering indemnification as a result of two incidents in 1984/1985 where response contractors could not obtain pollution liability insurance. Illinois established a fund to cover the cost of indemnification in 1987 to assure and encourage the participation of RACs in cleanup efforts until adequate liability insurance (occurrence-based) is readily available to RACs. Washington offered indemnification when the state first contracted with RACs because they believed it was a good business practice. Nevada offers indemnification, on a case-by-case basis, to all state contractors since they are working on the state's behalf. Although it was not Oregon's original intent to offer indemnification, RACs are able to obtain indemnification since Oregon's Superfund program is based on CERCLA.

The States of California and Louisiana have the authority to offer indemnification, but have not done so to date. A California official indicated that it was never the state's objective to offer indemnification to RACs. The legislation addressing the indemnification of RACs was developed as a result of several RACs pooling together and lobbying the state legislature. The state's financial department subsequently became involved, resulting in the inclusion of several prohibitive restrictions, which have precluded any RACs from receiving indemnification to date. Louisiana officials were unable to specify why the state passed legislation allowing the inclusion of hold harmless clauses in response action contracts.

Texas amended its Civil Practice and Remedies Code in 1991 to include indemnification of RACs for damages resulting from their signing of industrial solid waste and hazardous waste manifests in response to the Union Gas federal court decision that waived Pennsylvania's sovereign immunity. Texas's second indemnification statute, Section 361.405 of the Texas Health and Safety Code, reportedly resulted from RAC lobbying efforts.

REASONS STATES OFFER INDEMNIFICATION						
Difficulty Obtaining RAC Services and Inability of RAC to Obtain Insurance	Good Business	RACs Work on State's Behalf	State Based Legislation on CERCLA	RAC Lobbying Efforts	Response to Federal Court Decision	Unknown
4	1	1	1	2*	1*	1
* Texas is counted twice because it had a different reason for enacting each of its two indemnification statutes.						

Year States Received Authorization to Offer Indemnification

The first state to obtain authority to offer RAC's indemnification was Nevada in 1965. This authority is provided in Chapter 41 of the Nevada Revised Statutes that provides for the indemnification of all state contractors. Louisiana and Washington obtained their authority in 1984, followed by California and New Jersey, for its original indemnification program, in 1986. Florida, Illinois, Massachusetts, Oregon, and Texas (for its first indemnification statute) all obtained their authority to indemnify RACs in 1987. Texas's second indemnification statute was enacted in 1991. New Jersey obtained authority for its current indemnification program on January 9, 1992.

YEAR AUTHORITY TO OFFER INDEMNIFICATION WAS RECEIVED			
States Receiving Authorization Prior to 1980	States Receiving Authorization Between 1980 and 1985	States Receiving Authorization Between 1985 and 1990	States Receiving Authorization After 1990
1	2	7*	2*

* New Jersey is counted twice because it received authorization for its original indemnification program in 1986, and its current indemnification program in 1992. Texas is also counted twice because it has two indemnification statutes, one of which was enacted in 1987 and the other in 1991.

Indemnification Offered to All Types of RACs

Three of the 10 states (i.e., Florida, Illinois, and Washington) that have the authority to offer indemnification, currently offer indemnification to all types of RACs. Five states (i.e., Massachusetts, Nevada, New Jersey, Oregon, and Texas) only offer indemnification to RACs performing certain types of work or meeting specific criteria. Massachusetts only offers indemnification to emergency response and site assessment and remediation support service contractors since these contractors are unable to obtain errors and omissions insurance. Nevada only offers indemnification to RACs working on small scale projects under the direction of the state. Under New Jersey's original indemnification program, indemnification was offered on a case-by-case basis when qualified RACs were unable to obtain insurance. Under New Jersey's current program, the state is permitted to offer indemnification, when necessary, to solicit qualified RACs. Oregon is only authorized to offer indemnification to removal and remedial action contractors. Under its Civil Practice and Remedies Code, Texas is only liable for the indemnification of RACs that incur damages as a result of their signing of an industrial solid waste or hazardous waste manifest. Texas has not used its authority under its Health and Safety Code to offer indemnification to RACs. California and Louisiana have not used their authority to offer indemnification and are therefore not addressed.

INDEMNIFICATION OFFERED TO ALL TYPES OF RACS			
Offered to All RACs	Offered to Only Certain Types of RACs	Offered to RACs Meeting Specific Conditions	Authority Not Used
3	2	3	2

Subcontractors Indemnified

Florida, Illinois, Massachusetts, and Washington currently extend indemnification to subcontractors in addition to the prime RAC. Officials from Oregon and Nevada indicated that while they offer indemnification to prime contractors, indemnification is not extended to RAC subcontractors.

Texas's Civil Practice and Remedies Code states that the state is liable for the indemnification of "a person" for damages that result solely from that person's signing of an industrial solid waste or hazardous waste manifest during the performance of contractual activities. Thus, a subcontractor would be indemnified for damages that result from its signing of a manifest during the performance of contractual activities.

Officials from the States of California and Louisiana, which have not extended indemnification to any RAC as yet, indicated that subcontractors would receive indemnification if indemnification was offered to the prime RAC. In addition, a New Jersey state official indicated that the state extended indemnification to subcontractors under their original indemnification program and will continue to do so under the current program.

Officials from six of the seven states (i.e., California, Florida, Illinois, Louisiana, Massachusetts, New Jersey, and Washington) that indicated indemnification is or would be extended to subcontractors, specified that the prime contractor would be required to share indemnification coverage with their subcontractor because the subcontractor would not receive separate indemnification coverage. Consequently, any claims filed against a subcontractor would be subject to the prime's liability limitations and the prime's coverage would be reduced accordingly.

SUBCONTRACTORS INDEMNIFIED		
Subcontractors Indemnified	**Subcontractors Not Indemnified**	**Authority Not Used**
6	2	2

Liability Limitations

All of the states that currently offer indemnification, except Washington and Texas, have established limits on the amount of indemnification offered. Florida set a $5 million maximum limit consisting of the following smaller limits: $1 million limit for personal injury or death or an aggregate limit of $3 million for personal injury or death; an aggregate limit of $1 million for property damage; and an aggregate limit of $1 million for defense costs. Associated with Florida's coverage is a $50 thousand deductible applied on a per occurrence basis. Illinois limits its RAC indemnification to $2 million for a single occurrence and has no associated deductibles.

Oregon's Constitution and Tort Claims Act limits the state's indemnification to $50 thousand singularly or $300 thousand in the aggregate. There are no deductibles associated with Oregon's indemnification coverage. Nevada, which also does not have any deductibles, limits its indemnification coverage to a maximum of $50 thousand.

Under New Jersey's original indemnification program, indemnification limits varied from contract to contract. A state official indicated that the state attempted to keep the limits as low as possible. The state official indicated that the coverage level was a function of the dollar value of the contract and that $10 million was a common maximum limit. No deductibles were associated with coverage under the previous program. New Jersey's current program limits indemnification to $25 million for a single occurrence and $50 million in the aggregate. Deductibles are applied at 30 percent of the contract value, not to exceed $1.5 million on a per occurrence basis. The RAC additionally is required to pay a co-payment equal to 10 percent of the amount of the claim in excess of the deductible, not to exceed the indemnification limit specified in the RAC's indemnification agreement. The NJDEP, however, is authorized to lower the deductible and co-payment on a contract-by-contract basis.

The Commonwealth of Massachusetts provides its Site Assessment and Remediation Support Service (SARSS) contractors with maximum indemnification limits of $1 million for a single occurrence and $3 million in the aggregate for all occurrences. The commonwealth's emergency response contractors are provided with coverage of $300 thousand for a single occurrence and $1 million in the aggregate for all occurrences. The limits associated with the emergency response contracts are reportedly lower because the incidents being addressed are of smaller scale. A deductible of $50 thousand is applied to emergency response contract claims, while there is no deductible associated with SARSS contracts.

California and Louisiana, which have the authority to offer indemnification but have not done so to date, currently have no maximum indemnification limits or associated deductibles. A California official did indicate that limits and deductibles would be established if a RAC was able to meet the requirements associated with indemnification.

LIABILITY LIMITATIONS	
Range of Maximum Limits	Range of Deductibles
$50,000 - $50,000,000	$0 - $1,500,000

Length of Indemnification Coverage

Five states (i.e., Florida, Illinois, Oregon, Texas, and Washington) currently offer indemnification in perpetuity. The indemnification offered by these states extends indefinitely beyond the completion of work and term of the contract. A Massachusetts statute limits the

period of indemnification. However, the Massachusetts official contacted was unable to define the exact length of this period. Nevada officials indicated that the state operates under the practice that indemnification ends when the contract expires. However, the state's statute of limitations extends the period of indemnification from 2 to 6 years depending on the claim. Under New Jersey's original indemnification program, the period of indemnification varied by contract, with a maximum period of 10 years. New Jersey's current indemnification program requires the claimant to file notice of a claim within 90 days following accrual of the claim. However, the law does state that the New Jersey Superior Court may permit a claimant to file a notice at any time within one year of accrual of the claim provided that the RAC and state are not "substantially prejudiced thereby," and the claimant shows sufficient reasons for failing to file notice within 90 days.

California and Louisiana have not established policies dealing with the length of indemnification.

LENGTH OF INDEMNIFICATION				
Indemnification Provided Indefinitely	Limits Vary by Contract	Indemnification Limited to Statute of Limitations	Limited, But Not Defined	Not Established
5	1	1	1	2

Number of Claims Filed

Based on discussions with officials from the eight states (i.e., Florida, Illinois, Massachusetts, Nevada, New Jersey, Oregon, Texas, and Washington) that offer indemnification, it was learned that no claims have been filed against any indemnified RAC to date.

NUMBER OF CLAIMS FILED TO DATE	
Number of Claims Filed	Number of States That Offered Indemnification
0	8

Diligent Effort Documentation Required

Only 4 of the 10 states (i.e., Florida, New Jersey, Massachusetts, and Texas) that have the authority to offer indemnification require RACs to submit documentation of their diligent efforts to obtain pollution liability insurance. Florida and New Jersey require pollution liability insurance and also require RACs to document their diligent efforts to obtain this insurance. Louisiana also requires RACs to obtain pollution liability insurance, but does not require diligent effort documentation because RACs have been able to obtain insurance. Massachusetts currently

does not require RACs to obtain pollution liability insurance; however, it recently required SARSS contractors to submit documentation indicating whether they have errors and omissions insurance and, if not, to document that this insurance is not economically affordable for the RAC. Texas only requires documentation of diligent efforts when pollution liability insurance is required.

DILIGENT EFFORT DOCUMENTATION	
Documentation Required	**Documentation Not Required**
4	6

3.3 STATES NOT OFFERING INDEMNIFICATION

This section provides information on the 40 states that never had the authority to offer indemnification. This section addresses trends observed by the states and any difficulties experienced as a result of not offering indemnification. Information also is presented indicating whether RACs have requested indemnification from the state; the number of RACs responding to Request for Proposals (RFPs) for response action contracts; and whether the state offers immunity to RACs. The information discussed in this section is summarized in the No Indemnification Matrix that begins on page 3-25.

Reduced RAC Pool

Only 3 of the 40 states (i.e., Alaska, Rhode Island, and Tennessee) that never had the authority to offer indemnification indicated that they observed a reduction in the pool of qualified RACs as a result of their state not offering indemnification. An Alaska state official indicated that two firms withdrew from the bidding process because they were unwilling to sign contracts that did not include indemnification provisions. Similarly, in Rhode Island, three contractors withdrew from the bidding process because the state did not offer indemnification. The State of Tennessee observed a reduction in the number of RACs willing to perform cleanup work. Michigan and Pennsylvania officials also indicated that they observed a reduction in the pool of qualified RACs, which was attributable to their environmental bonding requirements, not to their indemnification practices.

NO INDEMNIFICATION MATRIX

State Name	Reduced RAC Pool	Increased RAC Costs	Cleanup Delays	Difficulty Obtaining RACs			Indemn. Requested by RACs	Number of RACs Responding to RFPs	State Provides Immunity
				RAC Type	Work Phase	Site Char.			
Alabama	No	No	No[a]	NA	NA	NA	No	NA	Yes
Alaska	Yes[a]	No	No	NA	NA	NA	Yes	6; 11[b]	Yes
Arizona	No	No	Yes[a]	NA	NA	NA	Yes	5-7; 12-14[b]	No
Arkansas	No	No	No	NA	NA	NA	No	5-10	Yes
Colorado	No	Yes[a]	Yes	NA	NA	NA	Yes	Unknown[b]	No
Connecticut	No	No	No[a]	NA	Yes[a]	NA	Yes	15	No[b]
Delaware	No	No	No	NA	NA	NA	Yes	Unknown	Yes
Georgia[a]	Na	NA	NA	NA	NA	NA	NA	NA	NA
Hawaii	No	No	No	NA	NA	NA	Unknown	NA[a]	Yes
[redacted]o	No	No	No	NA	NA	NA	Yes[a]	3	No
[redacted]na	No	No	No	NA	NA	NA	Yes	10	No
Iowa[a]	NA	NA	NA	NA	NA	NA	NA	NA	No
Kansas	No[a]	No[a]	No[a]	NA	NA	NA	No	NA[b]	No
Kentucky	No	No	No	NA	NA	NA	No	3-4	No
Maine	No	No	No	NA	NA	NA	Unknown[a]	5-6	No
Maryland	No	No	No	NA	NA	NA	No	5-6	No
Michigan	No	No	No	NA	NA	NA	Yes	6; 3-4[a]	No
Minnesota	No	No	No	NA	NA	NA	Yes	36[a]	No
Mississippi	No	No	No	NA	NA	NA	No	NA[a]	Yes
Missouri	No	No	No[a]	NA	NA	NA	No	100[b]	Yes
Montana	No	No	No	NA	NA	NA	Yes	6-7	Yes[a]
Nebraska[a]	NA	NA	NA	NA	NA	NA	NA	NA	No
New Hampshire	No	Unknown	No	NA	NA	NA	No	10	No[a]
[redacted] Mexico	No	No	No	NA	NA	NA	No	20-30[a]	No
[redacted] York	No	Unknown	Yes[a]	NA	NA	NA	Yes	8	No

NO INDEMNIFICATION MATRIX
(continued)

State Name	Reduced RAC Pool	Increased RAC Costs	Cleanup Delays	Difficulty Obtaining RACs			Indemn. Requested by RACs	Number of RACs Responding to RFPs	State Provider Immunity
				RAC Type	Work Phase	Site Char.			
North Carolina	No[46]	No[46]	No[46]	NA	NA	NA	NA	Unknown	No
North Dakota[46]	NA	NA	NA	NA	NA	NA	NA	NA	No
Ohio	No	No	No	NA	NA	NA	Yes	NA[46]	Yes[56]
Oklahoma	No	Yes[46]	No	NA	NA	NA	No	7-10	No
Pennsylvania	No[46]	No	No	NA	NA	NA	Yes	2-10[56]	Yes
Rhode Island	Yes[46]	No	No	NA	NA	NA	Yes	19	No
South Carolina	No	No	No	NA[46]	NA[46]	NA[46]	Yes	12	No
South Dakota	No	No	No	Yes[46]	NA	NA	No	2-3	Yes
Tennessee	Yes	No	No	NA	NA	NA	No	8; 3-4[46]	[illegible]
Utah	No	No	No	NA	NA	NA	No	4	[illegible]
Vermont	No	No	No	NA	NA	NA	Yes	≥3	No
Virginia[46]	NA	NA	NA	NA	NA	NA	No	NA	No
West Virginia[46]	NA	NA	NA	NA	NA	NA	NA	NA	Yes[56]
Wisconsin	No	No	Yes[46]	NA	NA	NA	No	8-10	No
Wyoming[46]	NA	NA	NA	NA	NA	NA	NA	NA	NA

COMMENTS

Alabama

(a) No delays have been experienced since the state employs RACs to conduct emergency removals only.

Alaska

(a) Two firms withdrew because they would not sign contracts without an indemnification provision.

(b) Six contractors responded to a RFP for cleanup work while 11 contractors responded to a RFP for assessment work.

Arizona

(a) A delay was experienced during the first solicitation when joint liability was negotiated. No delays were experienced with the most recent solicitation.

(b) Five to 7 RACs responded to a RFP issued five years ago, while 12-14 RACs responded to the most current RFP.

Colorado

(a) The cost of RAC services has increased due to the cost of pollution liability insurance.

(b) A state official indicated that "a fair number of RACs" responded to the state's RFP for work on a state-lead site. No specific information on the number of respondents was available.

Connecticut

(a) RACs, to date, have only been involved in RI/FS work. RACs indicated they will not perform design or remediation work without indemnification or immunity.

(b) The Connecticut DEP plans to request limited immunity for RACs from the state legislature if RACs are unwilling to work on a pending design contract without immunity.

Georgia

(a) The state has never hired a RAC to conduct response action work.

The state has not issued a RFP. It has only completed removals on an emergency basis.

Idaho

(a) Only one RAC has requested indemnification to date.

Iowa

(a) The state has never hired a RAC. As of October 1, 1991, there are no state-lead Superfund sites.

Kansas

(a) The state has not hired many RACs. PRPs and EPA conduct most of the remedial work in the state.

(b) The state has one contractor they use, which is on-call.

Maine

(a) State officials did not know if RACs have requested indemnification.

Michigan

(a) For Superfund work up to the RA phase, the state issues a RFP every four years. The last time a RFP was issued, 6 contractors responded to the RFP and all 6 were selected. State Superfund cleanup work is bid out for each job. Generally, 3 to 4 contractors respond.

Minnesota

(a) The state issues a RFP for Superfund work every 4 years. Thirty-six RACs responded to the last solicitation.

Mississippi

(a) The state only uses RACs for emergency response work. The state selects the contractor closest to the site; no RFP is issued. There are 3 to 4 contractors located throughout the state that are used.

Missouri

(a) The state only experienced delays when a RAC negotiated for indemnification from the EPA.

(b) The state does not issue RFPs, but rather maintains a list of prequalified RACs.

Montana

(a) The state provides immunity to RACs only if they are not negligent. If the RAC is found to be negligent, they are responsible for their own actions.

Nebraska

(a) The state has never hired a RAC to conduct response action work.

New Hampshire

(a) The state, in very limited cases, provides developers "hold harmless" protection from pre-existing conditions in exchange for cleaning up property they develop.

New Mexico

(a) Twenty to 30 RACs responded to two RFPs involving underground storage tank remediation activity.

New York

(a) The delays involved contract negotiations with RACs regarding inclusion of an indemnification clause in RAC contracts that was not acceptable to the state.

North Carolina

(a) Most cleanup activities are conducted by PRPs. The state has only contracted with one RAC in the past year.

North Dakota

(a) The state has never hired a RAC to conduct response action work.

Ohio

(a) The state reportedly does not solicit bids using RFPs.

(b) The state maintains that state law in combination with the eleventh amendment to the U.S. Constitution provides immunity to the sta and state-employed RACs. The Third Circuit Court of Appeals ruled against the provision of immunity per the eleventh amendment in United States v. Union Gas Co.

Oklahoma

(a) Although costs have increased, the state official was uncertain if the increase in costs is attributable to the state not offering indemnification or other factors.

Pennsylvania

(a) State officials indicated that state bonding requirements and not state indemnification practices are limiting the number of RACs responding to RFPs.

(b) The number of RACs responding varies with the size of the project and type of work involved.

Rhode Island

(a) Three contractors withdrew from the bidding process because the state did not offer indemnification.

South Carolina

(a) South Carolina previously had difficulty obtaining RAC services. The difficulty was due to a lack of qualified firms and not as a result of the state's indemnification practices.

South Dakota

(a) The state attributes its difficulty in obtaining RACs, particularly specialty contractors, to the remoteness of the state.

Tennessee

Eight RACs responded to RI/FS RFPs, while 3 to 4 contractors responded to RA RFPs.

Virginia

(a) The state has never hired a RAC to conduct response action work.

West Virginia

(a) The state has never hired a RAC to conduct response action work.

(b) West Virginia's "Good Samaritan Law" appears to provide RACs with immunity.

Wisconsin

(a) The state has experienced a 2 to 3 month delay at two Superfund sites.

Wyoming

(a) The state has never hired a RAC to conduct response action work.

REDUCED RAC POOL	
Reduction in RAC Pool Observed	Reduction in RAC Pool Not Observed
3	37

Increased RAC Costs

Only 1 of the 40 states (i.e., Colorado) that never had the authority to offer indemnification indicated that it observed an increase in the cost of RAC services as a result of the state not offering indemnification. The Colorado official indicated he based this observation on at least one contract that included increased costs to cover pollution liability insurance. The official implied that if indemnification was offered, then these insurance costs would not have been incurred. The official at the State of Oklahoma indicated the state observed an increase in the cost of RAC services, but was not certain if this increase was a result of the state not offering indemnification.

INCREASED RAC COST		
Observed Increase Due to Lack of Indemnification	States Not Observing Increase	Increase - Unknown Reasons
1	38	1

Cleanup Delays

Officials in 5 of the 40 states (i.e., Arizona, Colorado, Missouri, New York, and Wisconsin) that never had the authority to offer indemnification indicated that they experienced delays in conducting cleanups for reasons related to the state not offering indemnification. An Arizona official acknowledged that the state experienced a delay in obtaining RACs for their first RFP while liability provisions were determined, but that indemnification was not an issue with bidders on the state's most recent RFP. Officials from Colorado and Missouri indicated that their states experienced delays while RACs negotiated indemnification from the EPA on state-lead sites. New York experienced delays during contract negotiations when a RAC included an indemnification clause in their contract, which was unacceptable to the state. A Wisconsin official indicated that it experienced delays of 2 to 3 months at two state-lead sites because indemnification was not offered. Consequently, Wisconsin officials are attempting to obtain EPA indemnification for these RACs.

CLEANUP DELAYS	
Delays Experienced	Delays Not Experienced
5	35

Difficulty Obtaining RACs

Virtually all of the 40 states that do not offer indemnification indicated they had no difficulty obtaining the services of qualified RACs. Connecticut and South Dakota were the only states that indicated they experienced some difficulty obtaining RAC services. A Connecticut official indicated that some RACs informed the state that, while they are willing to perform RI/FS work, they would be unwilling to conduct remedial design or remedial action work without indemnification or immunity. RACs have not yet been tasked to conduct remedial design or remedial action work so their reported unwillingness to conduct this work has not been tested to date. A South Dakota official acknowledged the state experienced difficulty obtaining specialty contractors due to the remoteness of the state and not because the state does not offer indemnification.

DIFFICULTY OBTAINING RACS	
Difficulty Experienced	Difficulty Not Experienced
2	38

Indemnification Requested by RACs

RACs in 16 of the 40 states that never had the authority to offer indemnification requested indemnification from the state on at least one occasion. It is interesting to note that 5 of the 16 states (i.e., Alaska, Delaware, Montana, Ohio, and Pennsylvania) in which RACs requested indemnification offer immunity. It is possible that the RACs that requested indemnification were not aware that immunity was provided by the state.

INDEMNIFICATION REQUESTED	
Indemnification Requested	Indemnification Not Requested
16	24

Number of RACs Responding to RFPs

No correlation can be drawn between the states not offering indemnification and the number of RACs responding to RFPs for response action contracts. A state's geographic location and budget for response action contracts are most responsible for the number of responses received to a RFP. South Dakota received the smallest number of RAC responses (i.e., 2 to 3 responses) due to the remoteness of the state and the small number of qualified contractors located in the state. Minnesota received the largest number of responses to a RFP (i.e., 36 responses), presumably because the state issues only one Superfund contract every four years and selects four contractors to conduct response activities over a four year period.

Several state officials indicated that their state does not solicit bids with RFPs. An Alabama official, for example, indicated that Alabama acquires RACs through a continuous requisition process. Missouri maintains a pre-qualification list.

RACS RESPONDING TO RFPs	
Range of Responses	**Average Number of Responses**
2 - 36	10

3.4 STATE NARRATIVES

The statutes and contractual materials referenced in the following state narratives are included in Attachment D of this report.

ALABAMA

The State of Alabama does not offer indemnification, however, it does provide state-employed RACs with immunity from liability for any civil damages resulting from hazardous waste cleanup under Section 22-30A-9 of the Alabama Hazardous Waste Cleanup Fund. The statute states "no action may be commenced against the director, any employee of the department or any person under contract with the department for damages as a result of action taken or omitted in the course of performing duties and functions under this chapter..." This statute was drafted to provide immunity to state employees and contractors who conduct work under the Hazardous Waste Cleanup Fund. The state contact indicated that this provision was added to the Hazardous Waste Cleanup Fund in 1988. The state contact also indicated that this provision has never been tested in court.

The Alabama official indicated that the state does not offer indemnification to state-employed RACs. Indemnification is not necessary since immunity is offered to contractors. It is important to note that the state official originally indicated that the state offered indemnification. During a subsequent conversation it was clarified that the state actually provides immunity and not indemnification.

The state official indicated that they do not have any difficulty obtaining the services of RACs. The state only hires RACs to perform emergency removal services. These services typically involve removal of two or three abandoned drums at a cost of less than $15,000. The Hazardous Waste Cleanup Fund has only received $140,000 from the state legislature since its inception in 1988. The state official said that the state did not experience difficulty obtaining RAC services prior to implementation of the immunity provision and that the state has notified all contractors of the immunity provisions.

The state contact indicated that all RI/FS activities are conducted by Region IV. He also indicated that one large Superfund site in the state has been in and out of bankruptcy for several years. He stated that the state may be forced to begin a cleanup at that site in the near future and that this could encourage the state to modify or clarify the immunity provisions.

The Alabama state official indicated that the Hazardous Waste Cleanup Fund will be rewritten or amended in the 1992 legislative session and that it is possible that the immunity statute will be revised or clarified at that time. The state official contacted is the person at the Alabama Department of Environmental Management responsible for crafting new language for the cleanup fund in conjunction with agency lawyers. He stated that the agenda for the next session has not yet been determined.

ALASKA

The State of Alaska provides limited immunity to hazardous substance RACs, oil spill response RACs, the state, state employees and response corps volunteers. Section 46.03.823 of the Alaska Statutes provides immunity to "A person who is a response action contractor with respect to a release or threatened release of a hazardous substance other than oil whose acts or omissions are not contrary to a response plan or order...unless the release or threatened release is caused by an act or omission of the response action contractor that is grossly negligent or constitutes intentional misconduct." The statute further reads that a claimant must show the actions of a RAC were "not in accordance with generally accepted professional standards and practices at the time the response action services were performed."

Section 46.03.825 of the Alaska Statutes provides immunity to oil spill response action contractors. This section was repealed and Section 46.03.824(a) and (g) revised to delete "other than oil", both effective July 1, 1992. The effect of these revisions will be to provide identical immunity provisions to hazardous substance and oil spill RACs. These changes were passed in the 1991 legislative session.

Section 46.08.160 of the Alaska Statutes Supplement indicates that "the state, employees of the state and response corps members are not liable for costs or damages as a result of actions taken..." unless the actions are grossly negligent or due to intentional misconduct. The response corps consists of volunteers who are entitled to per diem and expenses.

The State of Alaska does not offer indemnification to state-employed RACs. The state official said that offering indemnification has been discussed, but that it is not likely that the state will offer indemnification in the near term.

The state contracting manager indicated that the state has not had difficulty obtaining RAC services. He stated that 11 RACs responded to an RFP to conduct assessments and that they received 6 responses to a cleanup RFP. They selected 4 contractors for assessments and 3 for cleanup. The contracting manager said the fact that prime contractors are prohibited by law to mark-up subcontractor invoices was more of an issue than indemnification in obtaining RAC services. The contracting manager stated that there were 2 firms, 1 of which was self insured, that would not sign contracts without an indemnification provision. Since there are other qualified contractors available and willing to sign the contracts, this did not hinder the contracting process.

The contracting official was not certain if RACs are able to obtain pollution liability insurance. He stated that they are required to carry general liability insurance.

The State of Alaska requires RACs to "indemnify, save harmless and defend the state, its officers, agents and employees from all liability..."

The state officials contacted do not anticipate any additional changes to the immunity provisions in Section 46.03.823 since the statutes were modified in the last three legislative sessions. Neither contact was aware of any proposals to offer indemnification.

ARIZONA

The State of Arizona does not offer indemnification or provide immunity to state-employed RACs or any other contractors. The constitution of the State of Arizona prohibits giving gifts to private parties and the state Attorney's General office has interpreted indemnification as a gift. As such, indemnification is unconstitutional in the State of Arizona. Section 12-820 of the Courts and Civil Proceedings Statutes provides absolute and qualified immunity to public entities and public employees but this immunity does not apply to RACs.

According to the state contract management specialist, the State Superfund Law was passed five years ago. When the first contract was put for bid with a liability clause, several RACs requested that the state provide indemnification. At that time, the Attorney's General office interpreted indemnification to be unconstitutional. The Arizona Department of Environmental Quality (ADEQ) worked with the potential bidders and the Attorney's General office to develop liability provisions that both parties could accept. At the time of this initial contract, the state official indicated there was some discussion of proposing a constitutional amendment to allow RAC indemnification, but instead, the contract was issued with a joint liability provision: the state accepted RAC liability and the contractor accepted state liability. The contract included a provision to enter into discussions on indemnification if the legislature enacted provisions to allow indemnification. Indemnification for RACs in Arizona has not been an issue since the initial contracts were awarded five years ago, and the Attorney's General office indicated there are no ongoing discussions to develop provisions to allow indemnification.

The state has not experienced any difficulties in obtaining RACs. Five to 7 contractors submitted bids for the first RFP issued five years ago and the state entered into contracts with two bidders. With the current liability provisions (i.e., joint liability), 12 to 14 RACs submitted responses to the latest RFP. There was a delay in obtaining RACs for the first RFP while liability provisions were being determined, but the state contact indicated that indemnification was not an issue with bidders on the latest RFP.

The state requires the RAC to "indemnify and hold harmless the state and/or its agents, officials and employees."

Arizona requires RACs to work with standard insurance, but does not require the RACs to carry pollution liability insurance. The state official indicated that RACs work without pollution liability insurance.

Although the Attorney's General office indicated there were no plans to amend the constitution to allow indemnification, the state contact at the ADEQ indicated that a new director of the ADEQ might attempt to craft a new policy.

ARKANSAS

The State of Arkansas does not offer indemnification to state-employed RACs, however, the state does provide immunity under Sections 8-7-420 and 8-7-512 of the Arkansas Environmental Law Statutes. These sections indicate that "a person taking a response action as a contractor for the Department of Pollution Control and Ecology (ADPC&E), shall not be liable to any person for injuries, costs, damages, expenses, or other liability, including claims for indemnification or contribution, and claims for death, personal injury, illness, loss of or damage to property, or economic loss resulting from a release or threatened release of hazardous substances." This limitation of liability does not apply if the release or threatened release was caused by negligent, grossly negligent, or intentional misconduct by the person taking the response action.

Arkansas does not offer indemnification because the state is able to obtain qualified RACs without difficulty. A state official indicted that a total of four RACs are currently working with the state on two Federal Superfund sites and that no RACs are currently employed for preliminary response action activities. Five to 10 contractors typically respond to Arkansas's RFP solicitations. The state official indicated that the state has not experienced a reduction in the pool of qualified contractors, an increase in the cost of contractor services, or a delay in the cleanup of contaminated sites as a result of the state not providing indemnification.

The state official also indicated that language in response action contracts requires the RACs to indemnify and hold harmless the ADPC&E from all claims, damages, losses and expenses that result from the performance of work providing that:

- the claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and

- the claim, damage, loss or expense is caused in whole or in part by any negligent act or omission of the contractor, its subcontractor, or any person or organization directly or indirectly employed by the contractor.

The state is not required by statute to include this information in its contracts.

Arkansas historically required state-employed RACs to obtain pollution liability insurance on a case-by-case basis; however, it is likely to begin requiring insurance on all new contracts. The state official indicated that only 1 of the 4 RACs currently working for the state was required to obtain such insurance. The state did not require two of the RACs to obtain insurance because of their oversight roles. The particular RAC that was required to obtain insurance, self-insured for a maximum of $3 million per claim and a $6 million annual aggregate. The RAC charged

the state an amount of $3 thousand for the self insurance. The state official was not able to provide any additional information on the availability of pollution liability insurance in the state.

The state official indicated that all RACs are required to maintain general liability insurance and that some of these insurance policies cover pollution liability. He indicated that if pollution liability is not covered under these general policies, then it is likely that most RACs work without pollution liability insurance. The state official further indicated that well drillers, subcontractors and specialty firms such as surveyors, were most likely to work without pollution liability insurance. He indicated that they tend to limit their efforts to investigation activities and not work at remedial action sites without insurance.

The state official indicated that Arkansas was unlikely to change its indemnification practices in the near future. The state would likely wait until the Federal government finalizes its indemnification practices prior to considering any changes.

CALIFORNIA

The State of California is authorized to indemnify state-employed RACs under Section 25364.6 of the California Health and Safety Code. This statute outlines the state's authority and includes several requirements that RACs and the Department of Health Services must meet for indemnification to be offered. According to an official at the California Department of Toxic Substances Control, the state has not offered indemnification to any RAC to date. The official indicated that no RACs have requested indemnification from the state because of their inability to meet the criteria specified in Section 25364.6.

The state official indicated that it was never the state's objective to offer indemnification to RACs. The legislation regarding indemnification of RACs was developed as a result of several RACs pooling together to lobby the state legislature shortly after response action contracts originated in 1985. Their efforts were influential and draft legislation allowing indemnification was developed. The state's financial department subsequently became involved and their efforts resulted in the inclusion of several prohibitive restrictions. The state official indicated that it is unlikely the state will lessen these restrictions or change its indemnification policy, as a sufficient number of qualified RACs continue to respond to the department's RFPs.

The Department of General Services is required to make several determinations before approving the Department of Health Services' offer of indemnification. These determinations include a demonstration by the RAC that it cannot obtain insurance at a fair and reasonable price and that this insurance is unlikely to become available; there is no other qualified RAC; and there is no other RAC that possesses insurance for the costs, damages and expenses that could be incurred as a result of a hazardous substance release or threatened release. The Department of General Services must also determine that the RAC assumes liability in an amount of up to twice the value of the work assigned and that the indemnification is limited to a maximum amount of $25,000,000. Several other conditions regarding the PRP at the response action site also restrict the availability of indemnification.

The state official indicated that the state experienced a reduction in the pool of qualified contractors, but that the reduction was not associated with the state's indemnification policy. Rather, the reduction was attributable to the small amount of state funding currently available and under-funding of previous response action contracts. The official also indicated that costs associated with contractor services have risen in response to inflation and not due to the absence of indemnification. Additionally, the state has not experienced delays in the cleanup of contaminated sites, nor has the state experienced difficulty in obtaining the services of qualified RACs.

California has the authority to indemnify professional engineers and geologists working on state construction contracts under Section 2782.6 of the California Civil Code. The indemnification is for damages arising from subterranean contamination or concealed conditions while providing hazardous materials identification, evaluation, preliminary assessment, design, remediation or other related services. This indemnification does not cover the first $250 thousand of liability and does not have a specified maximum level of coverage. There appears to be minimal restrictions regarding the allocation of indemnification under this statute. The official contacted at the California Department of Toxic Substances was not familiar with this statute and indicated that it likely pertains to work performed for the state Department of Transportation.

The State of California does not currently require its RACs to obtain pollution liability insurance; however, the state does require RACs to maintain $500 thousand in general liability insurance per Section 1254 of the California State Administrative Manual. In addition, the RAC must include the state as an insured party on the insurance policy.

An official at the state indicated that RACs working in the state have been able to obtain insurance, albeit at an unreasonable price. Another official indicated that RACs have "gone bare", meaning that they have conducted response action work without the protection of insurance or indemnification. The official indicated further that those RACs who believe they are protected by their corporate structure continue to conduct response action work, specifically field work, while those who are vulnerable do not participate in field work related activities. He indicated that some smaller firms (e.g., well drillers) continue to work regardless of potential liability. The state official indicated that the size of the cleanup does not appear to be a factor in the willingness of the RAC to perform work without indemnification, rather, the risk of something going very wrong at a site was more likely to serve as a deterrent to the RAC.

Prior to 1986, the state included language in its standard contract agreement that required the RAC to obtain private liability insurance and to indemnify the state. According to a state contracts official, this language is no longer included in state contracts because private liability insurance is not available. Language currently included in contracts indicates that if a law is passed allowing indemnification then indemnification will be offered to RACs under the contract.

The state official emphasized that the state's program has been quite successful and that a significant amount of work has been completed to date despite the fact that indemnification is not offered.

COLORADO

The State of Colorado does not offer indemnification or immunity to state-employed RACs. The State of Colorado does not provide immunity from liability for any civil damages from hazardous waste cleanups to persons, other than the employee of a governmental subdivision or agency, receiving compensation for their services. Section 29-22-109 of the Government-Local Statutes does provide immunity from liability to any person providing assistance or advice concerning the mitigation of hazardous substance incidents. This is strictly a Good Samaritan Statute and does not apply to contractors. Section 29-22-109(4)(b) of the Government-Local Statutes specifies that persons receiving compensation other than reimbursement for out-of-pocket expenses are not immune from civil liability. Consequently, the State of Colorado does not provide immunity to RACs.

The State of Colorado does not have a Superfund program. The state official indicated that for the one Federally-funded state-lead site a "fair number of bidders responded" to the RFP. The RAC selected was unwilling to perform the work until either indemnification was offered or the cost of pollution liability insurance was included in the contract. The state negotiated with EPA Headquarters and the cost of pollution liability insurance was included in the contract. The contracting and cleanup process was delayed while negotiations for indemnification and insurance were ongoing.

Additional information on contractor indemnification practices and RAC contracts was not available.

CONNECTICUT

The State of Connecticut does not offer indemnification or provide immunity for state-employed RACs. The state does not offer immunity from liability for any civil damages from hazardous waste cleanups to persons receiving compensation for their services in assisting the cleanup. Section 22a-452(b) of the Water Pollution Control Statutes states "no person, firm or corporation that renders assistance or advice in mitigating or attempting to mitigate" or "assists in preventing, cleaning-up, or disposing of such discharge shall be held liable... unless he is compensated for such assistance or advice for more than actual expenses." Since RACs and other contractors are compensated for expenses plus profit, the state has interpreted this provision to exclude RACs from the immunity provisions contained in this statute. The immunity statute was revised in 1991 by Public Act 91-289 to provide immunity for parties who respond to oil spills even if the responding party is compensated for more than actual expenses (i.e., makes a profit from the cleanup).

The Connecticut Department of Environmental Protection (CTDEP) attempted to limit RAC's liabilities in the 1991 legislative session, but the measure failed. The provision was worded such that a third party would have to prove negligence or misconduct before a suit could be filed against a RAC. The act also provided definitions for negligence and misconduct.

The CTDEP contends that although RACs are currently doing RI/FS work in Connecticut, they will not enter into design or remediation contracts with the state for reasons of liability. The state contact indicated that the RACs have stated that they will not sign a design or remediation contract with the state unless the state offers indemnification or immunity. One of the reasons the legislature gave for not passing the provision limiting RAC liability was the absence of documented need for such a provision. The CTDEP plans to release a design contract to determine what the actual response of RACs will be to a design RFP. If RACs are not willing to conduct the work, the CTDEP plans to go back to the legislature with a new provision.

Although the State of Connecticut does not offer indemnification, the state is not having difficulties obtaining RAC services to perform RI/FS work. Fifteen firms responded to the request for qualifications to perform RI/FS work and the state entered into master agreements with four firms. None of the four firms have refused to perform RI/FS work under these master agreements.

The state contact indicated that he did not know if RACs worked with or without private pollution liability insurance. He said that he did not think they carried pollution liability insurance since RACs have stated that the potential liability from RI/FS work is low since actual cleanup activities are not conducted.

The State of Connecticut requires the contractor to indemnify the state "to the fullest extent of the law." The RAC contract includes an indemnification provision in it. In addition, the State of Connecticut maintains sovereign immunity.

DELAWARE

The State of Delaware does not offer indemnification, but does have a statute that offers immunity to state-employed RACs. Section 8134 of the Courts and Judicial Procedures Statutes was passed in 1989 and provides immunity to RACs. The statute limits liability to "acts or omissions of the person during the course of performing these services which can be shown... to have been the result of negligent, reckless, wilful, wanton and/or intentional acts of misconduct or breach or contract, provided, however, such person is an independent outside contractor specifically engaged for the purpose of discharge mitigation or cleanup services." The statute further defines that actions conducted using generally accepted practice and state-of-the-art scientific knowledge "creates a rebuttable presumption that the acts or omissions were not negligent."

The state officials contacted indicated that RACs requested indemnification and/or immunity prior to the state passing its immunity provision in 1989. The immunity provision was passed, in part, due to the request of contractors. The state decided to provide immunity for contractors, rather than indemnification, because the state did not want to incur additional liability.

Although the state officials indicated that RACs requested indemnification and/or immunity prior to passage of the statute, the lack of such provisions did not hinder the contracting process for work completed at that time. The state official indicated that two RI/FS were conducted with federal funds, but that remediation was conducted by the regional EPA office. In addition, the state has hired RACs to conduct emergency removals. The Department of Natural Resources (DNR) contact indicated that the state has issued a request for qualifications to obtain a list of qualified contractors. From this list they plan to issue contracts to start conducting RI/FS work at State Superfund sites. The state plans to begin this work in the next one to two months.

Delaware does not require RACs to obtain pollution liability insurance. The state official contacted was unable to indicate if RACs are successful in obtaining pollution liability insurance; however, it is likely that RACs work without insurance since they are protected by the state's immunity statutes.

The State of Delaware requires the contractor "to indemnify and save harmless the DNR and its officers and employees from and against all claims, damages, losses, and expenses..." This language is included in the RAC contract.

FLORIDA

The Florida Department of Environmental Regulation (FLDER) is authorized to offer indemnification to state-employed RACs under Section 376.319 of Florida's Pollutant Discharge Prevention and Removal Statute. This statute, which became effective in 1987, allows the state to offer indemnification to any RAC that has a written contract with the FLDER or with a local government that has contracted with the FLDER to administer a program pursuant to Chapter 86-59 of the Laws of Florida. The state may indemnify RACs for any civil damages to third parties that result from acts or omissions of a RAC in conducting a response action and are caused by a discharge or releases of a hazardous substance, pollutant, or other contaminant from the response action site. Section 376.319 also protects state and political subdivision employees providing response action services from being held personally liable for any actions undertaken by the DER, political subdivision, or RAC, as long as the employee provided their services in the scope of their authority as a government employee.

The State of Florida began indemnifying RACs in 1987, following the effective date of Section 376.319 and the issuance of a two-page memorandum on the state's indemnification policy by the FLDER. According to state officials, the state began offering indemnification because of difficulty obtaining RAC services without limiting a RAC's potential liability. The state believes that indemnification serves as a compromise between the state and the RACs that wanted to reduce their exposure to liability.

The FLDER is required to consider several factors when determining whether to enter into an indemnification agreement with a RAC. These factors include the availability of cost-effective insurance, the immediate need for the response action, the availability of qualified RACs and the restriction of gross negligence and intentional misconduct in indemnification agreements.

Costs incurred by the state as a result of an indemnification agreement are payable from either the Water Quality Assurance Trust Fund or the Inland Protection Trust Fund depending on the nature of the discharge or release, per Section 376.319. These payments include the cost of defense.

According to state officials, indemnification is offered to all RACs involved in hazardous waste response action contracts. Indemnification agreements, included in RAC contracts, specify the limits and deductible associated with the indemnification offered. Overall, $5 million is the maximum amount of coverage for any incident. This $5 million limit is composed of several smaller limits as follows:

- $1 million limit for personal injury or death or an aggregate limit of $3 million for personal injury or death;

- aggregate limit of $1 million for property damage; and
- aggregate limit of $1 million for defence costs.

These limits and a $50,000 deductible per incident were established in the FLDER's policy memorandum dated October 26, 1987. While these limits are currently standard across all contracts, the state has the regulatory authority to apply varying limits as they deem appropriate. Language in the state's contracts indicate that indemnification is extended to approved subcontractors as well as to prime contractors. According to a state official, the same limits and deductibles apply to subcontractors. In the event that a third party files suit against a prime contractor and subcontractor for an incident, the indemnification coverage and deductible would be shared between the prime and subcontractor. Payment of the deductible or any costs in excess of the indemnification coverage would be determined per the contractual agreement between the prime and subcontractor.

The definition of an incident is not specified in state regulations or policy. A state official indicated that the definition of "incident" as included in a dictionary would apply. The official indicated that based on this broad definition more than one incident could occur at a site.

According to state officials indemnification coverage is granted in perpetuity. The state does not offer indemnification on a claims made basis or establish specific cut off dates for filing claims. The state officials indicated that no claims have been filed against an indemnified RAC to date.

The state does not believe that their offering of indemnification has resulted in a greater number of RACs responding to RFPs. The state official contacted indicated that the offer of indemnification serves as a compromise between the state and RACs. The official further indicated that he believed the indemnification issue is blown out of proportion and that some RACs will continue to respond to RFPs even without indemnification.

The state requires RACs to maintain pollution liability insurance or to submit documentation of their diligent efforts to obtain this insurance. Documentation, in the form of a letter from the RAC's insurance broker, is required to be submitted on a quarterly basis. The state has encountered difficulties because insurance brokers are refusing to submit this information on a quarterly basis. The state is in the process of hiring a consultant to evaluate the reporting frequency necessary to address diligent efforts. This consultant will also be evaluating the availability of pollution liability insurance and its cost effectiveness, as well as whether it would be appropriate for the state to continue to require the purchase of this insurance and whether it would be appropriate for the state to reimburse the contractor for the cost of the insurance. This study will evaluate these alternatives because there is some concern that the state is subjecting their Water Quality Assurance and Inland Protection Trust Funds to substantial risk.

Florida state officials indicated that at least one state RAC was able to obtain pollution liability insurance. The RAC apparently obtained coverage of $1 million in the aggregate. The sta

officials did not know the amount of the premium, however, the insurance was reported to be economically viable. No Florida officials were able to make the correlation between the size cleanup and the RAC's ability to obtain insurance.

One state official indicated that if indemnification was not offered some RACs would "go naked," meaning that they would work without the protection of insurance or indemnification. This was based on his conversation with a major engineering firm that participates in all phases of response action work. The official did indicate, however, that RACs may look for large value contracts to offset potential risks and turn down small value contracts.

All response action contracts include standard provisions on insurance and indemnification. The state requires the contractor to include the FLDER as an additional insured party on RAC insurance policies. The indemnification provisions outline the requirements specified in Section 376.319 of the Florida Statutes.

The state official indicated that no changes to the state's current indemnification practices are anticipated as the current practices are working well.

GEORGIA

The State of Georgia does not offer indemnification nor provide state-employed RACs with immunity from liability relating to hazardous waste cleanups. Georgia does have a Good Samaritan Statute, Section 12-8-141 of Article 6 of the Georgia Conservation and Resource Management Statutes. This code does not provide immunity to persons who have contributed to the actual or threatened discharge through negligence or misconduct, nor does it provide immunity to any person who receives or expects to receive compensation for the services rendered. Thus, the statute would not apply to RACs.

Georgia does not currently have a State Superfund program. Instead, the state relies on EPA-lead technical assistance teams for emergency responses and thus does not employ RACs. There have only been a few isolated cases where emergency removals have been performed using state funding. Since there is currently no statutory provision for such use of state funds, the state's major difficulty is in accessing funds rather than in obtaining qualified contractors.

Georgia officials report that this situation may change in the future. In order to establish a State Superfund program, the Georgia Hazardous Waste Management Act will need to be revised. A State Superfund program was proposed as part of a package in the state legislature in 1991, but the legislative package was not passed. Indemnification of RACs was one of several issues addressed by the package. State officials indicated that the legislators' lack of understanding of the issues involved was one of the reasons the package was rejected. However, state officials indicated that the governor accepted, as part of a 1992 legislative package, a proposed law to establish a State Superfund program, including provisions to limit the liability of persons engaged in the investigation or cleanup of environmental hazards created by others (proposed Code Section 12-8-86). Under the proposed code, liability would be limited to $1 million to any one person or $3 million to all persons for a single occurrence.

HAWAII

The State of Hawaii does not offer indemnification to state-employed RACs. The state contact indicated that in the past there have been attempts to offer indemnification at the county level, but that the courts did not allow it.

Although the State of Hawaii does not offer indemnification, it appears that immunity may be offered under Section 128D of the Hawaii Environmental Response Statutes. The state official contacted stated that the Department of Health and its attorneys do not interpret this statute to provide immunity to state-employed RACs, but that some RACs have interpreted this provision to provide immunity. Section 128D-6(e) of the Hawaii Revised Statutes reads "no person shall be held liable under this chapter or otherwise under the laws of the state or any of the counties... for costs, damages, or penalties as a result of actions taken or omitted in the course of rendering care, assistance, or advice in accordance with this chapter..." Unlike similar legislation in other states, the statute does not contain a prohibition or exclusion for persons receiving compensation. The state contact stated that although this statute is very broad, it was not the legislative intent to provide immunity for contractors.

The State of Hawaii does provide immunity for state Department of Health personnel under Section 342B-16 of the Air Pollution Statutes. The statute reads "(n)o member, officer, or employee of the department shall be criminally liable or responsible under this chapter for any acts done..."

The state contact indicated that the majority of the work conducted under the Environmental Response Statute is for emergency removals. In these cases, RFPs are not issued, there is no contract and the RACs are simply paid for their services. The state has not had any difficulties obtaining RACs to conduct this work. The state contact indicated that there has not been a delay in obtaining contractor services, but the bids have been very expensive. In addition, the state has not tried to obtain the services of RACs for RI/FS and cleanup activities.

The state official contacted indicated that Hawaii does not require state-employed RACs to obtain pollution liability insurance. The state official indicated that the same requirements that apply to RCRA contractors also apply to RACs.

The Hawaii official does not anticipate that the state will offer indemnification in the near future.

The State of Idaho does not limit the liability of state-employed RACs. The state's Good Samaritan Statute in Section 78-11-22 of the Idaho Code does not include anyone who receives compensation for services and, therefore, does not grant immunity to RACs. There are no other statutes in Idaho law that would limit the liability of RACs.

Idaho does not indemnify RACs working on Superfund sites and state officials indicate there is no intention of offering indemnification in the future. Contractors reportedly have significant profit factors built into their overhead and are essentially paid for the potential risk incurred. One official indicated that the state hires qualified professionals who have the ability to do adequate work and are willing to accept the risk involved eliminating the need for state indemnification.

According to state officials, lack of indemnification has not reduced Idaho's already small pool of contractors. The fact that the Federal government indemnifies contractors at Superfund sites may override potential reductions in the contractor pool. Officials have not seen an increase in the cost of contractor services or a delay in cleanup due to the lack of indemnification. There has only been one case in the State of Idaho where a major contractor requested indemnification from the state. The state did not fulfill the request, yet the contractor still conducted the work.

There is currently only one Superfund site in Idaho that is a state-lead site. An RFP was issued for the site approximately two years ago. The state received 3 responses out of 12 RFPs sent. Most of the Superfund sites in Idaho primarily are led by the responsible parties, others are led by the Federal government.

State-employed RACs are required to have $1 million in general liability insurance. Most RACs are able to obtain general liability insurance with a pollution exclusion. This is acceptable to the state since the liability of the state is limited to $500,000 under its Tort Claims Act. The exclusion implies that state-employed RACs are operating without pollution liability insurance. RACs are required to indemnify the state. Indemnification of the state by RACs is not outlined in Idaho's statutes, but is stipulated in individual contracts with RACs.

ILLINOIS

The State established the Response Contractors Indemnification Fund to provide state-employed RACs with indemnification from liability arising out of cleanup efforts. This fund was created in 1987 with the promulgation of the RAC Indemnification Act contained in Sections 7201 through 7206, Chapter 111 1/2 of the Illinois Revised Statutes. The state determined that it was necessary to offer indemnification in order to assure and encourage the participation of RACs in cleanup efforts until adequate liability insurance becomes available in the state. The state indicated that prior to the creation of the fund, RACs were frequently reluctant or unable to participate in state cleanup efforts because of the risk of incurring substantial liability for damages caused by conditions they did not create but were attempting to correct.

Section 7206 requires the state Director of Insurance to monitor and observe the insurance market in the state to determine if the occurrence of pollution liability insurance becomes available to RACs under reasonable terms. In the event that one or more insurers provide this insurance, under reasonable terms, the director is required to adopt a rule that includes this determination. This directive suggests that indemnification will not be offered if the state Director of Insurance makes a final declaration of insurance availability. During a conversation with the Department's Assistant Deputy Director, Property and Casualty Section, it was learned that insurance is currently available on a claims-made basis, but not on an occurrence basis. He indicated that an occurrence based policy requires only that an incident occur during the policy period. Its discovery and corresponding claim can occur outside the period covered by the policy. While the state official was not familiar with the premiums and deductibles associated with these claims-made policies, he did indicate that the size of cleanup was not a factor in the RAC's ability to obtain insurance.

All contractors, their employees, agents, subcontractors and consultants involved in the performance of services or supplying materials relating to state response contracts receive indemnification through the Response Contractors Indemnification Fund. However, persons or entities liable for the creation or maintenance of the condition to be addressed under the contract are prohibited from entering into that state response action contract. State statutes prohibit the Illinois EPA from providing indemnification to RACs working on Federally-funded projects. On such projects, Federal indemnification is sought.

The Response Contractors Indemnification Fund is funded with monies diverted from response action contracts. Specifically, five percent of the total RAC contract dollars is paid directly into the fund by the state, instead of to the RAC. When only a portion of a contract deals with response action, then only that portion is subjected to the five percent diversion. A state official indicated that the five percent is addressed differently under different contract types. When a contract is procured through the sealed bid process, the contractor is expected to cost

the five percent into the total proposed cost. Cost and fixed-fee contracts include the five percent as a cost, which is not subject to any fees or profits.

In the event that a claim is filed, the RAC will be indemnified by the fund unless the state Attorney General determines that the claim arose from actions outside the scope of the response action contract or that the actions were intentional, willful or wanton misconduct. The RAC will be indemnified for all defense costs, including court costs, litigation expenses, and attorneys' fees, as well as payments of final judgements and final settlements. Section 7204 indicates that under no event will the amount paid for a single occurrence surpass $2 million, provided this limitation does not render any portion of the judgement enforceable against the RAC. This statute does not specify that the RAC will pay a deductible in the event that a claim is filed or define the period of indemnification coverage. A state official confirmed that there are no set deductibles or a defined period of coverage identified in the statutes. In the event that a claim is filed, the courts would be required to interpret the intent of the statutes if the information is not specified in the response action contract.

A total of 30 response action contractors conducting work for the Illinois Department of Land Pollution Control have been indemnified by the Response Contractors Indemnification Fund to date. A state official indicated that several other contractors conducting response action work for other state departments have also received indemnification under the Response Contractors Indemnification Fund. The state officials contacted were not aware of any claims filed against an indemnified RAC to date.

The state Treasurer is the custodian of the fund and is responsible for crediting the fund with interest. In the event that the fund is insufficient to cover costs associated with a claim approved by the Attorney General, the state Comptroller is required to transfer money from the General Revenue Fund to the Response Contractors Indemnification Fund in accordance with Section 7204. A state official indicated that the state will continue to provide indemnification through the fund as long as insurance is not available at a reasonable price.

A state official indicated that the state did not observe an increase in qualified RACs bidding on state contracts after indemnification became available.

All RACs are required to indemnify the state, its employees, and agents, and the EPA, for any and all damages and injuries resulting from work conducted under a state response action contract. The RAC is not required to indemnify the state in the event that the damages or injuries are caused by the negligence of the state, or its agents, or employees.

INDIANA

The State of Indiana does not provide indemnification to state-employed RACs nor do they indemnify any other types of contractors. In addition, Indiana does not require RACs to indemnify the state. The State of Indiana also does not provide state-employed RACs with immunity from civil liability nor do they have a Good Samaritan Statute.

State officials believe that their pool of qualified contractors is adequate, despite not offering indemnification. The state is currently taking the lead on two NPL sites. This is the first RAC involvement in a Superfund cleanup that is being overseen by the State of Indiana. Two RACs are currently conducting RI/FSs at the sites. If proper action is taken by the RACs, their contracts will be extended to the site cleanups. Both RACs requested indemnification, but the states denied their request.

Indiana requires RACs to obtain pollution liability insurance. Each RAC involved with an NPL site must have a $1 million clause in their liability insurance for a one time accidental occurrence. For general liability the RACs must carry an additional $2 million in insurance. Such a policy does not cover any legal costs or personal injury costs that might be incurred. This insurance covers both RI/FS work and the actual site cleanup. According to state officials, these provisions will become liability standards in the language of future RAC contracts. State Superfund RACs are not required by law to carry these insurance provisions, but in practice, the state will only consider contracting with those RACs that do carry pollution liability insurance.

State officials do not report any shortages in the pool of available contractors. State officials receive an average of 10 responses to NPL or state Superfund RFPs. Regarding the prospect of future shortages in private insurance coverage for RACs employed by the state, one official said that Indiana is unwilling to compensate for any private insurance shortages with state indemnification.

IOWA

The State of Iowa does not provide indemnification to state-employed RACs or any other type of contractor, nor do state statutes provide immunity from liability in a civil action to RACs. Section 455B.393 of the state statutes protects state employees and persons providing assistance at the request of the state from liability in a civil action for damages resulting from a hazardous condition. Section 455B.399 of the Code of Iowa protects a person providing assistance or advice in mitigating, attempting to mitigate, preventing, cleaning up, or disposing of a hazardous condition from liability. However, Section 455B.399 further states that the immunity from liability does not apply to a person who receives compensation other than reimbursement of out-of-pocket expenses. According to state officials, both sections of the statutes are Good Samaritan Statutes and do not apply to RACs. Both sections specify that any person receiving payment beyond reimbursement for out-of-pocket expenses or with the expectation of such payment is not immune from liability for civil damages. Consequently, the State of Iowa does not provide immunity from liability to RACs.

State officials indicated that indemnification is not offered to RACs because it has never been an issue. Iowa officials indicated that the state does not have any state-lead Superfund sites. Officials reported that originally there were five sites, however, as of October 1, 1991, the state has relinquished all five sites. Furthermore, Iowa officials stated that the all work completed by the state on the original five sites was for oversight only and was conducted in-house. Consequently, officials reported that the state has never hired any contractors. Because the state has never hired any contractors, discussions pertaining to observations in a reduction in the pool of qualified contractors, difficulty in obtaining the services of qualified RACs, increases in the cost of contractor services, or delays in the cleanup of contaminated sites due to the state not offering indemnification are not applicable. Since the state has never hired a RAC, discussions regarding the state requiring RACs to indemnify the state also are not applicable.

Since state indemnification of RACs has not been an issue, Iowa officials do not anticipate that the state will change its current indemnification practices in the near future.

KANSAS

The State of Kansas does not provide indemnification or immunity from liability for any civil damages from hazardous waste cleanups to state-employed RACs receiving compensation for their services in assisting the cleanup. Section 65-3472 of the Public Health Statutes does provide immunity from liability to any person providing assistance or advice concerning the cleanup of hazardous materials, however, according to state officials this is strictly a "Good Samaritan" statute and does not apply to RACs. State officials further commented that the legislature never intended for Section 65-3472 to be anything more than a "Good Samaritan" statute. Section 65-3472(b)(2) of the Public Health Statutes specifies that any person receiving compensation other than reimbursement for out-of-pocket expenses for its services in rendering assistance or advice is not immune from liability for civil damages. Consequently, the State of Kansas does not provide immunity from liability to RACs.

Kansas officials reported that the state does not offer RAC indemnification because they do not think it is necessary. State officials also reported that state indemnification is not offered because the PRPs are funding most of the cleanup work and the remainder are EPA-managed sites. State officials further reported that since PRPs are doing most of the cleanup work, they don't contract with many RACs. Therefore, they have not observed a reduction in the pool of qualified RACs nor have they had difficulty in obtaining the services of qualified RACs. State officials reported that they have one RAC on call which they use, consequently, the state does not issue RFPs for Superfund work. To date, no RACs have requested indemnification from the state. The state does not provide indemnification to RACs or any other type of contractors.

Kansas officials reported that the state does require RACs to indemnify the state, but only on PRP consent orders. State officials indicated that the state does require a standard clause in its RAC contracts whereby the RAC indemnifies the state. However, state officials reported that the state does not include language in its RAC contracts that establishes a liability standard for RACs.

State officials reported that state-employed RACs have been able to obtain pollution liability insurance as evidenced by the insurance certificates accompanying RAC contracts. In addition, Kansas officials stated RACs do not work without some type of general liability insurance.

Without more pressure from RACs, Kansas officials do not anticipate that the state will change its current indemnification practices in the near future.

KENTUCKY

The Commonwealth of Kentucky does not provide indemnification nor do state statutes provide immunity from civil liabilities to state-employed RACs.

Officials indicated that indemnification is not offered to RACs because it has never been an issue since Kentucky has just initiated work on state-lead Superfund sites. Although Kentucky has not had state-lead sites for very long, officials reported that they have not observed a reduction in the pool of qualified contractors, no increase in the cost of contractor services, no delay in the cleanup of contaminated sites, nor any difficulty in obtaining the services of qualified RACs as a result of not offering indemnification. Typically, 3 to 4 RACs respond to RFPs.

Kentucky officials reported that RACs have not requested indemnification and Kentucky does not require RACs to indemnify the commonwealth. Furthermore, officials said that Kentucky does not include language in its RAC contracts that establishes a liability standard for RACs or that indemnifies the commonwealth.

Due to Kentucky's relative inexperience regarding state-lead cleanups and the subsequent use of RACs, officials did not know whether state-employed RACs have been able to obtain pollution liability insurance. However, officials believe that state-employed RACs do not work without some kind of insurance.

Kentucky officials do not anticipate that the commonwealth will change its current indemnification practices in the near future.

LOUISIANA

The State of Louisiana, has the authority under Section 2206, Chapter 9, Title 30 of the Louisiana Revised Statutes Annotated to include a "hold harmless" clause in response action contracts, if a contractual agreement with a contractor cannot be reached without such a clause. The "hold harmless" clause has been interpreted by the Louisiana Department of Environmental Quality (LADEQ) as indemnification. It has not been included in any RAC contracts since Section 2206 became effective in February 1984. Section 2206 indicates that this clause would obligate the state to hold the RAC harmless for property damages and personal injuries arising from the performance of the contract unless the injuries and damages resulted from the contractor's intentional acts or acts of gross negligence. The state official contacted indicated that this clause would only indemnify the RAC for damages or injuries caused by the state.

One state official contacted indicated that it may someday be necessary to include the hold harmless clause in RAC contracts in the event the state must address a site posing immediate threat or danger. However, he doubted that the state would ever agree to include the clause in contracts dealing with non-emergency situations. The state is involved in a variety of response action activities ranging from discovery to post-closure care. Response action contracts are typically developed to address one specific site. Contracts dealing with preliminary actions, however, generally involve several sites.

While Section 2206 provides the state with the authority to enter into hold harmless agreements with RACs, it does not specify a monetary limit on the protection, a period of coverage, or a source of funding in the event a claim is filed, nor is this information specified in the contractual agreement. A state official indicated that a limit is not specified because the hold harmless clause provides protection for a specific activity or its consequences. According to the state official, the hold harmless clause coverage period is a function of the activity, and is sometimes indefinite. A second state official confirmed that a specific source of funding has not been established. In the event that a claim is filed against a protected party, a funding source would be addressed by the legislature. If a hold harmless agreement is entered into with the prime contractor, its coverage also would apply to the subcontractors working on the site. The prime contractor would be required to guarantee the same status to each subcontractor.

The state includes standard language in its response action contracts that indicates that the RAC holds the state harmless, unless the state is responsible for the release or threatened release. An example in which the state would be responsible would be if the contractor constructed a treatment system in accordance with a state design which subsequently fails.

Louisiana requires its RACs to obtain pollution liability insurance when the risk of further contamination exists at a site. Insurance is not required of RACs conducting preliminary activities or field activities that do not involve digging or borings. The cost of this insurance

is billed to the state either as a direct cost or as part of the company's overhead costs and subsequently paid by the state.

A state official indicated that RACs have been able to obtain insurance when required and that the state therefore does not generally require documentation of a RAC's diligent efforts to obtain insurance. However, in one instance, a contractor was unable to obtain pollution liability insurance at the price specified in the contractor's proposal. The state therefore required the contractor to document that insurance was not available at the originally quoted price before agreeing to pay for the higher priced insurance. The state official contacted speculated that small companies working on projects for which the state does not require pollution liability insurance, likely work without such insurance.

Two Louisiana officials indicated that the state does not anticipate any changes in its current indemnification practices in the near future.

MAINE

The State of Maine does not provide indemnification to state-employed RACs or any other type of contractor, nor do state statutes provide immunity from civil liabilities to RACs. Section 1369 of the Hazardous Substance Sites Statutes provides immunity to employees of the state from liabilities for the death or injury of persons or damage to property. State officials clarified that state-employed contractors are not considered employees of the state, therefore, the immunity provided in Section 1369 does not apply to RACs. Section 1402 of the Mitigating Hazardous Discharges Statutes provides immunity from civil liabilities or penalties to any person who provides assistance or advice in mitigating the effects of actual or threatened discharges of hazardous materials or in the cleanup of any discharges. However, Section 1403 of the statutes specifies that immunity does not apply to persons who receive compensation other than reimbursement for out-of-pocket expenses for its services in rendering the assistance or advice. Consequently, this statute does not provide immunity from civil liabilities to RACs. Although state statutes do not provide immunity from civil liabilities to RACs, it should be noted that state officials reported that there are state statutes which provide immunity from liability to contractors closing municipal sanitary landfills in accordance with approved closure plans and contractors responding to oil spills.

Maine officials reported that the state does not offer indemnification because the state has not seen a need for indemnification. Maine officials further reported that the state has never perceived indemnification to be a problem. State officials indicated that they haven't had difficulty in obtaining the services of qualified RACs, nor have they observed a reduction in the pool of qualified contractors or a delay in the cleanup of contaminated sites as a result of the state not offering indemnification. In addition, state officials doubt if there has been an increase in the cost of contractor services offered, because the state does not offer indemnification. Maine officials reported that typically 5 to 6 RACs respond to removal or cleanup RFPs.

Although Maine does not provide indemnification to RACs, the state does require RACs to indemnify the state. The state includes language in RAC contracts that reads "the contractor agrees to indemnify, defend and save harmless the state, its officers, agents and employees from any and all claims and losses..." The state, however, does not include language in its RAC contracts that establishes a liability standard for RACs.

According to Maine officials, the state does not require its state-employed RACs to have and maintain insurance. Since insurance is not an issue with the state, officials did not know if RACs have been able to obtain pollution liability insurance or what types of insurance RACs carry, if any.

Maine officials indicated that unless contractors are unwilling to work without indemnification from the state, the state does not anticipate any changes in its current indemnification practices in the near future.

MARYLAND

The State of Maryland does not provide indemnification to state-employed RACs or any other type of contractors, nor do state statutes provide immunity from civil liabilities to RACs. Section 7-229 of the Maryland Environmental Code Annotated provides immunity from civil liabilities or penalties to persons providing assistance in connection with the release of hazardous substances or materials. However, the statute further specifies that immunity does not extend to persons receiving compensation other than reimbursement for out-of-pocket expenses. Consequently, Maryland Statutes do not provide immunity from civil liabilities or penalties to RACs.

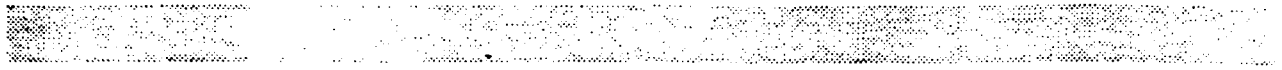
Maryland officials reported that the state does not offer indemnification because it is not an issue at the state level. State officials indicated that they haven't had difficulty in obtaining the services of qualified RACs nor have they observed a reduction in the pool of qualified contractors, an increase in the cost of contractor services offered, or a delay in the cleanup of contaminated sites as a result of the state not offering indemnification. Typically, 5 to 6 RACs respond to State Superfund RFPs, while 20 RACs respond to state Leaking Underground Storage Tank (LUST) program RFPs. State officials reported that RACs have not requested indemnification from the state.

Although Maryland does not provide indemnification to RACs, the state does require RACs to indemnify the state. State officials reported that RAC indemnification of the state is a mandatory requirement. The state includes language in RAC contracts that reads "the contractors shall indemnify the state against liability for any suits, actions, or claims..." However, Maryland officials reported that the state does not include language in its RAC contracts that establishes a liability standard for RACs.

Maryland requires state-employed RACs to maintain liability insurance. The contractor must submit a certificate of insurance to the state certifying insurance coverage. Maryland officials were uncertain whether state-employed RACs have been able to obtain pollution liability insurance.

Maryland officials indicated that the state does not anticipate any changes in its current indemnification practices in the near future.

MASSACHUSETTS



The Commonwealth of Massachusetts began offering limited indemnification to state-employed RACs in December of 1987 as authorized by Sections 16 and 17 of Chapter 21E of the Massachusetts General Laws. Massachusetts began offering indemnification as a result of the failure of the first Site Assessment and Remediation Support Services (SARSS) procurement effort. Officials forced to reject each of the three proposals submitted, because they did not meet the commonwealth's insurance requirements as they all included a pollution exclusion clause. According to the official contacted, nine contractors responded to the SARSS RFP when indemnification was offered.

Indemnification is offered only to emergency response contractors and site assessment and remediation support service contractors because neither contractor is able to obtain pollution liability insurance and SARSS contractors, to date, have not been able to obtain coverage for errors and omissions. Additionally, officials believe that without indemnification, there would be insufficient competition for these contracts. Indemnification is not offered to construction contractors as there is sufficient competition for these contracts in the commonwealth. Massachusetts currently has 5 SARSS contractors and 9 emergency response contractors.

Indemnification limits and deductibles are specified in the SARSS and emergency response contractors' proposal and agreement forms. Massachusetts provides SARSS contractors with a maximum indemnification limit of $1 million for a single occurrence and $3 million in the aggregate for all occurrences. Emergency response contractors are provided with coverage of $300 thousand for a single occurrence and $1 million in the aggregate for all occurrences. The limits associated with emergency response contracts are reportedly lower because the incidents being addressed are smaller. A deductible of $50 thousand is applicable only to emergency response contracts.

The prime contractor may pass indemnification down to its subcontractors with the approval of the commonwealth. To date, only one prime contractor has requested permission to do this. According to the official contacted, the amount of coverage referenced above would apply to the subcontractor. In the event that a claim is filed that exceeds the indemnification coverage limits, the prime and subcontractor would have to negotiate between themselves the percentage of costs each would cover.

The Commonwealth of Massachusetts does not currently require RACs to obtain pollution liability insurance or errors and omissions insurance. The Commissioner of Insurance's annual report (last written in 1987) indicates that generally pollution liability insurance was not readily available at that time. The report did indicate that errors and omissions insurance was more readily available. The report also indicates that some insurance firms were providing special pollution liability coverage to existing industrial clients. The state currently requires SARSS

contractors to inform them if they have errors and omissions coverage. Secondly, Massachusetts is requiring the SARSS contractors to contact their brokerage firms to determine if such insurance is available at a viable cost to their firm. The SARSS contractors are then required to "make their case" in writing as to why the insurance is not available to their firm. Officials will then determine if the RAC will be required to obtain the insurance, if it is indeed available.

According to the official contacted construction contractors, typically field service companies, often work without indemnification and insurance.

While Massachusetts does not offer immunity to its RACs, legislation is currently being processed to provide non-profit organizations which respond to off coast oil spills with indemnification. The official indicated that no claims against indemnified RACs have been filed to date and that aside from possibly requiring errors and omissions insurance, no revisions to indemnification practices are currently planned.

MICHIGAN

The State of Michigan does not provide indemnification to state-employed RACs or any other type of contractors, nor do state statutes provide immunity from civil liabilities to RACs. Michigan officials reported that the state does not offer RAC indemnification because it is prohibited in the state constitution. Furthermore, state officials reported that there has been no sentiment to push for a constitutional amendment.

State officials reported that they have not observed a reduction in the pool of qualified contractors due to the state not offering indemnification. However, one official indicated that there has been a reduction in qualified contractors due to Michigan's Environmental Bond Program. Michigan requires its contractors to obtain a payment and performance bond in the amount of the contract awarded to guarantee the state that the contractor will do the work, complete the work and pay the subcontractors. State officials said the cost of bonding can be very expensive, especially if a contractor has more than one job.

Michigan officials reported that they have not observed an increase in the cost of contractor services offered or a delay in the cleanup of contaminated sites due to the state not offering indemnification. In addition, state officials reported they have not had difficulty in obtaining the services of qualified RACs. Michigan officials did specify that RACs have requested indemnification from the state. State officials indicated that this is an important issue with the RACs and that the RACs are constantly asking the state for indemnification.

Depending on the phase of Superfund work, Michigan officials reported two different procedures for contracting work to RACs. Officials responsible for work covering the evaluation phase up to the final cleanup phase stated that one RFP is released every four years. Last time there were six legitimate proposals and all six contractors were chosen. Officials reported that they rotate the services of the six contractors. Officials responsible for the cleanup phase specified that they bid out each job separately. Depending on the size of the job, anywhere from 3 to 40 RACs respond to state RFPs. The state official responsible for cleanup also stated that the number of RACs responding to RFPs is growing.

Although the State of Michigan doesn't offer indemnification to RACs, the state does require RACs to indemnify the state. The state includes language in its RAC contracts that requires the RAC to indemnify the state. The contract language states that "the contractor shall indemnify and hold harmless the State of Michigan and its agents and employees..." However, Michigan officials reported that the state does not include language in RAC contracts that establishes a liability standard for RACs.

Michigan requires state-employed RACs to purchase and maintain liability insurance in the amount of $2 million for each occurrence due to bodily injury, sickness or disease, or death of

any person other than the contractor's employees, and when applicable an annual aggregate of $6 million for non-automobile hazards. State contract language specifies that the contractor must furnish certificate(s) of insurance before starting work verifying liability coverage and listing the State of Michigan, it's departments, agents and employees as additional insureds. State officials reported that the state use to require contractors to purchase and maintain errors and omissions insurance. However, this is no longer required because of the apparent unavailability of errors and omission insurance. Michigan officials indicated that state contract language reads that at the end of the first year and subsequent years thereafter, based on the availability of the insurance, the state will review whether errors and omissions insurance will be required. State officials reported that the large architectural and engineering firms are willing to work the following phases of Superfund work without errors and omissions insurance: RI/FS; design; and construction oversight.

Michigan officials indicated that the state does not anticipate any changes in its current indemnification practices in the near future.

MINNESOTA

The State of Minnesota does not provide indemnification to state-employed RACs or any other type of contractor, nor do state statutes provide immunity from civil liabilities to RACs.

Minnesota officials reported that the state does not offer indemnification for two reasons. First, it is not allowed under the state constitution, and second, a belief that RACs don't deserve indemnification from the state. As a result of the state not offering indemnification, Minnesota officials reported they haven't had difficulty in obtaining the services of qualified RACs, nor have they observed a reduction in the pool of qualified contractors, an increase in the cost of contractor services offered, or a delay in the cleanup of contaminated sites.

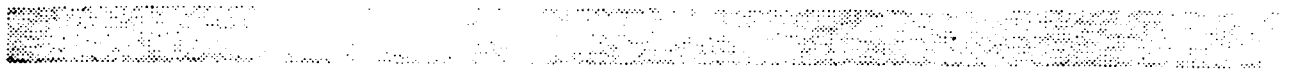
Currently, the state awards one Superfund contract every four years. Minnesota officials reported that the state received proposals from 36 RACs in response to the last Superfund RFP. State officials indicated that 4 contractors were selected from the 36. From this pool of four contractors, the state tasks out the work site by site. Minnesota officials indicated that contractors are selected for a specific site based on factors such as the quality of past work, the contractors work load and the equipment owned. State officials reported that RACs have requested indemnification from the state.

Although the State of Minnesota does not offer indemnification to RACs, the state does require RACs to indemnify the state. The state includes language in RAC contracts that requires the RAC to indemnify the state. The contract language states "the contractor agrees to indemnify and save and hold the state, its agents and employees harmless..." Minnesota officials reported, however, that the state does not include language in RAC contracts that establishes a liability standard for RACs. Although Minnesota does not establish a liability standard in RAC contracts, the state does offer RACs the defenses to liability claims provided under state statutes. The RAC contract language states that if a third party claims injury or damage resulting from acts or omissions arising out of the performance of the contracted work, the defenses provided under state statutes are available to the contractor as defenses to liability claims. Sections 115B.04, Subd. 11 and 115B.05, Subd. 9 of the Minnesota Environmental Response and Liability Act specify that response costs or damages resulting from acts taken or omitted in preparation for, rendering care, assistance, or advice are a defense to liability. Consequently, state officials indicated that if the contractor had a third party liability claim filed against them they would not be defending against negligence, but would argue that they were providing response costs or rendering care under the contract. In addition, state-employed RAC contract language states that it is intended, but not warranted by the state, that the contractor be deemed a "response action contractor" as defined in 119(e) of SARA that the contractor enjoy the limitations on liability as provided in SARA and that the contractor be considered eligible for indemnification by the President under SARA.

Minnesota requires state-employed RACs to maintain general liability insurance with minimum limits of $1 million per occurrence with an annual aggregate of $2 million, exclusive of legal defense, for bodily injury and property damage liability combined. The contractor must provide the state with current certificates of insurance certifying insurance coverage. Pollution liability insurance for state-employed RACs is not an issue with the state, therefore, Minnesota officials did not know whether RACs have been able to obtain insurance.

Minnesota officials indicated that the state does not anticipate any changes in its current indemnification practices in the near future. State officials indicated that the attitude the state has taken towards indemnification is indicative of the small amount of Superfund work the state has conducted. State officials reported that most of the Superfund work in Minnesota is being conducted by the responsible parties at $250 million, followed by the Federal government at approximately $30 million, and then the state at a level of $8 million.

MISSISSIPPI



The State of Mississippi does not provide indemnification to state-employed RACs, however, state statutes do provide RACs immunity from civil liabilities. Mississippi enacted a statute in 1985 which provides immunity from civil liabilities or penalties to persons acting in good faith and using reasonable care in rendering assistance or advice in accidents involving the discharge of hazardous materials. State officials indicated that Section 17-17-57 of the Solid Waste Disposal Statutes includes response action contractors operating in good faith and in the exercise of reasonable care.

Mississippi officials reported that the state does not offer indemnification to RACs because there are so few NPL sites and there hasn't been a lot of interest in state indemnification. State officials reported that Mississippi does not have a State Superfund Program. Cleanup from uncontrolled sites is funded by the PRPs. Consequently, state officials reported that state-employed RACs are used for emergency responses only.

State officials have observed no reduction in the pool of qualified contractors, no increase in the cost of contractor services offered, no delays in the cleanup of contaminated sites and have had no difficulty in obtaining the services of qualified RACs in support of emergency responses. Mississippi officials further stated that RACs have not requested indemnification from the state. State officials reported that a no bid procedure is used for selecting a RAC for responding to a specific emergency response rather than the state issuing an RFP. State officials indicated that there is currently a pool of 3 to 4 contractors available for emergency response work. When there is an emergency response, the state selects the RAC closest to the site. State officials said emergency responses rarely exceed $10,000.

Although Mississippi does not indemnify RACs, the state does indemnify contractors responding to oil spills. State officials reported that this legislation was sponsored by the oil industry.

Mississippi does not require RACs to indemnify the state, however, state officials reported that state-employed RACs must have a certificate of insurance providing coverage for any gross negligence on the RAC's part. The state requires RACs to have pollution liability insurance ranging from $2.5 to $5 million; consequently, state-employed RACs do not work without insurance. State officials reported that the size of the cleanup has not been a factor in the RAC's ability to obtain pollution liability insurance because state-employed RACs are used for emergency response only. State officials further reported since RAC services are purchased only on an emergency basis, they do not have a standing contract with RACs. Therefore, there is no contractual language establishing a liability standard for RACs or indemnifying the state.

State officials do not anticipate that the state will change its current indemnification practices in the near future.

MISSOURI

The State of Missouri does not offer indemnification to state-employed RACs, however, the state does have the authority to limit a contractor's liability. Section 260.552 of Title 16 of the Missouri Revised Statutes specifies that no person engaged in the business of waste cleanup of environmental hazards created by others, shall be liable for any damages arising from the release or discharge of a pollutant, resulting from such activity, in an amount greater than $1 million to any one person or $3 million to all persons for a single occurrence. This limitation of liability does not apply to persons who intentionally, wantonly, or willfully violate Federal or state regulations respecting the clean up process. Section 260.480 provides immunity for the state, its officers, employees and agents against any injury caused by dangerous conditions at any abandoned or uncontrolled site, unless the dangerous conditions were the result of an act or omission constituting gross negligence on their part.

RAC contract language merely references Section 119 of CERCLA and makes no reference to the liability limitations contained in Section 260.552 described above. According to a state official, the monetary liability limits specified in the RAC contract (per Section 260.552) are primarily for insurance purposes only. Conversely, the contract language defining the limitations on state liability are explicitly stated in response action contracts.

Missouri also includes language in all of its response action contracts which obligates the RAC to indemnify the state. This language indicates that the RAC assumes the obligation to hold harmless and indemnify the State of Missouri, its agencies, employees and assigns from every expense, liability, or payment arising as a result of the RAC's performance under the contract. The RAC must also agree to indemnify the state for any act or omissions conducted by any subcontractor or persons employed under their supervision under the terms of the contract.

The state does not offer indemnification because the state legislature has not perceived the need and the state has not experienced difficulty in obtaining the services of qualified RACs. The state official contacted indicated that the state has not observed a reduction in the pool of qualified RACs, an increase in the cost of contractor services, or a delay in the clean up of contaminated sites in response to the state not offering indemnification. According to the state official, the state maintains a list of prequalified contractors. This list contains the names of 30 to 40 contractors and is updated every one to two years. As many as 100 contractors attempt to be included in the list. The state currently has two ongoing response action contracts dealing with RI/FS activities.

Missouri requires its RACs to obtain pollution liability insurance in amounts of $100 thousand per person and $800 thousand per occurrence. The state official indicated that the state's currently employed RACs are able to obtain pollution liability insurance. The insurance policies reportedly have premiums equaling two percent of the contracts' total cost and set fees based on

the contract's perceived risk. The state official indicted that the cost of the policy is directly related to the size of the cleanup and that the premium costs would be easier to spread out over a larger contract.

The state official indicated that the state is unlikely to change its indemnification practices in the near future.

MONTANA

The State of Montana passed the Comprehensive Clean-Up and Responsibility Act in 1989 that defines the liability of remedial action contractors with respect to a release or threatened release of hazardous or deleterious substances. Liability is specifically defined under the statute Waste and Litter Control [75-10-718]. Under this statute, a RAC is not liable to any person for injuries, costs, damages, expenses, or other liability that results from the release or threatened release, including but not limited to claims for indemnification or contribution and claims by third parties for death, personal injury, illness, loss or damage to property, or economic loss. Immunity from liability does not apply if:

- the conduct of the RAC is negligent or grossly negligent, or constitutes intentional misconduct;
- the person is under a warranty under Federal, state, or common law;
- the liability of a RAC as an employer to an employee under any provision of law (e.g., laws relating to workers' compensation); or
- the party is a potentially responsible party (PRP), under 75-10-715 or CERCLA, for costs or damages incurred as a result of a release or threatened release of hazardous or deleterious substance.

The above-mentioned statute offers immunity to state-employed RACs for liabilities incurred by RACs at the clean-up site if their actions are not negligent. If the RAC is negligent, they are responsible for the liability of their actions. This applies to the state as well. Contractors went to the state legislature to obtain this immunity statute.

Montana does not have sovereign immunity from the liabilities of their actions at cleanup sites. The state does have Good Samaritan Statutes, but these do not apply to RACs. Montana does not indemnify any other contractors such as architectural and engineering firms.

An attorney for the Montana Mini-Superfund Program indicates that the state does not offer indemnification to RACs. Montana does not have a statutory requirement for indemnification. The likely reason it is not offered is the cost.

The decision not to indemnify RACs has not caused a reduction in the pool of qualified contractors. Typically, 6 or 7 contractors regularly respond to state RFPs. Montana officials have not observed any increases in costs or delays in cleanup that result from the lack of an indemnification program. RACs have requested indemnification from the state, but have been

refused. This includes refusal to pay the premiums for pollution liability and error and omissions insurance for contractors.

Montana does not require RACs to indemnify the state. RACs are liable for their own negligence as is the state.

Since RACs receive no indemnification, the state has required RACs to obtain pollution liability insurance. Because RACs have had problems obtaining insurance, the state allows RACs to work without insurance if the RAC can document that they cannot obtain insurance. State officials indicated that contractors are uncomfortable working without insurance and indemnification.

NEBRASKA

Under Chapter 81-1568 of the Nebraska Environmental Protection Code, volunteers providing assistance or advise are protected from liability (a Good Samaritan Law). The following exceptions apply to liability protection:

- the volunteer performed an act or omission which caused in whole or in part actual or threatened discharge; and

- persons who receive compensation other than reimbursement for out-of-pocket expenses for their services in rendering such assistance or advice, such as remedial action contractors.

A program specialist for the Nebraska Hazardous Waste Section, Superfund Unit, and legal counsel from the Attorney's General office, validated that the state does not indemnify state-employed RACs. Nebraska does not have a State Superfund Law. It also has never hired a RAC. All RACs in the state have been hired by EPA or private industry. To their knowledge, Nebraska does not indemnify other contractors such as architectural and engineering firms.

Nebraska has been involved with six pre-remedial contracts with EPA in which the contractor was required to provide certification of insurance for coverage of liability. RACs cannot work in the state without liability insurance. Nebraska officials are unaware of any problems that RACs have obtaining private liability insurance. Additionally, the Nebraska officials are not familiar with the limits, exclusions, and costs of the policies obtained by state-employed RACs. Under the pre-remedial contracts, no liability is placed upon the state and the EPA does not provide indemnification. Liability can only be placed on the state under the state Tort Act (non-contractual liability) if it is deemed applicable. Indemnification of the state by RACs has to be negotiated on a case-by-case basis.

State pre-remedial contracts do establish a liability standard for reasonable conduct, professionalism, etc. These contracts have performance standards which deal with the performance of work and services. According to the attorney contacted, liability standards regarding professional conduct, etc. are inherently set in the contract through the RFP process.

Since the state has no State Superfund Law, it has no statutory authority to indemnify RACs. At present, the state has no plans to pursue indemnification. There have been some discussions with RACs requesting indemnification, but no overtures have been made to the legislature.

NEVADA

In Chapter 41.03 of the Nevada Revised Statutes, the state waives its sovereign immunity and establishes an indemnification program. Under this statute, the state consents to have its liability determined in accordance with the same rules that apply to civil actions against persons and corporations. No action may be brought under this statute or against an immune contractor which is based upon the state or immune contractor, exercising due care, the execution of a statute or regulation that has not been declared invalid by a court or the exercise, performance, or the failure to exercise or perform a discretionary function or duty on the part of the state or any of its divisions, workers, etc, (including immune contractors) whether or not the discretion involved is abused.

The Nevada statute limits the award for damages in an action sounding in tort brought under the waiving of sovereign immunity or against an immune contractor arising out of an act or omission in the scope of public duties or employment. The award may not exceed the sum of $50,000 and may not include any amount as exemplary or punitive damages. The statute of limitations to file a claim arising out of a tort is two years.

The Nevada statute also allows the state to set up an insurance program. This program may insure Nevada against any liability arising from its waiving of sovereign immunity, immune contractors against tort liability resulting from an act or omission in the scope of their employment and against the expense of defending a claim against itself or an immune contractor whether or not liability exists on such a claim.

In Sections 624.245 through 624.280 of the Nevada Revised Statutes, the state requires a surety bond or a cash deposit from the contractor before issuing a contractor's license. But, under the definition of a contractor in Section 624.020, a surety bond is only required of builders, which does not include environmental contractors. This interpretation was brought forth by a representative in the Nevada Attorney's General Office. If there is an instance that the environmental contractor is building some type of structure, then a surety bond is required of the contractor.

The amount of each surety bond or cash deposit is fixed by the board based on the contractor's financial and professional responsibility and the magnitude of its operations. The amount may vary between $1,000 and $50,000. Each bond or deposit must be in favor of the state for the benefit of:

- the owner of the property which has been damaged by failure of the contractor to perform the contract or to remove liens filed against the property;

- an employee of the contractor who performed labor on or about the site of the construction covered by the contract;

- a supplier or materialman who furnished materials or equipment for the construction covered by the contract; or

- a person who is injured by any unlawful act or omission of the contractor in the performance of a contract.

Nevada offers limited indemnification to state-employed RACs. The branch supervisor for the Bureau of Waste Management in the Nevada Division of Environmental Protection stated that the state does not indemnify RACs. But, a state attorney indicated that the state will indemnify most negligence up to $50,000 on a contract-by-contract basis (for small-scale projects). Indemnification is negotiated on a case-by-case basis.

Indemnification is offered under Chapter 41 of the Nevada Revised Statutes which has been in existence since 1965. It is not automatically offered to contractors. A contractor must request indemnification specifically. The state will offer indemnification to contractors that are under state direction. If a contractor works independently (without state direction), indemnification usually is not offered. The state does not indemnify subcontractors to the RACs. Also, Nevada has placed no legal limit on liability for RACs.

The state operates under the practice that indemnification ends when the contract ends. But, depending on the claim, statute of limitations in Nevada can vary from 2 to 6 years. No claims have been filed against an indemnified RAC to date.

Possible reasons given for not offering indemnification on every project are that the state has no Superfund program and currently it has only one Superfund site which is only in the RI/FS stage. EPA hired and indemnifies the RAC at this Superfund site. Also, the state leads only small-scale cleanups because of a limited amount of money. Nevada is self insured (provides its own insurance without the aid of a private insurance company).

The state has not had any problems in obtaining qualified contractors. Contracts are awarded through a competitive process which limits individual increases in contractor services. The only delays in the cleanup of contaminated sites have occurred because of contract negotiations determining the level of indemnification to be provided. RACs have not requested indemnification from the state in the past 15 months.

The State of Nevada requires state-employed RACs to indemnify the state and is negotiated on a contract-specific basis.

Nevada does not set pollution liability insurance requirements or require documentation of diligent efforts in obtaining insurance in agreeing to a contract with a RAC.

The branch supervisor does not anticipate any changes in the state's current indemnification practices in the near future. These issues may be considered if the public (or RACs) request such practices. Legislative action would most likely be needed to indemnify RACs.

NEW HAMPSHIRE

Under Chapter 404-E of the New Hampshire Environmental Statutes, New Hampshire has established an environmental risk insurance pool funded through premiums paid by businesses and communities that request membership in the pool. The pool protects member businesses and communities from unpredictable and excessive costs by providing economic assistance for costs associated with the study and remedy of on-site hazardous waste pollution and to protect the public from the threat of pollution spreading beyond the borders of the members' property. Membership is limited to businesses and communities making good faith efforts to comply with all state and Federal environmental laws, rules and regulations excluding nuclear related activities. The board sets limits on the dollar amount of coverage and the types of events excluded from coverage. This statute does not apply to RACs.

Under Chapters 505:12 and 508 12-a of the New Hampshire Revised Statutes Annotated, New Hampshire provides a Good Samaritan Law for emergency care. This law, limiting liability, does not apply if direct compensation for the care is given. Therefore, RACs are not covered under this law.

New Hampshire does not indemnify state-employed RACs. EPA contracts indemnify RACs at Federal clean-up sites in the state. Most of these contracts have been RI/FS studies. The state contracting process does not indemnify RACs.

New Hampshire has not observed a reduction in the pool of qualified contractors due to the lack of indemnification practices by the state. RACs have not requested indemnification from the state. The New Hampshire official did not know if the cost of contractor services has increased, but added that contracts are awarded based on the lowest bid. The lack of indemnification has not caused delays in the cleanup of contaminated sites. Past delays have been caused by the lack of available funds and the hesitancy to develop a removal program. The state has not had difficulty obtaining the services of qualified RACs.

The state has hired RACs for various types of hazardous waste cleanups (approximately 20 to 30 sites). This figure does not include activities such as hydrogeologic investigations which number an additional 30 sites/contracts.

New Hampshire standard state contracts do not allow indemnification of other types of contractors. The state requires RACs to indemnify the state through private liability insurance. Contractors are required to have performance bonds up to the contract price schedule.

RACs in New Hampshire have been able to obtain private liability insurance. RACs are required to have general comprehensive liability insurance not less than $250,000 per claim and up to $2 million per incident. Coverage must not be less than 80% of the value of the property.

The state also has a special provision default bond. This involves withholding a percentage of payment for services until the state is satisfied with the completion of the project and the contractor obtains a performance bond. New Hampshire has come close to implementing the provisional default bond, but to date, has not needed to do so. State-employed RACs are not allowed to work without indemnification or insurance.

New Hampshire provides limited immunity to developers of contaminated properties. The limited immunity is referred to as "hold harmless". Under this hold harmless policy, the state and the developer sign a binding Letter-of-Agreement stipulating that the state will not pursue the developer for claims on any pre-existing conditions. In exchange, the developer agrees to cleanup the site. This agreement does not restrict third parties or the EPA from pursuing the developer for liability claims. This program may be unique among the states.

State contracts require the RAC to indemnify the state. The wording in Item 13 of the standard state contract reads the state is held harmless and that sovereign immunity applies to the state. RACs, however, have included language in their contracts (Federal sites) that the state is liable up to the fee of the contract. State attorneys, however, consider this a scare tactic and believe it would not hold up in court.

NEW JERSEY

The New Jersey Department of Environmental Protection (NJDEP) first began offering indemnification to state-employed RACs in 1986 as authorized by Chapter 58:10-23.11f of the New Jersey Statutes Annotated. The NJDEP used this authority to offer limited indemnification until January of 1990 when its authority expired. On January 9, 1992, the governor of New Jersey signed Senate Bill 2844 (the Hazardous Substance Response Action Contractors Indemnification Act) into law reinstating the state's authority to indemnify state-employed RACs.

The NJDEP first offered indemnification as a result of two incidents in 1984/1985 in which no contractors could obtain pollution liability insurance. Under the state's original indemnification program, indemnification was offered on a case-by-case basis when qualified RACs were unable to obtain insurance. The state employed indemnification as a competitive factor when soliciting bids from RACs. When evaluating RAC proposals, the state gave preferential treatment to those RACs that were able to obtain pollution liability insurance. Those RACs that could not obtain pollution liability insurance and thus requested indemnification were penalized in the bidding process.

Chapter 58:10-23.11f of the New Jersey Statutes Annotated provided the state with the authority to indemnify state-employed RACs but did not establish specific limits, deductibles or periods of coverage. These specifics were identified in the RAC contracts. According to the state official, the coverage levels and periods varied from contract to contract and the state attempted to keep them as small as possible. The official indicated that the coverage level was a function of the contract's dollar amount and that $10 million was a common maximum limit. Additionally, the period of indemnification typically lasted a maximum of ten years, however, sometimes the indemnification was limited to a five year period. According to the state official, an indemnified prime contractor's subcontractors were indemnified on a case-by-case basis. In the event that the subcontractor was indemnified, the prime's coverage would thus be shared with the subcontractor.

New Jersey's current indemnification law (Public Law 1991, Chapter 373) is substantially different from the state's original indemnification law. Under the current law, preferential treatment in the bid/proposal process may only be given to contractors who provide occurrence-based insurance coverage in lieu of indemnification. The new program also subjects the RAC, in the event of a claim or judgement covered by indemnification, to a deductible and a co-payment. The deductible equals 30 percent of the contract amount, not to exceed $1.5 million on a per occurrence basis. The co-payment equals 10 percent of the amount of the total claim, in excess of the deductible, not to exceed the indemnification limit specified within the RAC's indemnification agreement. The current law allows the NJDEP to lower these deductibles and co-payments on a contract-by-contract basis based on the availability of pollution liability

insurance, the number and quality of bidders, or on other factors that it deems relevant. The NJDEP has the authority to offer indemnification and legal defense for claims of up to $25 million for a single occurrence and up to $50 million per contract as it deems necessary to solicit qualified RACs depending on the nature, risk, and size of the job.

New Jersey's current indemnification law is unique in that it guarantees that surety liability does not extend to claims for damages based upon alleged negligence that result in personal injury, wrongful death, or property damages, and that a surety bond can not be construed as liability insurance. The current indemnification law specifically states that it will not have an affect on any indemnification agreements made between the NJDEP and state-employed RACs under the state's original indemnification program.

New Jersey requires state-employed RACs to obtain pollution liability insurance or submit documentation of their diligent efforts to obtain such insurance. According to the state official, the state has the same diligent effort documentation requirements as the EPA, in that New Jersey requires its RACs to submit information or a letter from its broker indicating which insurance carriers were contacted, types of insurance requested, associated premiums, deductibles, limits, exclusion and subsequent approvals or denials.

Some RACs currently are able to obtain claims-made insurance at levels up to $5 million. The state official was unable to specify the exact cost of these policies but indicated that costs are based on the rate of revenue generated. The state official was not sure if the size of a cleanup was a factor in the RAC's ability to obtain insurance, however, he did indicate that in the past some RACs were unwilling to work at NPL sites. The state official indicated that some RACs "go bare" in that they work without the protection of indemnification or pollution liability insurance. These RACs are typically small companies working on small projects.

New Jersey's current indemnification law requires the NJDEP to submit a report addressing insurance availability and coverage within 24 months of the law's enactment (i.e, January 1994). This report will assess the current availability and affordability of pollution liability insurance for state-employed RACs and several aspects of the state's new indemnification program. This report will identify the state's cost of administering the program; the contractors indemnified by the state and the amount of indemnification provided; site specific bids and awards for each contract for which indemnification is provided; the impact of the program on the quality and cost of response action contracts; the number and nature of claims filed against an indemnified RAC; the number and nature of any claims brought against RACs for which private insurance carriers were responsible; and a technical evaluation of contractor practices that resulted in the claims and recommendations for correcting the identified deficiencies.

Officials indicated that the state did not observe a reduction in the pool of qualified contractors, an increase in the cost of contractor services, or a delay in the cleanup of contaminated sites during the one-year period (January 1990, through December 1991) when the state did not offer indemnification to state-employed RACs. The state official indicated that companies were more willing to take risks as a result of the downturn in the economy.

New Jersey includes language in its RAC contracts which provides for the RAC's indemnification of the state. The RAC is required to indemnify the state for everything for which the state does not indemnify the RAC, including non-pollution liability.

NEW MEXICO

Under New Mexico's Article 4B on Emergency Management (74-4B-8 through 12), no provisions relieve hazardous material owners, shippers, or carriers of their responsibilities and liabilities in the event of an accident. Such persons shall assist the state as requested in responding to an accident and are responsible for restoring the scene of the accident to the satisfaction of the state.

Under Section 41-4 of the New Mexico Tort Claims Act, New Mexico waives its right to sovereign immunity. New Mexico public employees (including state-employed RACs) are not covered under state sovereign immunity.

New Mexico has a Good Samaritan Law. Under this law, persons providing assistance or advice are protected from liability. The following exceptions apply to liability protection:

- persons who performed act or omission which caused in whole or in part actual or threatened release of hazardous materials; and
- persons who receive compensation other than reimbursement for out-of-pocket expenses for his services in rendering assistance or advice (e.g., RACs).

The Good Samaritan Law does not limit or otherwise affect the liability of any person for damages resulting from gross negligence or reckless, wanton or intentional misconduct. It does do not apply to state-employed RACs.

New Mexico does not indemnify RACs (or any other types of contractors) as a general rule. As a policy, the state does not indemnify environmental work. This practice has not caused a reduction in the pool of qualified contractors. The state Superfund representative noted that in general, there has been an increase in the number of contractors responding to state solicitations.

New Mexico is currently implementing its first state-lead contract of a Superfund site involving an RI/FS. The state has hired contractors for emergency response actions and has performed more than 12 emergency responses. Several of the emergency responses have been performed under a single contract.

The state received 20 to 30 RAC responses to its last two RFPs involving investigation and remediation. A state attorney said it is state policy not to sanction actions (through indemnification) that generate liabilities because of poor contractor performance. No delays in the cleanup of contaminated sites have resulted from this policy. The state Superfund representative has not heard of RACs requesting indemnification from the state.

The New Mexico Groundwater Protection and Remediation Bureau, at times, requires RACs to indemnify the state. This issue is negotiated on a contract-by-contract basis. The state official contacted believes that New Mexico requires its RACs to obtain pollution liability insurance. RACs have had no problems in obtaining private pollution liability insurance to the knowledge of the state representative.

An individual with the New Mexico Institute of Public Law, who conducted a study on insurance issues, indicated that one insurance company (The Reliance Group) has set a $5 million limit on pollution liability coverage. The individual indicated, however, that RACs may be able to obtain more coverage, if they are willing to pay a higher premium and deductible. The cost of the policies begin at $25 thousand and increase depending on the coverage.

State contracts establish a liability standard for RACs. Contracts provide standard limits on insurance that range from $100,000 to $750,000 depending on the type or number of claims. These limits are legislated under the New Mexico Tort Claims Act. Contract language also includes indemnification of the state, if required.

No changes in the state's indemnification practices are anticipated in the near future.

NEW YORK

New York does not indemnify state-employed RACs. Indemnification is prohibited by the New York State Constitution. Its Gift and Loan Provision (Article 7, Section 8) does not allow the state to give or loan money in aid to any private corporation, or association, or private undertaking. Also, credit cannot be given to any individual, public or private corporation or association, or private undertaking.

Under Chapter 27-0916 of the New York Environmental Conservation Law on Department Authority for Cleanups, New York limits the liability for cleanup or restoration contractors under contract with the department or under order by the department or court for any injury to person or property from such services. Liability is limited to acts of omissions which result from negligence, gross negligence, or reckless, wanton or intentional misconduct.

If a favorable claim is made against the contractor, the liability of the contractor is limited to 50 percent or less of the total liability assigned to all contractors liable provided the liability is not based on gross negligence. Assuming no reckless disregard or intentional misconduct, the liability of the contractor to the claimant for loss relating to injury to property and for non-economic (e.g., pain and suffering, mental anguish, loss of consortium, etc.) losses relating to an injury to a person shall not exceed the equitable share of the contractor's total liability.

This statute does not limit or effect the liability of the contractor for breach of any express warranty or an express or implied warranty under the uniform commercial code, or to an employee of a contractor to the workers' compensation law. It also does not relieve the liability of any person who processed, disposed of or dealt in hazardous wastes unlawfully.

According to the statute, the state is immune from liability and action for any act or omission done in exercise of the department's authority, provided that it does not limit any liability for unlawful, willful or malicious acts or omissions on the part of the state, state agencies, etc.

Under 27-1321 of the New York Environmental Conservation Law, state-employed RACs are not protected from liability for their deeds because they receive compensation other than reimbursement for out-of-pocket expenses for services in rendering assistance or service. Also, a RAC is liable for its acts or omissions at cleanup and restorative sites, if there is negligence, gross negligence or reckless, wanton or intentional misconduct.

New York officials have not experienced a reduction in the pool of qualified contractors. A judgement could not be made by New York officials on any increases in contractor costs resulting from the lack of indemnification. There have been delays in the cleanup of contaminated sites when the liability clause in the RAC contract is not acceptable to the state.

New York contracts establish a liability standard for RACs that is based on Article 13, Sections 27-1321, 27-13-13, and 27-0916 of the New York Environmental Conservation Law. The contract language, however, does not indemnify state-employed RACs.

In an informal manner, RACs have requested indemnification from the state by including indemnification clauses in the contract bids they submit. New York receives approximately 8 responses to RFPs from RACs even though indemnification is not offered. New York does not have Good Samaritan Statutes or any other types of immunity statutes that limit the liability of RACs.

New York requires RACs to indemnify the state. This is a standard requirement in all of their RAC contracts.

The state also requires contractors to obtain private liability insurance. State-employed RACs have had problems obtaining private pollution liability insurance in the past. Lately, however, RACs have had no problems obtaining insurance. RACs are allowed to work without liability insurance if they prove that they cannot obtain insurance. For those RACs that can obtain liability insurance, the state will pay the premiums as a bid item in the contract. The state officials contacted indicated that they were not familiar with the limits, exclusions and cost of the policies obtained by the state-employed RACs.

The New York representative anticipates no changes in state indemnification practices in the near future.

NORTH CAROLINA

The State of North Carolina provides neither immunity nor indemnification from liability to state-employed RACs for any civil damages resulting from hazardous waste cleanups. There has not been a perceived need to grant RACs indemnity, because most hazardous waste cleanups have been resolved privately between the responsible parties and their RACs. In the past year, only one RAC has been employed by the state. In this recent case, the RAC performed an emergency response action cleanup of a State Superfund site. To date, there has been no Federal Superfund site cleanup where the State of North Carolina has taken the lead. The RAC must guarantee indemnity to North Carolina. The state also limits its own liability in hazardous waste cases at $100,000.

In addition to not providing immunity or indemnification to RACs, the state government has a constrained budget with which to employ RACs. State oversight of hazardous waste cleanup is provided by the Superfund Section of the Department of Environment, Health, and Natural Resources. The State of North Carolina operates on an annual balanced budget. As a result, the Superfund Section cannot compensate RACs in a way that overextends a given yearly budget.

According to state officials, North Carolina's RAC policies are not fully written because there has been little need to define and enforce them. Most of the waste cleanup in North Carolina has not been associated with Superfund sites but instead with RCRA emergency response sites. As a result, the specificity of RAC contracts for Superfund sites is not as clearly defined as other cleanup contracts.

In the most recent instance where the state hired a RAC to clean a Superfund site, the contractor had adequate pollution liability insurance. North Carolina has no insurance requirement for its RACs, because it is confident that future RAC applicants will have adequate liability coverage. For example, the RAC that was employed last year for the State Superfund cleanup provided the state evidence of private insurability that satisfied any state concern about the limits, exclusions, or costs of the RAC's pollution liability insurance.

State of North Carolina officials indicated that they have not observed a reduction in the pool of qualified RACs, nor have they had any difficulty in obtaining the services of RACs. They could not respond as to whether or not the lack of indemnification has resulted in an increase in RAC costs, given that the state has had minimal prior experience in hiring RACs.

The state handles the language of each contract, such as clauses regarding liability standards, on a case-by-case basis. It has not yet developed a codified requirement for liability standards that it incorporates into each RAC contract. In practice, however, North Carolina officials do include language in each contract about liability standards. Without greater need to do business with RACs, North Carolina officials do not anticipate that the state will change its current indemnification practices in the near future.

NORTH DAKOTA

North Dakota has no provisions for granting civil immunity to state-employed RACs. Section 32-03-41 of the North Dakota Century Code regarding judicial remedies states that persons who "assist or advise in mitigating or attempting to mitigate the effects of an actual or threatened discharge, leakage, seepage, or other release of materials or substances designated or defined as hazardous by any state or Federal law or the rules and regulations of any state or Federal entity, or in preventing, cleaning up, or disposing of, or in attempting to prevent, cleanup, or dispose of any such discharge, leakage, seepage, or other release is not subject to any civil liability or penalty." However, this immunity does not apply to any person, such as a RAC, who receives compensation other than reimbursement for out-of-pocket expenses for such services. The state itself still has sovereign immunity, according to a North Dakota official.

No historical precedent for whether or not state-employed RACs would be indemnified exists, because the state has never hired RACs. However, the state has a policy against indemnification unless the dollars can be identified. A state official indicated that there is no statutory authority for indemnification, but contracts must go through an attorney general contract review, and it would have to be demonstrated that the dollars for indemnification are available in an agency's budget before approval of indemnification could be granted.

North Dakota, according to a state official, has never hired a RAC for any preliminary activities such as RI/FSs, any cleanup work or any emergency response actions. The state does have a Superfund program, however, it is not quite a year old. No monies have yet been expended from the fund.

In the past, the state has always been able to identify the responsible party(ies) and the responsible party has always contracted for the necessary work. A number of factors may make it easier to identify the PRPs in North Dakota since the state reportedly generates little hazardous waste. In fact, the state has only two Superfund sites, both are in the process of being cleaned up by the responsible parties. Under the state's new Superfund program, the state has the authority to contract for emergency response actions when a violation of the law triggers an emergency and when PRPs cannot be identified using monies from the new Superfund.

OHIO

According to an Ohio official, the eleventh amendment to the U.S. Constitution provides the State of Ohio and its contractors with immunity from liability.

The eleventh amendment prevents a citizen from sueing a state in Federal court and requires that such suits be filed in state courts. The official, however, points outs that in United States v. Union Gas Co., the Third U.S. Circuit Court of Appeals on remand from the U.S. Supreme Court ruled against the issue of state sovereign immunity and held that the eleventh amendment does not bar a suit against the state and that SARA makes clear the abrogation of eleventh amendment immunity. So while Ohio law combined with the eleventh amendment can be interpreted to provide immunity to state-employed contractors, there is precedence to indicate that such immunity will not be upheld in court.

Contractors are not granted immunity under the state's Good Samaritan Law because such law only applies to those rendering services without anticipation of renumeration (Section 2305.23.2(b)(2)).

An Ohio official reports that the state does not offer state-employed contractors indemnification because of constitutional constraints and requirements. It is also noted that contractors in the State of Ohio are not referred to as RACs. The official indicated that the state does not submit RFPs for bids, rather, on a biennial basis, the legislature approves a specified budget for a hazardous waste cleanup fund. Contracts are then awarded to qualified contractors for a two-year period at a specified dollar level for the purpose of performing cleanup tasks in assigned areas across the state. The level-of-effort for each task is established by the state and is deducted from the contractor's original contracted budget. For example, the state selects a qualified contractor to cover the northwest portion of the state for hazardous waste cleanups. The contractor is awarded a two-year $500,000 contract with the agreement that any hazardous waste cleanups in that part of the state will be awarded at a level-of-effort established by the state. That level-of-effort is then deducted from the original $500,000. If the contractor depletes the designated funds before the end of the contract period, then the tasks are performed by another contractor. However, the state official said that this has never occurred. Any monies unused at the end of the contract period stay in the fund. The state's program is unique in three ways: (1) the contractor is awarded a contract with a given budget and timeframe, (2) the contractor is given a task(s) to perform in a specified region of the state at a specified level-of-effort, and (3) the contractor performs the task(s).

The official stated that they have not seen a reduction in the pool of qualified contractors for the reason of not offering contractor indemnification. On several occasions, contractors have requested indemnification from the state, however, they have been told it is not possible because of the constitutional constraints.

According to the state official, contractors must carry general liability insurance worth $1 million per occurrence or $2 million annual in aggregate. Pollution liability insurance is not a requirement.

A state official reports that the state includes language in its contracts that indemnifies the state. Despite this requirement, the state has not had difficulty obtaining the services of qualified contractors. The state official does not anticipate that the state will change its current indemnification practices.

OKLAHOMA

The State of Oklahoma does not provide immunity from liability for any civil damages from hazardous waste cleanups to a contractor receiving compensation for its services in assisting the cleanup. Section 5.7 of the state's statutes addressing torts does provide immunity from civil liability to any person who, in good faith and without prior compensation, provides emergency care, assistance, or advice at the scene of an accident or existing or impending disaster involving the use, handling, transportation, transmission or storage of hazardous materials. That provision does not apply, however, to persons who are engaged professionally or commercially in providing such services. Therefore, Oklahoma does not provide immunity from liability to state-employed RACs.

An Oklahoma official indicated that the state does not currently indemnify state-employed RACs, nor have any legislative bills been introduced for the next session which would do so. The state also does not indemnify any other types of contractors. When an RFP is issued for a Federal Superfund site, as many as 17 to 85 contractors respond. For non-NPL sites, the state conducts preliminary assessments "in-house" and does not hire a contractor. For remedial designs or remedial actions at the non-NPL sites, the state does issue RFPs. Generally, 7 to 10 RACs respond.

Since the state has never offered indemnification, it's unknown whether the pool of qualified contractors is reduced because of the lack of indemnification, but no delay in the cleanup of contaminated sites has been observed. For emergency actions, the state selected one contractor on bid and this contractor works on an on-call basis. The state has no Superfund program and funds cleanup actions at non-NPL sites through the state's hazardous waste fee system, when responsible parties are not identified. There has been an increase in the cost of contractor services over time, but the state official did not know if that increase was related to indemnification or not. The state bid system has resulted in a recurring problem in obtaining qualified RACs because of the requirement to take the contractor with the lowest bid. This problem is not specific to any particular phase of work requiring service. RACs have not requested indemnification from the state, according to an Oklahoma official.

Oklahoma does not require state-employed RACs to indemnify the state, but whether or not a liability standard for RACs exists depends on the agency in the state floating the contract.

Any contracts associated with the State's Superfund program require RACs that cleanup Superfund sites to carry minimal amounts of liability insurance, which includes pollution liability insurance. For any sizable cleanup, the amount that must be carried is $1 million. Based on letters and conversations between RACs and state officials, RACs have had no problem obtaining $1 million of liability insurance, but recently one RAC had a problem obtaining $5 million in insurance coverage for a site involving solid waste.

OREGON

The State of Oregon is authorized under Section 465.340 of the Oregon Hazardous Waste and Hazardous Materials Law to provide indemnification to removal and remedial action contractors. This indemnification, however, is limited by Article XI, Section 7, of the Oregon Constitution and the Oregon Tort Claims Act, ORS 30.260 to 30.300, which prohibits the Oregon Department of Environmental Quality (ORDEQ) from indemnifying state-employed RACs unless the ORDEQ has set aside money in the Hazardous Substance Remedial Action Fund to cover the claims which could result from the indemnification. The state's constitution requires the state to operate on a balanced budget. According to an attorney at the Oregon Department of Justice (ORDOJ), the Oregon Constitution and Oregon Tort Claims Act limit the amount of indemnification offered by the state to $50 thousand singularly or $300 thousand in the aggregate. According to a state official, Section 465.340 was promulgated because the State of Oregon based its legislation on the EPA's CERCLA legislation.

The language included in response action contracts indicates that the ORDEQ shall indemnify, defend, and hold harmless the contractor, its officers, agents and employees from any claims of liability arising out of its negligent performance under this agreement to the extent permitted by the Oregon Constitution and the Oregon Tort Claims Act. Several of the state officials contacted indicated that no indemnification is actually offered by the inclusion of this language in response action contracts, due to the constraints of the state constitution and Tort Claims Act. However, the attorney at the ORDOJ indicated that this contractual clause does provide RACs with limited indemnification. The contractual language indicates that indemnification lasts beyond the duration of the contract, but the exact duration is not specified.

Several officials at the ORDEQ indicated that the department currently lacks adequate funding to indemnify contractors or fund the response action work. These officials indicate that indemnification would only be offered in a critical situation where immediate action must be taken and no qualified RACs will perform the work without indemnification. In such an event, the state would need to stop work in other areas and reappropriate the funds previously dedicated to the work that was ceased in order to fund the cost of indemnification.

All response action contracts include language in which the contractor is obligated to indemnify the State of Oregon, the ORDEQ, its officers, agents and employees from any claim of liability arising out of the RAC's performance under the contract. The contracts additionally require the RACs to include the state, ORDEQ and its officers, employees and agents as additional insureds with respect to activities performed under the contract.

In July of 1989, the ORDEQ contracted with three RACs for remedial activities. To date, work under these contracts has involved only preremedial activities. As this work becomes available, it will be rotated among the three RACs. These remedial activity contracts begin to expire in

May of 1992. The state is therefore preparing to renegotiate its remedial activity contracts as well as emergency response contracts. According to a state contracts official, the state will not likely offer indemnification to the RACs secured under the new contracts. The state official also indicated that the state will likely require those RACs conducting removal and emergency response activities to acquire pollution liability insurance.

Section 465.340 indicates that an indemnification agreement may be provided only if the Director of the ORDEQ determines that the liability covered by the indemnification agreement exceeds or is not covered by pollution liability insurance available at a fair and reasonable price to the contractor at the time the contractor enters into the contract to provide removal or remedial action, and adequate insurance to cover such liability is not generally available at the time the contract is entered into. The language pertaining to insurance in the response action contracts however does not state that pollution liability insurance is always required, rather it indicates that the ORDEQ reserves the right to require the RAC to obtain pollution liability insurance. According to the state contract's official, the three remedial service contractors currently working for the state have not yet been required to obtain pollution liability insurance due to the type of work currently being conducted.

Section 465.340 also requires the RAC to make diligent efforts to obtain pollution liability insurance prior to the ORDEQ providing an indemnification agreement. The RAC is required to make diligent efforts for such insurance each time the RAC begins work at a new facility on a multiple site contract. According to a state official, documentation of diligent efforts has not yet been required.

Oregon is somewhat unique in that it has the authority under Section 465.340 (4)(c)(A) to provide indemnification to a RAC carrying out a written contract or agreement with any potentially responsible party, if the indemnification available from the PRP is inadequate to cover any reasonable potential liability of the contractor arising out of the contractor's negligence in performing the contract or agreement with the party. It is unlikely that the ORDEQ would enter into such an agreement because of the limitations placed on the department by the Oregon constitution and the state's current funding situation.

Oregon does offer immunity to volunteers providing assistance or advice in response to discharges of hazardous material as long as the volunteers do not receive compensation beyond reimbursement per Section 30.505. This provision, however, does not apply to RACs.

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PENNSYLVANIA

The Commonwealth of Pennsylvania provides immunity from liability for civil damages from hazardous waste cleanups to state-employed contractors under Title 35, Section 6020.702(c) of the Pennsylvania Consolidated Statutes Annotated. A person or company who has entered into a contract with the Department of Environmental Resources to assist the department in implementing the state's Hazardous Site Cleanup Act, or a response action contractor under Section 119 of the Federal Superfund Act, shall not be held liable for a release of a hazardous substance arising out of performance of a response action when the release is not caused by the contractor's negligence. Section 6020.706 contains a provision for a covenant not to sue concerning liability to the commonwealth, including future liability, resulting from a release or threatened release of a hazardous substance addressed by a remedial action.

42 Pa.C.S.A. Section 8336 of the Judiciary & Judicial Procedure provides civil immunity for assistance upon request in incidents involving the transportation of hazardous substances; however, this Statute excludes persons who are compensated. Section 6020.703(e) of the Health and Safety Statutes provides immunity from liability to municipal waste transporters (garbage haulers) for that portion of municipal waste which is defined as household hazardous waste under Section 1512 of the act of July 28, 1988, known as the Municipal Waste Planning, Recycling and Waste Reduction Act, which is collected from generators and transported to permitted municipal waste disposal facilities. Therefore, state-employed RACs are granted civil immunity only under Section 6020.702(c).

A Pennsylvania official reports that the commonwealth does not offer RAC indemnification because there is no statutory authority. It would take an act of the General Assembly for the Commonwealth of Pennsylvania to offer indemnification. However, Pennsylvania does provide some relief for liability as mentioned in the above statutes.

The official contacted could not definitely say there is a reduction in the pool of qualified contractors because Pennsylvania does not provide indemnification. Pennsylvania's bonding requirements are so stringent (100 percent for performance and payments) that they limit the number of contractors that respond to RFPs and do not provide for healthy competition. Depending on the size of the project and on the kind of work involved, only 2 to 10 RACs may respond to an RFP. The commonwealth has, therefore, seen tremendous differences between the actual bids and estimated costs on projects. For example, an estimate cost of a cleanup might be $2 million and the actual bids could be between $4 to $6 million.

Only one company requested indemnification from the commonwealth and that company was supplying sludge. The Pennsylvania official reported that the commonwealth does not indemnify any other type of contractor. Under Section 6020.513(b) of the Health and Safety Statutes,

Pennsylvania does not require RACs to indemnify the commonwealth. Before promulgation of this statute, the official stated that RACs (even the large contractors) would not submit bids.

According to an official contacted, the RAC must meet insurance requirements, i.e., general liability, workman's compensation, vehicle coverage, pollution liability, etc. Generally, RACs have been able to obtain pollution liability insurance.

Generally, the Commonwealth of Pennsylvania does not include language in RAC contracts that establishes a liability standard for RACs, except in the case of negligence. The official contacted does not anticipate that Pennsylvania will change its current indemnification practices in the near future, because RAC indemnification is not considered a problem.

RHODE ISLAND

The State of Rhode Island does not provide indemnification to state-employed RACs or any other type of contractor, nor do state statutes limit the liability of RACs. Section 9-1-29 of the Causes of Action Statutes provides immunity from liability against architects or professional engineers who construct improvements to real property. The statute provides that any architects, professional engineers, contractors, or subcontractors involved in the construction improvements to real property are immune from liability. However, state officials reported that this statute does not apply to RACs and no one has ever tried to apply the statue to RACs.

Rhode Island officials indicated that indemnification is not offered to RACs because the state does not have any state-lead sites. State officials reported that the state has a number of EPA-lead sites, and that PRPs have the lead on the big Superfund sites. Rhode Island officials indicated that, at present, indemnification is not an issue of concern.

Although Rhode Island does not have any state-lead Superfund sites, they do use RACs under their state response contract. As a result of the state not offering indemnification, officials have observed a slight reduction in the pool of qualified contractors. Rhode Island officials stated that three of the larger contractors withdrew from the last state response RFP because the state did not offer indemnification. However, state officials have not observed an increase in the cost of contractor services or delays in the cleanup of contaminated sites, nor have they had difficulty in obtaining the services of qualified RACs because the state doesn't offer indemnification.

Rhode Island uses a number of prequalified contractors under their state response contract. Officials reported that 19 RACs responded to the last state response RFP. In addition, Rhode Island officials reported that RACs have requested indemnification from the state pursuant to the state response contract.

Although Rhode Island does not offer indemnification to RACs, the state tries to require RACs to indemnify the state whenever possible, especially with response action contracts. Rhode Island officials reported that the state tries to include language in RAC contracts that indemnifies the state, however, it is a requirement that the state has not been successful enforcing in the last few years. State officials reported that the state does not include language in its RAC contracts that establishes a liability standard for RACs.

State-employed RACs do not work without insurance. Rhode Island requires RACs to have worker's compensation, general liability insurance with a $1 million umbrella and errors and omissions insurance. However, state officials reported that they waived the errors and omission insurance requirement for the last four to five years because it was unobtainable due to a prohibitively high cost. Rhode Island officials stated that RACs claimed they were not able to

obtain pollution liability insurance. State officials indicated that they believe pollution liability insurance is available, however, it is very expensive.

Rhode Island officials do not anticipate that the state will change its current indemnification practices in the near future.

SOUTH CAROLINA

The State of South Carolina may provide immunity from liability for civil damages resulting from hazardous waste cleanups to contractors receiving compensation for their services in rendering advice or cleanup assistance under the State of South Carolina Tort Claims Act. Immunity would have to be decided on a case by case basis by the state court. Under South Carolina Code Annotated, Article 3, Immunity From Civil Damages (44-56-330), immunity applies to any person whose act or omission did not cause the actual or threatened discharge and who renders such assistance or advice voluntarily and without compensation. This statute, therefore, does not apply to RACs who are compensated for their services.

Beginning in 1991, South Carolina amended their RFP contracting procedures with RACs to include the following insurance requirements:

- The contractor and subcontractors are responsible for, and at their own expense, any and all loss of or damage to their equipment, as well as state-owned equipment. The contractor's aggregate liability for state-owned equipment is $300,000.

- The contractor is required to indemnify and hold harmless the state against all losses, liabilities, claims, demands, damages, fines and penalties, and related expenses with respect to injury or death of any person resulting from the contractor's performance.

- All indemnity by the contractor does not apply to any actions resulting from any pollution, contamination, or a release of toxic materials, including all adverse health effects which results from the contractor's negligence or willful misconduct.

- For all losses, damages, liabilities or expenses, the contractor's liability to the state shall not exceed, in the cumulative aggregate, with respect to all claims arising out of or related to the agreement, the greater of the total amount of compensation paid to the contractor or $1 million.

- The contractor must procure at their own expense, Employee's Liability and Workmen's Compensation Insurance; Public Liability and Property Damage Insurance of at least $300,000; Marine Insurance of at least $300,000 (where hazardous substance response activity involves work on navigable water); and $300,000 coverage for the loss of all contractor and subcontractor-owned or rented equipment.

The State of South Carolina does not require pollution liability insurance as part of the RFP contractual obligations.

Less than 10% of the RACs responding to state solicitations or conducting RAC activities for the state have requested indemnification. All contractor's conducting RAC activities in South Carolina work without indemnification. State officials believe that some RACs are able to obtain private liability insurance. No information, however, was available on the number of RACs working without indemnification and private liability insurance.

South Carolina has had no problems obtaining RAC services. During the last solicitation, 12 RACs submitted proposals to the state. This represents a 100% increase in respondents in comparison to the last solicitation four years earlier. In prior years, the state did have difficulty procuring RAC services, however, this was due to a lack of qualified firms, not the absence of indemnification.

South Carolina reportedly does not offer RAC indemnification because they do no think it is necessary and have no plans to offer indemnification in the future.

SOUTH DAKOTA

The State of South Dakota provides civil immunity from liability to persons requested by any emergency and disaster service agency to assist with hazardous material incidents in the event of an accident or other emergency situation. The implication is that RACs requested to assist with cleanup in an emergency situation would be provided immunity, whereas RACs involved in the cleanup of a Superfund site would not be provided immunity. Such immunity is provided under Statute 33-15-18.1 of the South Dakota Codified Laws Annotated. The official reported, however, that on several occasions the state has made contractors state employees to protect them from liability.

A South Dakota state official reported that it is the responsibility of the PRPs to hire the RACs for site cleanups. The state maintains a nonapproved listing of RACs to be used as references for PRPs. The only requirement is a 40-hour OSHA training course that includes a hazardous waste certification. If the PRPs will not clean up the site, then the case is handed over to the Attorney's General office and either the state or EPA will initiate the cleanup and then will attempt to recover the costs from the PRPs.

For the Leaking Underground Storage Tank Trust (LUST) Fund, the state maintains contracts with approximately three RACs, usually on an annual basis. South Dakota is currently selecting a qualified contractor for other types of response actions through the use of the state's Regulated Substance Response Fund. With both funds, RACs are procured through RFPs or advertising for a specific site. If an emergency arises, one of the contracted RACs can be used or the state has the authority to go out and hire a RAC without advertising. If the PRPs cannot be identified, then the state will use the LUST Fund supported by EPA. If the site is too large or the state does not have the funding to clean up the site, then the state requests EPA to manage the work. One unique aspect of South Dakota's program is that the Petroleum Relief Compensation Reimbursement Fund reimburses PRPs for petroleum cleanup, which includes leaking tanks. However, the PRP is responsible for the initial $10,000 of the total cost and the remaining cost is picked up by the fund. The state official said that RAC costs have increased sharply but have stabilized over the past few years after the Petroleum Board put a lid on costs. The board now sets the maximum rates for reimbursement.

A South Dakota official reported that the state does not offer RAC indemnification because the issue has not come up and to his knowledge, RACs have never requested indemnification from the state. This, he believed, was due to the fact that RACs are usually hired by the PRPs and are only hired by the state if the PRP cannot be identified or if the PRP refuses to do the cleanup. The state has relied heavily on the EPA to conduct preliminary assessments and RI/FS. A state official reported that the state will adopt a system of preselecting contractors and then issue contracts for multi-sites in the event the state is required to manage the cleanup. In this way, the state can hire larger and more qualified contractors.

Since the State of South Dakota has no certification process for contractors, it has seen an increase in the available pool of contractors rather than a decrease. However, because of the remoteness of the state and the lack of qualified contractors in the state, particularly specialty contractors, the state has had to go out-of-state to contract with RACs.

Several officials contacted had no knowledge regarding a RAC's ability to obtain pollution liability insurance as the state does not require RACs to procure such insurance. Officials indicated that in many instances RACs work without pollution liability insurance.

The South Dakota official also reported that the state does not require RACs to indemnify the state. However, the state includes a hold harmless clause in its RAC contracts that covers contractor responsibility for negligence or willful acts. Other than that clause, the state does not include language that establishes a liability standard.

State officials contacted do not anticipate that the state will change its current indemnification practices in the near future.

TENNESSEE

Tennessee does not provide state-employed RACs with immunity from civil liability, nor does it offer RACs indemnification. There also has been no application of Good Samaritan Statutes to RACs. Under Section 68-27-202 of the Safety and Health Hazardous Substances Statutes, the state identifies a Good Samaritan as someone who would act "without compensation," thereby excluding RACs from coverage under the statute. State officials mentioned, however, that no contractor has ever been sued in Tennessee for work on a Superfund site. Because of the lack of RAC litigation, liability standards for RACs have not been fully developed.

According to a state official, there are either 4 or 5 NPL sites, of which 2 or 3 are currently being cleaned up. The State of Tennessee has not taken the lead on any of these sites. The EPA is responsible for managing all the relevant RAC contracts. Consequently, Tennessee has not applied its immunity and indemnification policies to RACs working on fund-lead sites.

For State Superfund sites, Tennessee does not provide indemnification to state-employed RACs. State officials said that a general prohibition on indemnification exists for all state contracts.

According to a state official, RACs must indemnify the state. This is provided through the use of a "hold harmless clause" in RAC contracts. This clause is limited to cases of RAC negligence. No RAC has yet requested state indemnification, according to state officials.

The State of Tennessee traditionally employs RACs on an "on-call" basis. A contract generally covers a period of years during which the RAC conducts emergency responses at a given state Superfund site, as needed. According to state officials, Tennessee has begun issuing RFPs for site-specific contracts. Officials are concerned that the site-specific contracts may involve a more lengthy state approval process than with on-call contracts.

Tennessee does not legally have the authority to require RACs to obtain pollution liability insurance. In practice, however, any response from an RFP in which the RAC applicant does not have insurance is dropped from consideration by the state. The liability insurance expectations of the state are less stringent for RI/FS RACs than they are for contractors involved with actual site cleanup. (The State of Tennessee usually hires a different RAC to perform site cleanup than the RAC that conducts RI/FS.)

Tennessee officials report that they have been able to employ RACs with adequate liability insurance for Superfund cleanups. They have received an adequate contractor response both with on-call RFPs and site-specific RFPs. They pointed out, however, that the pool for RI/FS contracts averages about 8 prospective contractors, while cleanup contract pools average between 3 and 4 prospective RACs. They also indicated that the cleanup contract pool consists mostly

of out-of-state RACs. That notwithstanding, state officials did not site any insurance problems or cleanup delays with implementing RAC contracts.

State officials do not anticipate any changes in indemnification practices without a prior change in Federal policy. They also do not cite any unique innovations or problems with their RAC contract process.

TEXAS

The State of Texas is authorized to indemnify state-employed RACs under the Texas Civil Practice and Remedies Code and the Texas Health and Safety Code. On August 26, 1991, Section 104.002 of the Texas Civil Practice and Remedies Code was amended to state that the State of Texas is liable for the indemnification of a person when damages result solely from that person's signing an industrial solid or hazardous waste manifest during the course of the person's contractual performance. According to a state official this law was enacted in response to the Union Gas case decision which determined that the State of Pennsylvania did not have sovereign immunity.

The second statute, Section 361.405 of the Texas Health and Safety Code, originally enacted in 1987 (as Section 26.308(b)(c) of the Texas Water Code), allows the Texas Water Commission (TWC) to provide indemnification in RAC contracts, to state-employed RACs performing services in connection with a contract or cooperative agreement under Section 361.402, against "any claim or liability arising from an actual or threatened release of a hazardous substance that occurs during the performance of any work." The statute states that the TWC may only indemnify a state-employed RAC if they meet the following conditions: the RAC demonstrates that insurance is unavailable at a reasonable cost; no other RAC submits a comparable proposal and demonstrates that insurance is available at a reasonable cost; and the federal government agrees in a cooperative agreement or contract to indemnify the state pursuant to Section 119 of CERCLA. According to a state official, the state has never offered indemnification under this statute because the federal government does not indemnify state governments.

The statute's requirement that the federal government indemnify the state circumvents the requirement in the Texas State Constitution that representatives of the state cannot incur a debt against the state unless the state legislature has appropriated for it. This constitutional requirement is significant as the Texas Attorney's General Office issued a statement in 1982, indicating that any indemnity agreement negotiated by a state instrumentality in violation of the constitution is unenforceable and void. According to a state official contacted, the constitution does not prohibit indemnification under the Civil Practice and Remedies Code because the bill was passed by the legislature.

In addition to the indemnification provided under the Texas Practice and Remedies Code, a RAC's liability is limited under Subsection 361.405(e) of the Texas Health and Safety Code. Subsection (e) of 361.405 indicates that a state-employed RAC is not responsible for an act or failure to act during the performance of work under a contract (pursuant to Section 361.402) unless the RAC acts with gross negligence or willful misconduct. According to a state official, this statute specifically limits a RAC's liability pursuant to Texas nazardous waste laws.

Section 361.196 of the Texas Health and Safety Code also appears to limit RAC liability, however a state official indicated that this statute is directed at PRPs. Section 361.196 was originally enacted in 1987 (as Article 4477-7, Chapter 3 of the Health, Solid Waste Disposal Act). This statute limits liability resulting solely from acts or omissions in response efforts by any person, in the absence of gross negligence or willful misconduct.

The state currently requires state-employed RACs to obtain private pollution liability insurance on a case-by-case basis at the discretion of the project manager. Prior to 1992, all state-employed RACs were required to obtain pollution liability insurance or submit documentation of their diligent efforts to obtain such insurance. Texas modified this requirement due to the high cost of the insurance and the availability of only claims made insurance, which only covers claims made during the period of insurance coverage. State officials indicated that claims made insurance policies are not sufficient as damages may not be apparent for several years after the completion of the work.

One unique feature of Texas' program is that the state requires the contractor to name the state as co-insured on all insurance policies, including general liability, professional liability and pollution liability insurance. This provides the state with liability coverage without the state itself purchasing insurance. This is important because the state is prohibited from purchasing insurance coverage for itself. The state also requires contractors to indemnify the state against damages caused by the contractor's actions or through the contractor's negligent actions.

UTAH

The State of Utah does not indemnify RACs or limit the liability of state-employed RACs under its statutes. Section 26.14d-801 of the Utah Code Annotated pertains to government immunity, but does not include RACs. However, one state official indicated that in a unique case where the government might operate on state-owned land, a RAC could potentially be covered.

RACs are not exempt under Utah's Good Samaritan Act at Section 78-11-22. The act exempts only those offering gratuitous emergency services, thus excluding contractors who are reimbursed for their services. Utah offers no provisions under its statutes regarding RACs and will not change its indemnification practices unless problems develop in the future.

The Utah state legislature is very conservative and thus does not intend to take on potential liability by indemnifying RACs. According to state officials, not offering indemnification to RACs has not caused a reduction in the pool of qualified contractors or increased the cost of their services. Utah has not had difficulty obtaining the services of qualified RACs.

Utah only has had one state-lead Superfund site. Other Superfund sites are remediated under the direction of the Federal government or the PRPs. An RFP was issued for the one state-lead Superfund site and the state received four responses to the RFP.

The state requires that RACs obtain $5 million in liability insurance including environmental professional, error and omission, and comprehensive general liability. Additionally, the state has contract provisions requiring sufficient coverage in relation to the site, as well as OSHA certification and sufficient safety and health training. The size of the site has not been a factor in RAC's ability to obtain insurance, but one state official indicated it potentially could be.

The state requires RACs to indemnify the state. Indemnification requirements are outlined as a provision in individual contracts. The state has $500,000 limited liability under its Governmental Immunity Act.

VERMONT

The State of Vermont applies a standard state contracting protocol to all types of contractors, including RACs. This protocol does not allow the state to offer indemnification for any contractor, nor does it allow any other type of protection through immunity, "Good Samaritan" Statutes, or other means. When RACs have requested indemnification from the state, the requests have been denied by the state Attorney General, and the state's standard contracting protocol has been followed. Section 1283, Chapter 47, Title 10, Vermont Statutes Annotated, provides for a contingency fund to be used to take action to investigate and/or mediate the effects of hazardous material releases to the environment. However, this section does not address indemnification, immunity, or insurance issues. State officials report that the statutes prevent the offering of immunity to contractors.

Vermont officials reported that the state policy regarding indemnification and immunity for RACs does not appear to have affected the state's ability to obtain qualified RACs. However, since the state has never altered this policy, it is not known if a policy providing indemnification or immunity for RACs would result in a larger number of RACs or more highly qualified RACs submitting responses to RFPs, or in lower costs or improved response times for such services. Vermont officials indicated that they feel their contractors provide good service at a reasonable cost to the state. The state has received responses from at least three RACs on all removal RFPs to date.

In its contracts with RACs, the State of Vermont does not include language that indemnifies or establishes a liability standard for RACs. However, state officials reported that all RAC contracts include a clause stating that the contractor agrees to hold the state harmless.

State officials indicated that a new general contracting protocol is being developed. The new protocol may change existing requirements regarding pollution liability insurance, but this is not certain. State officials indicated that they believe pollution liability insurance is currently required for RACs, because it is required for asbestos removal. However, it is very expensive and restrictive, and may not be required in the future. All contractors must have worker's compensation, general liability and automobile insurance.

VIRGINIA

The Commonwealth of Virginia does not provide immunity from liability for any civil damages from hazardous waste cleanups to contractors receiving compensation for its services in assisting the cleanup. Persons who, upon request of any police agency, fire department, rescue or emergency squad, or any governmental agency, provide assistance in the event of an accident or other emergency involving the use, handling, transportation, transmission or storage of liquefied petroleum gas, liquefied natural gas, hazardous material or hazardous waste, shall not be liable for any civil damages resulting from good faith efforts (Section 8.01-225 of the Code of Virginia, Civil Remedies and Procedures).

According to Virginia officials, the commonwealth has no provisions for indemnifying state-employed RACs, nor are any anticipated. The Commonwealth of Virginia has not considered indemnification because it does not contract with RACs and has no direct control over the RACs working in the commonwealth. Virginia has no Superfund program and all contractors for the cleanup of Superfund sites are chosen by EPA, even if the commonwealth has the lead on the sites and if the work is done under a cost/share arrangement with EPA. An official indicated that even when a consent decree is signed with EPA to cleanup a site, the commonwealth has a disclaimer so that there's no responsibility by the Commonwealth of Virginia towards the contractor. The commonwealth also has no standby contractors for emergency situations nor does Virginia contract with RACs to respond to emergency situations. Rather, the Department of Emergency Services has collected a list of contractors over the years and provides the list to interested parties. Contracts are written between the party with the emergency and the RAC. Thus, the commonwealth has no experience contracting with RACs. According to an official, although the commonwealth has never contracted with a RAC, the Commonwealth of Virginia routinely rejects contract language with other types of contractors regarding indemnification.

WASHINGTON

The Washington Department of Ecology began offering indemnification to contractors conducting remedial actions and investigations in 1984 following the department's receipt of Federal Superfund monies. The department believed that it was a good business practice to offer indemnification as long term pollution liability insurance was not available. Indemnification is provided on a contract basis, included in each prime contractor's master contract, which covers all addendums (i.e., individual work assignments) which are subsequently added. The state official contacted indicated that a total of nine contractors have received indemnification since 1984.

The state Department of Ecology is authorized to offer indemnification under 70.105D.030(1)(c) of the Washington Public Health and Safety Statutes. This statute states that the department may indemnify contractors retained by the department for carrying out investigations and remedial actions but that the department may not indemnify any contractor's reckless or willful misconduct. According to the state official, the department has not set any deductibles or limits on the amount of indemnification offered and that the period of indemnification is indefinite. The state official did indicate, however, that the language included in the contracts requires the contractor to provide the state with reciprocal indemnification. Specifically, the contractor is required to indemnify, defend, and hold harmless the department, its officers, agents and employees from any claim of liability arising out of the contractor's intentional or reckless acts or out of the contractor's negligent performance under the contract. All prime contractors are required to include the same indemnification language in their agreements with subcontractors.

The state Department of Ecology currently requires its contractors to maintain only bodily injury and automobile insurance and is therefore unaware of the contractor's ability to obtain pollution liability insurance. The willingness of contractors to work without indemnification or insurance also could not be assessed as the contractors are not in a position where they must make such a decision. The state official did indicate, however, that a Pollution Liability Agency had recently been created in the state and that the agency may have established a requirement which will require all contractors responding to the department's 1991 - 1992 procurement package to obtain pollution liability insurance.

The state official indicated that no changes to the department's current indemnification program are anticipated at this time. She did indicate that the department would likely reevaluate the program in the event that claims are filed.

WEST VIRGINIA

The State of West Virginia provides immunity from liability for any civil damages from hazardous waste cleanups to trained hazardous substance response personnel receiving compensation for their services in rendering advice or cleanup assistance under the "Good Samaritan Law" (Section 55-7-17). Immunity from liability does not extend to any person who by their action or omission causes or contributes to the cause of the actual or threatened discharge of any hazardous substance. Although the statute does not exempt RACs from immunity, the statute has never been tested since the State of West Virginia has never contracted a RAC for remedial or removal activities.

West Virginia has no state-lead sites. At present, the state does not have sufficient funds to cleanup any sites. To date, they have never hired a RAC to conduct remedial or removal activities at a Superfund site. Because the state have never issued a solicitation for cleanup activity, indemnification has not been addressed at the state level.

WISCONSIN

The State of Wisconsin does not provide indemnification to state-employed RACs or any other type of contractor, nor do state statutes provide immunity from civil liabilities to RACs. Section 895.48 of the Miscellaneous Provisions Statutes provides immunity from civil liability to any person acting in good faith in providing assistance or advice relating to an emergency or a potential emergency regarding the mitigation or cleanup of an actual or threatened discharge of a hazardous substance. However, the statute further specifies that immunity does not extend to persons receiving compensation, other than reimbursement for out-of-pocket expenses. Consequently, the Wisconsin Statutes do not provide immunity from civil liabilities to RACs.

Wisconsin officials reported that the state does not offer indemnification because it has no statutory authority and indemnification is not allowed under the state constitution. State officials indicated that this applies to any state contract, not just Superfund. State officials further indicated that to allow state indemnification would require special legislation and the attorney's general position is that the state constitution would prevent special legislation.

Wisconsin officials indicated that they have had no difficulty in obtaining the services of qualified RACs, nor have they observed a reduction in the pool of qualified contractors or an increase in the cost of contractor services offered as a result of the state not offering indemnification. However, state officials qualified this response by stating that they have contracted services for only two sites to date. Ten RACs responded to the first RFP and 8 RACs responded to the second RFP. Wisconsin officials did indicate that there has been a delay in the cleanup of contaminated sites because the state doesn't offer indemnification. State officials reported that there has been a two to three month delay in getting contractors on board. Consequently, state officials have been trying to obtain indemnification from the EPA for RACs working on state-lead sites.

Although the State of Wisconsin does not offer indemnification to RACs, the state does require RACs to indemnify the state. The state includes language in its RAC contracts that requires the RAC to indemnify the state. The contract language states that "the consultant agrees to save, keep harmless, defend and indemnify the state, the department and all their officers, employees and agents..." However, Wisconsin officials reported that the state does not include language in its RAC contracts that establishes a liability standard for RACs.

Wisconsin requires state-employed RACs to maintain worker's compensation insurance, comprehensive automobile liability insurance, and public liability and property damage insurance. Contract language specifies a minimum coverage of $1 million single limit liability or $500,000 bodily injury per person and $1 million per occurrence and $500,000 property damage. The contractor must provide the state with insurance certificates and must include the Department of Natural Resources and its employees as additional named insureds. Wisconsin

officials were uncertain whether state-employed RACs have been able to obtain pollution liability insurance. State officials thought that the larger firms have been able to obtain pollution liability insurance, but that the smaller firms have not.

Wisconsin officials indicated that the state does not anticipate any changes in its current indemnification practices in the near future.

WYOMING

The State of Wyoming does not provide indemnification or offer immunity to state-employed RACs. The State of Wyoming does not provide immunity from civil liability for any damages from hazardous waste cleanup to persons receiving compensation for their services. Section 1-1-120 of the General Provisions Section of the Wyoming Statutes does provide immunity from liability to persons providing assistance or advice concerning the cleanup of hazardous materials. The statute is applicable only to persons "who provide assistance or advice without compensation other than reimbursement of out-of-pocket expenses." The statute does not specifically prohibit parties who receive compensation from exemption from liability, but has been interpreted by the courts to exclude parties who receive compensation.

Contractor indemnification has not been an issue for the state since they have never hired a RAC. The state has never had difficulty obtaining the services of RACs since they have never hired nor attempted to hire a RAC. The state official contacted said they had no plans to obtain the services of a RAC in the near future.

The state does not have primacy for administration of RCRA or Superfund, nor do they take the lead on Superfund sites. In Wyoming, responsible parties have strict liability under Wyoming Statutes 35-11-101 through 35-11-1428, specifically 35-11-301 through 35-11-307 and must provide response action for their sites.

According to the state contact, the Department of Environmental Quality (DEQ) does not indemnify any other type of contractors and requires that underground storage tank contractor's indemnify and hold harmless the DEQ. The requirement to indemnify the DEQ is included in RFPs sent for bid and included in contract language. The bid states "provider shall indemnify and hold harmless DEQ and its agents and employees from and against any and all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the work..."

The state official indicated that Wyoming does not plan to obtain primacy for RCRA or Superfund or offer contractor indemnification in the near term.

ATTACHMENT A

MODEL LETTER

September 18, 1991

NAME
TITLE
DEPARTMENT
DIVISION
STREET ADDRESS
CITY, STATE ZIP CODE

Dear NAME:

The U.S. Environmental Protection Agency (EPA) is currently developing final guidelines regarding the indemnification of Superfund response action contractors. In conjunction with this effort, EPA has asked DPRA Incorporated (DPRA) in St. Paul, Minnesota, to conduct a review of Superfund contractor indemnification practices at the state level. As part of this review, a member of DPRA will be contacting your office (during the time period of September 26 through October 23, 1991) to discuss specific aspects of your state's indemnification practices. Ben Hamm, of the EPA CERCLA Enforcement Division, Office of Waste Programs Enforcement, has instructed DPRA initially to contact you for assistance in identifying the individual most familiar with your state's Superfund indemnification practices.

The results of DPRA's review will be compiled in a final report which will be available upon request. It is anticipated that this report will be useful to all state agencies confronted with the issue of contractor indemnification.

Your assistance, and the cooperation of your staff, will be greatly appreciated in this effort. Please feel free to contact me at 612/227-6500 if you have any questions.

Sincerely,

Pat Martz Kessler
Policy Analyst

ATTACHMENT B

MODEL DISCUSSION POINTS

Name of State Contact: _____

Title and Office of State Contact: _____

Phone Number: _____

Name of DPRA Staff Person: _____

Date of Telephone Conversation: _____

1. Does your state currently indemnify RACs?

   A. If yes, please provide the following information:

      (1) Which RACs receive state indemnification (e.g., all RACs, RACs working at extremely complicated sites, or RACs working at sites involving certain types of waste)?

      (2) By what authority is indemnification offered (e.g., statutes, rules, regulations, written policies, or guidelines)?

      (3) Why does the state offer indemnification?

      (4) When did the State begin offering indemnification?

(5) Is indemnification offered on a site-by-site basis or contract basis?

(6) Has the state set a legal limit or cap on liability for RACs?

(a) If yes, please provide the following information:

(i) Under what authority was the legal limit or cap set?

(ii) What are these limits or caps?

(iii) What deductible levels are associated with the coverage levels (e.g., 100,000 deductible for a 1 million coverage level)?

(iv) Are deductibles applied to each occurrence or in the aggregate?

(v) Do the limit and deductible levels differ between contract types (e.g., fixed price contracts versus cost reimbursement contracts) or different types of contractors (e.g., removal, RI/FS)?

(7) How long does indemnification last (e.g., 1 year following completion of work)?

(8) Have any claims been filed against an indemnified RAC to date?

(a) If yes, please provide the following information:

(i) Number, dollar amount, and date(s) of claim(s) filed?

(ii) Number, dollar amount, and date(s) of claim(s) paid?

(iii) Number and dollar amount of claim(s) still pending?

(9) Once indemnification was offered, did you find that a greater number of RACs responded to the RFPs?

(10) Does the state offer indemnification to subcontractors RACs?

(a) If yes, please provide the following information:

(i) How does the coverage impact the prime RAC's coverage?

(ii) Is the subcontractor subject to the same limits, deductibles, coverage period as the prime.

(1) If no, how does the coverage differ?

(11) Does the state require the RAC to provide documentation of diligent efforts (i.e., proof of the RACs efforts to obtain private insurance)?

(a) If yes, please provide the following information:

(i) What type of documentation is required?

(ii) Has the state assessed the administrative costs incurred by the state and RACs in association with the diligent effort requirements?

(12) Does your state limit the liability of RACs in any other way (e.g., good Samaritan statutes or other types of state immunity statutes)?

(a) If yes, how?

B. If no, please provide the following information:

(1) Why has the state not offered indemnification?

(2) Have you observed any of the following trends as a result of the state not offering indemnification?

(a) A reduction in the pool of qualified contractors

(i) *If yes, what is this observation based on?*

(b) An increase in the cost of contractor services offered.

(i) If yes, what is this observation based on?

(c) A delay in the cleanup of contaminated sites.

(i) If yes, what is this observation based on?

(3) Has the state had difficulty obtaining the services of qualified RACs?

(a) If yes, please provide the following information:

(i) Type of company not providing service (e.g., construction, architectural and engineering, specialty subcontractor)?

(ii) Phase of work requiring service (e.g., preliminary assessment, RI/FS)?

(iii) Characteristics of involved site (e.g., treatment, remedy, health and safety issues, type of waste)?

(4) Have RACs ever requested indemnification from the state?

(5) How many RACs respond to RFPs when indemnification is not offered?

(6) Does your state limit the liability of RACs in any other way (e.g., good Samaritan statutes or other types of state immunity statutes)?
(a) If yes, how?

2. Does the state indemnify any other type of contractor (e.g., Architectural & Engineering firms)?

3. Does the state require RACs to indemnify the state?

4. Have state-employed RACs been able to obtain private insurance?

A. If yes, what is your source of information (e.g., letters, knowledge of the industry)?

B. If yes, what are the limits, exclusions, and cost of the policy?

C. Has the size of the clean up been a factor in the RAC's ability to obtain insurance?

5. Do state-employed RACs work without indemnification or insurance?

A. If yes, could you provide the following information:

(1) Type of company (e.g., construction, architectural and engineering firm, specialty subcontractor, etc.)?

(2) Phase of work (e.g., preliminary assessment, RI/FS)?

B. Has the size of the clean up been a factor in the willingness of state-employed RACs to work without indemnification or insurance?

6. Do you anticipate that the state will change its current indemnification practices in the near future?

A. If yes, in what ways?

B. Why is the state changing its indemnification practices?

7. Is there anything about the state's program which you think is unique or particularly progressive?

8. Would you please send me the statutes (or sections of the statutes) which govern the state's authority regarding indemnification of RACs and non-RACs (NOTE: only request this information if it is not already included with the existing statute materials or if it is more current).

9. Does the state continue to include language within its RAC contracts which:

A. Establishes a liability standard for RACs?

(1) If yes, explain.

B. Indemnifies the RAC?

(1) If yes, explain.

C. Indemnifies the state?

(1) If yes, explain.

ADDITIONAL QUESTIONS

1.

2.

3.

4.

MISCELLANEOUS COMMENTS

ATTACHMENT C

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ANTI-INDEMNIFICATION SUMMARY

Introduction

This Summary presents information on state anti-indemnification statutes that appear to pertain to Response Action Contractors (RACs) performing activities funded by state governments or private parties. The information included within this Summary was generated from a review of applicable state statutes and supporting case law. The information is presented in the Summary and the supplemental Anti-Indemnification Summary Table. The Summary provides an overview of DPRA's findings, while the Anti-Indemnification Summary Table, which follows, provides detailed information on each anti-indemnification statute identified, including a summary of each statute and an indication of whether the statutes are applicable to RACs and to contracts entered into by private, non-governmental parties.

When anti-indemnification statutes are included within the Summary, the reference is to statutes that appear to restrict the indemnification of RACs, and not to other anti-indemnification statutes that the state may have (e.g., statutes pertaining to the inoculation of animals).

Methodology

A two-step process was used to obtain the information presented in this Summary and the supporting table. The first step involved the identification of applicable statutes. This encompassed a manual search of each state's general index of statutes using several keywords including "contracts," "hold harmless," "indemnification," "liability," and "negligence." Other sources, including miscellaneous articles and reports, also were used to identify applicable anti-indemnification statutes. The second-step involved the collection and review of all state statutes that appeared relevant. Each statute identified was first reviewed to verify that it does prohibit or void indemnification agreements that are applicable to RACs. Next, we determined whether the statute pertains to any indemnification agreements (i.e., not limited to RAC activities) entered into between private, non-governmental parties.

DPRA initially attempted to identify anti-indemnification statutes using WESTLAW's automated search capabilities, however, difficulties were encountered due to the numerous keywords required and the general nature of the search. Consequently, this approach was abandoned in favor of the methodology discussed above.

Anti-Indemnification Summary Table Preview

The Anti-Indemnification Summary Table presents information on each anti-indemnification statute identified. The statutes are organized alphabetically by state and then in order of their applicability to RACs, with the most applicable statutes presented

first. The Table is comprised of five columns with the first column listing each state's name. The second column, "Anti-Indemnification Statutes," provides citations for each anti-indemnification statute identified or the entry "None" when no anti-indemnification statutes were identified. The third column, "Statute Applicable to RACs," indicates whether or not a statute is applicable to RACs. Entries in this column are quite conservative and almost always listed as "Probable." "Yes" and "No" entries are only provided when a statute specifically states that it is or is not applicable to RACs. The fourth column, "Statute Applicable to Private Contracts," indicates whether the statutes pertain to contracts entered into by private, non-governmental parties. This column's entries also are conservative in that "Yes" and "No" entries are listed only when specifically addressed by the statute or the statute's supporting case law involved private parties or public entities. The fifth column, "Comments," provides brief descriptions of each anti-indemnification statute and an explanation of the entries under columns three and four.

The third and fourth columns of the Summary Table address two separate issues; *the applicability of one does not impact the applicability of the other.* That is, if an anti-indemnification statute applies to RACs working for the state, it does not necessarily apply to RACs working under private contracts (e.g., RACs working for Potentially Responsible Parties (PRPs)). Conversely, a statute pertaining to private contracts does not necessarily apply to RACs working for the state. Additionally, an indemnification agreement between a RAC and a PRP would be void only if a statute applies both to RACs and to private contracts since RACs working for PRPs are working under private contracts.

Findings

Anti-indemnification statutes were identified for 43 states, while no anti-indemnification statutes were identified for the states of Alabama, Arkansas, Kansas, Kentucky, Maine, Missouri, and Vermont. Twenty states have more that one anti-indemnification statute; these states' multiple statutes typically address different contracting situations (e.g., construction, petroleum underground storage tanks, solid waste landfills, or hazardous waste facilities) and therefore do not appear to be in conflict with each other.

Forty-one of the states having anti-indemnification statutes have statutes that probably apply to RACs, whether performing response activities under state or private contracts. Twenty-eight of these states have statutes that appear to apply to RACs under private contracts with PRPs. Ten additional states have statutes that also may be applicable to RACs under private contracts with PRPs. That is, "Probably" is entered under the "Statute Applicable to RAC" column and "Unknown" is entered under the "Statute Applicable to Private Contracts" column.

ANTI-INDEMNIFICATION SUMMARY CHART			
States Having Anti-Indemnification Statutes	States Having Anti-Indemnification Statutes Probably Applicable to RACs	States Having Anti-Indemnification Statutes Probably Applicable to RACs Under Private Contracts	Additional States Possibly Having Anti-Indemnification Statutes Applicable to RACs Under Private Contracts
43	41	28	10

Several similarities were observed among the identified statutes, including the states' usage of virtually identical language and similar applications. The statutes are broadly categorized into six main groups by contract type and are discussed below.

CATEGORIZATION OF ANTI-INDEMNIFICATION STATUTES					
Constr. Contracts	Architects, Designers, Surveyors, and/or Engineers	Constr. Contracts Involving Architects, Designers, Surveyors, and/or Engineers	Owners or Operators of Solid Waste Landfills or Hazardous Waste Facilities	Releases from Petroleum Facilities	Activities Related to Oil, Gas, or Water Wells and Mineral Mines
30 States	7 States	7 States	7 States	9 States	3 States

Construction Contracts

Thirty states have anti-indemnification statutes that pertain to construction contracts. These statutes render void and unenforceable agreements made in connection with construction contracts that purport to indemnify the promisee or its agents or employees for liability for damages resulting from the negligence of the promisee or its agents or employees. Construction contracts encompass construction, alteration, repair, or maintenance of buildings, structures, streets, and bridges including moving, demolition, and excavating.

Architects, Designers, Surveyors, and/or Engineers

Seven states (i.e., Louisiana, New Hampshire, New Jersey, New York, Pennsylvania, South Dakota, and Utah) have anti-indemnification statutes that pertain specifically to architects, designers, surveyors, and/or engineers. These statutes render void and unenforceable agreements in connection with contracts in which architects, designers,

surveyors, and/or engineers would be indemnified by owners, contractors, and/or subcontractors for damages caused by their sole negligence, arising from the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications or their giving of or failure to give instructions or directions.

Construction Contracts Involving Architects, Designers, Surveyors, and/or Engineers

Seven states (i.e., Arizona, California, Delaware, Florida, Indiana, Mississippi, and Texas) have anti-indemnification statutes that combine references to construction contracts and the professional services of architects, designers, surveyors, and/or engineers. These statutes render void agreements made in connection with construction contracts between owners, contractors, and/or subcontractors and architects, designers, surveyors, and/or engineers that would provide indemnification for liability for damages caused by negligence or defects in plans, designs, or specifications.

Owners or Operators of Solid Waste Landfills or Hazardous Waste Facilities

Seven states (i.e., California, Hawaii, Illinois, Louisiana, Massachusetts, Minnesota, and Pennsylvania) have anti-indemnification statutes that pertain to owners or operators of solid waste landfills or hazardous waste facilities. These statutes render void and unenforceable agreements that transfer legal liability from owners or operators of solid waste landfills or hazardous waste facilities or vessels or from any other person liable for a release or threat of a release of hazardous material to any other person.

Releases from Petroleum Facilities

Nine states (i.e., Alaska, California, Indiana, Iowa, Michigan, Nebraska, Ohio, Oklahoma, and South Dakota) have anti-indemnification statutes that pertain to releases from petroleum facilities. These statutes render void and unenforceable agreements that transfer liability and liability for costs of cleanup from owners or operators of petroleum facilities or underground storage tanks systems, or from any other person liable for a release, to another person.

Activities Related to Oil, Gas, or Water Wells and Mineral Mines

Three states (i.e., Louisiana, New Mexico, and Wyoming) have anti-indemnification statutes that pertain to activities related to oil, gas, or water wells and mineral mines. These statutes render void and unenforceable agreements made in connection with exploration, development, production, or transportation of oil, gas, or water, or drilling

for minerals that indemnify the indemnitee against loss or liability for damages arising from negligence of the indemnitee or his agents, employees, or subcontractors.

Miscellaneous

Six states (i.e., Minnesota, Nevada, Oklahoma, South Dakota, Montana, and Oregon) have anti-indemnification statutes that do not fit within the categories described above. The majority of these statutes do not fit because of their general nature. The following statutes, however, were not categorized because of their uniqueness.

- Nevada Statute 616.265 renders void indemnity contracts that waiver or modify terms of liability created by the Nevada Industrial Insurance Act.

- Oregon Statute 465.255(5) pertains to destruction of natural resources. This statute renders void agreements in which liability for remedial action costs for injury or destruction of natural resources cannot be transferred from the responsible person to another person.

- Oregon Statute 475.455(5) pertains to liability for cleanup costs associated with an alleged illegal drug manufacturing site and natural resource damages caused by chemicals at the site. This statute renders void agreements in which liability for these cleanup costs cannot be transferred from the responsible person to another person.

Conclusions

DPRA's review and interpretation of state anti-indemnification statutes determined the following:

- At least 28 states probably have anti-indemnification statutes that pertain to RACs employed under private contracts with PRPs and

- An additional 10 states may have statutes applicable to RACs employed under private contract with PRPs.

Since DPRA did not contact state officials, we were unable to verify if the statutes referenced above definitely apply to RACs or to determine if the 10 states discussed above have statutes that render void indemnification agreements entered into between RACs and PRPs.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Alabama	None	---	---	No anti-indemnification statutes were identified for this state.
Alaska	Alaska Stat. Sec. 46.03.822	Probable	Unknown	This statute holds that an indemnification, hold harmless, or similar agreement is not effective to transfer liability from the owner or operator of a hazardous waste facility or vessel or from a person who may be liable for release or threatened release to another person. However, the statute further states that it does not bar indemnification agreements or a cause of action. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	Alaska Stat. Sec. 45.45.900	No	Yes	This statute renders void and unenforceable agreements affecting a construction contract that purport to indemnify the promisee against liability for damages from the sole negligence of the promisee or his agents; however, it does not affect indemnification agreements respecting the handling, containment, or cleanup of oil or hazardous substances. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Arizona	Ariz. Rev. Stat. Ann. Sec. 34-226	Probable	Yes	This statute renders void all clauses or covenants in or affecting construction or architect-engineer professional service contracts that indemnify or hold harmless the promisee against liability for loss and damage resulting from the sole negligence of the promisee, his agents, employees, or indemnitees. However, case law indicates that the courts must "give effect to contracts as written" when parties bind themselves by a lawful contract and the terms of contract are clear and unambiguous. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
Arkansas	None	---	---	No anti-indemnification statutes were identified for this state.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
California	Cal. Civ. Code Sec. 7034	Probable	Yes	This statute holds that no contractor (i.e., any person who constructs, alters, repairs, adds to, subtracts from, improves, moves, wrecks, or demolishes any building, highway, road, parking facility or other structure, project, development (or improvement) licensed and regulated by the Contractors' State License Board, may insert into any contract or participate in any contract that contains a provision, clause, covenant, or agreement that is void and enforceable under Section 2782 of the Civil Code. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.
	Cal. Health & Safety Code 25299.74 (Div. 20, Ch. 6.75, Art. 7)	Probable	Unknown	This statute indicates that no indemnification, hold harmless, or other agreements shall be effective to preclude any liability for costs recoverable under Article 7 (Cost Recovery, Enforcement, and Administration) of Chapter 6.7 (Underground Storage of Hazardous Substances). The statute does not, however, bar any agreement to insure, hold harmless, or indemnify a party for any costs under this chapter. The statute further states that the entry of judgement against any party does not bar future action by the Underground Storage Tank Cleanup Fund against any person who is later discovered to be potentially liable for costs paid from the Fund. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
California (continued from previous page)	Cal. Civ. Code Sec. 2782, 2782.2, 2782.5, 2782.6	No	Yes	This statute renders void all provisions and clauses contained in or affecting construction contracts that purport to indemnify the promisee against liability for damages, loss, or expense arising from the sole negligence or willful misconduct of the promisee or for defects in design furnished by the promisee, provided the statutory provision does not affect the validity of any insurance contract, workers' compensation, or agreement issued by an insurer as defined by the insurance code. Additionally, the statute specifically states that nothing in the statutory provision prevents the following: • Agreements to indemnify a professional engineer against liability for negligence in providing inspection requirements if certain requirements are met; • Agreements in construction contracts regarding the allocation or limitation of liability for design defects; or • Agreements to indemnify a professional engineer or geologist from liability in providing hazardous materials identification, evaluation, preliminary assessment, design and remediation services, etc. if the promisee meets certain requirements. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
California (continued from previous page)	Cal. Public Resources Code 43606 (Div. 30, Pt. 4, Ch. 2, Art. 4)	No	No	This statute renders ineffective all agreements that transfer legal obligations from the owner or operator of a solid waste landfill to another person. This statute does not prohibit agreements between the owner and operator regarding their respective closure and post-closure obligations for a solid waste landfill or prohibit a cause of action that an owner or operator has against the other by reason of that agreement.
Colorado	Colo. Rev. Stat. 13-50.5-102(8)	Probable	No	This statute renders void agreements contained in public contracts for construction, alteration, repair, or maintenance of any building, structure, highway bridge, viaduct, or utility system, including moving, demolition, or excavation that indemnify a public entity from that public entity's own negligence. This statute does not apply to construction bonds, insurance contracts, or to agreements that indemnify contracting parties against claims arising out of negligent acts of the indemnitor and its subcontractors. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Connecticut	Conn. Gen. Stat. Sec. 52-572k	Probable	Unknown	This statute renders void any agreement entered into with a contract relative to construction, alteration, repair or maintenance of any structure including moving, demolition, and excavating that purports to indemnify the promisee against liability for damage caused by the sole negligence of the promisee. According to the history section of this statute, this statute applies specifically to the construction industry and does not apply to other situations. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
Delaware	Del. Code Ann. Tit. 6, Sec. 2704	Probable	Yes	This statute renders void an agreement made in connection with a contract relative to the construction, alteration, repair or maintenance of streets, bridges, or structures including moving, demolition, and excavating that purports to indemnify the promisee or its agents for liability for damages resulting from the promisee's own negligence. This statute applies to all phases of construction, and is not limited to preconstruction professionals such as designers, planners, and architects. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is applicable to both public entities and private parties.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Florida	Fla. Stat. Ann. Sec. 725.06	Probable	Yes	This statute renders void any agreement made in connection with the construction, alteration, repair, or demolition of a building or structure between an owner and an architect, engineer, general contractor, subcontractor, or material supplier where any of these parties obtains indemnification from liability for damages caused by any act, omission, or default of the parties. The agreements are not void if • The contract contains a monetary limitation on the extent of indemnification and • The indemnitee gives specific consideration to the indemnitor, as provided for in the contract and specifications or bid documents. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Georgia	Ga. Code Ann. 13-8-2	Probable	Yes	This statute renders void agreements in connection with contracts relative to construction, alteration, repair, or maintenance of a building structure, including moving, demolition, and excavating, purporting to indemnify the promisee against liability for damages caused by sole negligence of the promisee or his agents, provided this subsection shall not affect the validity of any insurance contract or workmen's compensation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Hawaii	Hawaii Rev. Stat. 431-453	Probable	Unknown	This statute renders void all contractual agreements relative to the construction, alteration, repair or maintenance of a building, structure, appurtenance or appliance, purporting to indemnify the promisee against liability for injury or damage caused by the promisee's sole negligence or willful misconduct, provided the statute does not affect any valid workers' compensation claim or any other insurance contract. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	Hawaii Rev. Stat. 128D-6	Probable	Unknown	This statute renders ineffective all agreements that transfer legal liability from the owners or operators of hazardous waste facilities or vessels or from any other person who may be liable for a release or threat of release to any other person. However, this statute does not bar any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability. Additionally, nothing in the Environmental Response Law bars a course of action that an owner or operator, or any other person subject to liability under this section, has by reason of subrogation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Idaho	Idaho Code Sec. 29-114	Probable	Unknown	This statute renders void agreements in connection with contracts relative to construction, alteration, repair, or maintenance of a building, structure, or highway including moving, demolition, and excavating, purporting to indemnify the promisee against liability for damages caused by the sole negligence of the promisee or his agents. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Illinois	Ill. Stat. Ann. Ch. 29, Sec. 61	Probable	Yes	This statute renders void agreements with respect to contracts for construction, alteration, repair or maintenance of buildings, structures, highways, bridges, viaducts, or for any moving, demolition, or excavation connected with construction that attempt to indemnify another person from that person's own negligence. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.
	Ill. Stat. Ann., Ch. 111 1/2, Pt. 1022.2(g)	Probable	Yes	This statute holds that no indemnification agreement shall be effective to transfer liability from an owner or operator of a hazardous waste facility or vessel or any other person who may be liable for a release or threat of release to any other person. However, the statute also states that it shall not bar agreements to insure, hold harmless, or indemnify a party for liability. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Indiana	Ind. Code Ann. Sec. 26-2-5	Probable	Yes	This statute renders void all agreements affecting any construction or design contract (entered into after June 30, 1975), except those pertaining to highway contracts, that purport to indemnify the promisee against liability for injury, damages, or design defects arising from the sole negligence or willful misconduct of the promisee. This statute does not apply when liability insurance, normally available within the United States at standard rates, cannot be obtained for the facility being constructed or designed because it constitutes a dangerous instrumentality. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	Ind. Code Ann. Sec. 13-7-20.1-10	Probable	Unknown	This statute renders ineffective all indemnification and hold harmless agreements that transfer liability for the costs of remedial action from the owner or operator of a petroleum facility, or other person liable for release, to another person. However, this statute does not bar any agreement to insure, hold harmless, or indemnify a party to an agreement for any liability under the Petroleum Releases Chapter. Additionally, the statute does not bar a cause of action that an owner or operator, a responsible party, or another person subject to liability under the Petroleum Releases Chapter may have by reason of subrogation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Iowa	Iowa Code Ann., Tit. 17, Ch. 455G.13	Unknown	Unknown	This statute holds that indemnification agreements that transfer liability for costs recoverable under the Iowa Comprehensive Petroleum Fund Act are ineffective, except when the agreement shifts liability to a party eligible for assistance for corrective action expenses for which another potentially responsible party is liable. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
Kansas	None	---	---	No anti-indemnification statutes were identified for this state.
Kentucky	None	---	---	No anti-indemnification statutes were identified for this state.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Louisiana	La. Rev. Stat. Ann. Sec. 30:2278	Probable	Unknown	This statute renders void all indemnification agreements or conveyances that transfer liability, for a discharge or disposal, from the owner or operator of any facility (i.e., a pollution source or property where hazardous wastes are managed) or from any other person potentially liable for the discharge or disposal to any other person. This statute does not bar insurance policies that protect the insured from discharge or disposal liabilities. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	La. Rev. Stat. Ann. Sec. 38:2216(G)	Probable	No	This statute renders null and void any provision contained in a public contract, other than an insurance contract, providing for a hold harmless or indemnity agreement from (a) the contractor to the public body for injuries or damages to a third party caused by the negligence of the public body, and (b) the contractor to any architect, landscape architect, engineer or land surveyor for such damages caused by their negligence. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Louisiana (continued from previous page)	La. Rev. Stat. Ann. Sec. 9:2780	No	Yes	This statute renders void all agreements pertaining to the exploration, development, production, or transportation of oil, gas, or water, or drilling for minerals that indemnify the indemnitee against any loss or liability for damages arising from the indemnitee's own negligence. The statute does not void indemnification agreements that indemnify against damages and liability arising from the retainment and clean-up of oil spills (resulting from the failure of a well) to protect the safety of the general public and the environment. This statute does not affect the validity of insurance policies. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
Maine	None	---	---	No anti-indemnification statutes were identified for this state.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Maryland	Md. Cts. & Jud. Proc. Code Ann. Sec. 5-305	Probable	Yes	This statute renders void agreements in connection with contracts relating to the construction, alteration, repair, or maintenance of buildings or structures, including moving, demolition, and excavating, purporting to indemnify the promisee against liability for damages to property and for bodily injury caused by the sole negligence of the promisee, or his agents or employees. This statute does not affect the validity of insurance contracts, workers' compensation, or agreements issued by an insurer. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
Massachusetts	Mass. Ann. Laws Ch. 149, Sec. 29(c)	Probable	Yes	This statute renders void any provision in connection with contracts for construction, alteration, repair, or maintenance work including excavation, backfilling or grading on any underground or aboveground structure including roads, bridges, and utility lines that require subcontractors to indemnify any party for injury to persons or damage to property not caused by the subcontractor or its agents or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Massachusetts (continued from previous page)	Mass. Ann. Laws Ch. 21E, Sec. 5(f)	Probable	Yes	This statute holds that indemnification agreements shall not be effective to transfer liability for the release or threat of release of hazardous material from the owner or operator of a hazardous waste site or vessel or from any other person who may be liable, to any other person. However, the statute indicates that it does not bar any agreement to insure, hold harmless, or indemnify a party for any liability under this section. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.
	Mass. Ann. Laws Ch. 21H, Sec. 4(i)	Unknown	Unknown	This statute holds that indemnification agreements shall not be effective to transfer liability for pollution or threat of pollution from an owner of any existing or closed solid waste facility to any other person. However, the statute indicates that it does not bar any indemnification agreement for any liability under this section. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Michigan	Mich. Compiled Laws Ann. Sec. 691.991	Probable	Yes	This statute renders void agreements in connection with contracts relative to construction, alteration, repair, or maintenance of a building or structure (including moving, demolition, and excavating), purporting to indemnify the promisee against liability for damages to persons or property resulting from the sole negligence of the promisee or his agents or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.
	Mich. Compiled Laws Ann. Sec. 299.842	Probable	Unknown	This statute holds that indemnification agreements shall not be effective to transfer liability from the owner or operator of an underground storage tank or any other person who may be liable for a release or threat of release to any other person. However, the statute indicates it does not bar any indemnification agreement for liability under the Michigan Natural Resources Environmental Response Act. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Minnesota	Minn. Stat. Ann. 337.01-05	Probable	Unknown	This statute renders unenforceable indemnification agreements executed in connection with construction contracts (i.e., for real property, highways, roads, or bridges) except to the extent the underlying damage can be attributed to the negligence of the promisor or his agents or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	Minn. Stat. Ann. 115B.10	Probable	Unknown	This statute holds that an owner or operator of a hazardous waste facility or any other liable person may not avoid liability by means of an indemnification agreement. However, this does not prohibit a liable party from entering an indemnification agreement, nor does it prohibit the enforcement of an indemnification agreement or a cause of action brought by a liable person or an insurer. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	Minn. Stat. Ann. 18D.111	Unknown	Unknown	This statute holds that a responsible party may not avoid liability by means of indemnification agreements. However, it does not prohibit a liable person from entering an indemnification agreement, nor does it prohibit the enforcement of an indemnification agreement, nor does it bar a cause of action brought by a liable person or an insurer. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Mississippi	Miss. Code Ann. Sec. 31-5-41	Probable	Yes	This statute renders void and unenforceable all covenants or agreements within public and private construction contracts that purport to indemnify another person for that person's own negligence. The statute does not pertain to insurance contracts or agreements. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.
	Miss. Code Ann. Sec. 15-1-41	Probable	Unknown	This statute holds that no action may be brought for indemnity for damages arising out of any patent deficiency in the design, planning, supervision, or observation of construction, except by prior written agreement providing for such indemnity against any person, firm, or corporation purchasing the design, plans, etc. more than ten years after the written acceptance of such construction by the owner. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
Missouri	None	---	---	No anti-indemnification statutes were identified for this state.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Montana	Mont. Code Ann. 28-2-702	Probable	Unknown	This statute holds that contracts are against public policy if they directly or indirectly exempt a person from responsibility for that person's own fraud, willful injury, or violation of law. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
Nebraska	Neb. Rev. Stat. Sec. 25-21, 187	Probable	Yes	This statute renders void all public and private agreements associated with the construction, alteration, repair, or maintenance of a building, structure, highway, bridge, including moving, demolition, or excavation, that indemnify or hold harmless another person for that person's own negligence. The statute does not apply to insurance contracts or agreements. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Nebraska (continued from previous page)	Neb. Rev. Stat. Sec. 66-1516	Probable	Unknown	This statute prohibits a person's avoidance of responsibility under the Petroleum Release Remedial Action Act for a petroleum release by any indemnification or hold harmless agreement. The statute does not prohibit or bar the following: • A responsible person from entering into an agreement by which the person is insured or a member of a risk-retention group and therefore, indemnified for part or all of the liability; • The enforcement of an insurance, hold harmless, or indemnification agreement; or • A cause of action brought by a responsible person or by an insurer or guarantor. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Nevada	Nev. Rev. Stat. 616.265	Probable	Yes	This statute renders void contracts of indemnity that waiver or modify the terms of liability created by the Nevada Industrial Insurance Act. However, the statute does not prevent an owner or lessor of real property from requiring indemnification against liability for repair or maintenance of the promisee from the lessor. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
New Hampshire	N.H. Rev. Stat. Ann. Chap. 338-A:1	Probable	Unknown	This statute renders void and unenforceable agreements that indemnify or hold harmless an architect, engineer, or surveyor for damages resulting from that person's negligence. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
New Jersey	N.J. Rev. Stat. Sec. 2A:40A-1	Probable	Yes	This statute renders void agreements in connection with contracts relative to construction, alteration, repair, maintenance, servicing, or security of a building, structure, highway, or railroad including site preparation or development purporting to indemnify the promisee against liability for damages to persons or property caused by the sole negligence of the promisee or his agents or employees. This shall not affect the validity of any agreement issued by an insurer. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.
	N.J. Rev. Stat. Sec. 2A:40A-2	Probable	Unknown	This statute renders void agreements in connection with a contract in which an architect, engineer, surveyor, or their agents or employees would be indemnified for damages caused by their sole negligence, arising out of the following: • Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications or • Giving of or failure to give instructions or directions. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

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STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
New Mexico	N.M. Stat. Ann. Sec. 56-7-1	Probable	Yes	This statute renders void any provision contained in an agreement relating to the construction, alteration, repair, maintenance, demolition, drilling, site preparation, or development of real property by which a party agrees to indemnify the indemnitee or his agents or employees against liability for damages to persons or property caused by the negligence of the indemnitee or his agents or employees, unless such provision provides that the indemnification agreement shall not extend to the liability arising out of the following: • Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications by the indemnitee or his agents or employees or • Giving of or failure to give directions by the indemnitee or his agents or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
New Mexico (continued from previous page)	N.M. Stat. Ann. Sec. 56-7-2	Unknown	Yes	This statute renders void agreements contained in contracts pertaining to oil, gas, or water wells or mines for minerals purporting to indemnify the indemnitee against liability, for damages to persons or property, arising from the negligence of the indemnitee or his employees or representatives. This statute does not affect the validity of any insurance contract or workmen's compensation benefits. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
New York	N.Y. Gen. Oblig. Law Sec. 5-322.1	Probable	Yes	This statute renders void and unenforceable agreements in connection with or collateral to construction agreements that purport to indemnify the promisee against liability for damage contributed to, caused by, or resulting from the negligence of the promisee provided the statute does not affect the validity of any insurance contract, worker's compensation agreement or other agreement issued by an admitted insurer. The statute does not preclude the indemnification of a promisee for damages resulting from the negligence of another party, whether or not the promisee is partially negligent. The statute only applies to agreements entered into on or after August 7, 1995. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	N.Y. Gen. Oblig. Law Sec. 5-324	Probable	Yes	This statute renders void and unenforceable agreements in connection with any contract or agreement where an architect, engineer, surveyor, or their agents are indemnified by the owners, contractors, subcontractors, or suppliers for damages caused by defects in the maps, plans, designs, or specifications used or acquired by the architect, engineer, or surveyor. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
North Carolina	N.C. Gen. Stat. Sec. 22B-1	Probable	Yes	This statute renders void agreements in connection with contracts relative to the design, planning, construction, repair, or maintenance of a building or highway, including moving and excavating, purporting to indemnify the promisee and his contractors, agents or employees against liability for damages to persons or property caused by the negligence of the promisee, his contractors, agents, or employees. However, this statute does not prohibit agreements in which a promisor shall indemnify a promisee or his contractors, agents, or employees against liability for damages resulting from the sole negligence of the promisor or his agents or employees. This statute also does not affect an insurance contract or workmen's compensation agreement, nor does it apply to agreements regarding public utilities or the Department of Transportation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
North Dakota	N.D. Cent. Code Sec. 9-08-02.1	Probable	Unknown	This statute renders void any provision in a construction contract that would make a contractor liable for omissions or errors of the owner or his agents in the plans and specifications of the contract. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Ohio	Ohio Rev. Code Ann. Sec. 2305.31	Probable	Yes	This statute renders void agreements in or affecting design, construction, and maintenance contracts that indemnify the promisee against liability for damages that result from the promisee's negligence. This statute does not prohibit any person from purchasing insurance from an authorized insurance company, for the person's own protection, or from purchasing a construction bond. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	Ohio Rev. Code Ann. Sec. 3737.89(D)	Probable	Unknown	This statute holds that an indemnification, hold harmless, or similar agreement is not effective to transfer liability for any costs incurred for any corrective or enforcement action undertaken by the Fire Marshal in response to a petroleum release from the responsible person to another person. However, this statute also states that it does not bar the following: • Any agreement to insure, hold harmless, or indemnify a party to such an agreement for any liability under this section and • A cause of action against any other person by reason of subrogation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Oklahoma	Okla. Stat. Ann., Tit. 15, Sec. 212	Probable	Yes	This statute renders void all contracts that attempt to exempt a person for his own fraud or willful injury to another person or property. This statute also voids all notices by for-profit business entities that seek to exempt these business entities from liability for injury resulting from acts of negligence on the part of the business or its servants or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	Okla. Stat. Ann., Tit. 15, Sec. 422	Probable	Unknown	This statute renders void agreements to indemnify a person for an act yet to be done if the act is known by the person to be unlawful at the time it is done. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Oklahoma (continued from previous page)	Okla. Stat. Ann., Tit. 17, Sec. 309(E)	Unknown	Unknown	This statute renders void indemnification agreements that allow an owner or operator to avoid liability as a result of a release from an underground petroleum storage tank system. However, this statute does not prohibit or bar the following: • A liable person from entering into an indemnification or hold harmless agreement that would indemnify the person for part or all of the liability; • The enforcement of an insurance, hold harmless, or indemnification agreement; or • A cause of action brought by a liable person or an insurer. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Oregon	Or. Rev. Stat. Sec. 30.140	Probable	Unknown	This statute indicates that indemnification provisions in construction agreements that require a person to indemnify another person against liability caused by the indemnitee's negligence in the design or the indemnitee's sole negligence in the inspection of the work are only enforceable if the indemnitee secures or maintains insurance covering such risks for the indemnitor. The statute limits the indemnification obligation in that it can be no greater than the limits of the insurance secured by the indemnitee. However, not withstanding the previous paragraph, the statute renders void any provision in a construction agreement that requires a person or that person's surety or insurer to indemnify another against liability caused by the sole negligence of the indemnitee. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Oregon (continued from previous page)	Or. Rev. Stat. Sec. 465.255(5)	Probable	Unknown	This statute holds that an indemnification, hold harmless, or similar agreement is not effective to transfer liability for remedial action costs for injury or destruction of natural resources from the responsible person to another person. However, this statute does not bar the following: • Any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability for remedial action costs for injury or destruction of natural resources; • A person liable for remedial action costs for injury or destruction of natural resources from seeking contribution from any other person for liability under ORS 465.200, 465.455, and 465.900; and • A liable person's cause of action for reasons of subrogation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Oregon (continued from previous page)	Or. Rev. Stat. Sec. 475.455(5)	Probable	Unknown	This statute holds that an indemnification, hold harmless, or similar agreement is not effective to transfer liability for cleanup costs associated with an alleged illegal drug manufacturing site and natural resource damages caused by chemicals at the site from the responsible person to another person. However, this statute does not bar the following: • Any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability for cleanup costs or natural resource damages associated with an alleged illegal drug manufacturing site; • A person liable for cleanup or natural resource damages at an alleged illegal drug manufacturing site from seeking contribution from any other person for liability; and • A liable person's cause of action for reasons of subrogation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Pennsylvania	Pa. Stat. Ann. Tit. 68, Sec. 491	Probable	Unknown	This statute renders void and unenforceable agreements made in connection with contracts entered into by owners, contractors, subcontractors, or suppliers in which an architect, engineer, surveyor, or his agents, servants, or employees are indemnified for damages arising out of the following: • Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications or • Giving or failure to give instructions provided this is the primary cause of damage. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Pennsylvania (continued from previous page)	Pa. Stat. Ann. Tit. 35, Sec. 6020.704	Probable	Unknown	This statute holds that an owner or operator of a hazardous substances facility or any other liable person may not avoid liability by means of an indemnification agreement. However, the statute does not prohibit or bar the following: • A liable party from entering into an agreement by which that party is insured, held harmless, or indemnified for liability; • The enforcement of an insurance, hold harmless, or indemnification agreement; or • A cause of action brought by a liable party, insurer, or guarantor. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Rhode Island	R.I. Gen. Law Sec. 6-34-1	Probable	Yes	This statute renders void agreements in connection with contracts relative to the design, planning, construction, repair, or maintenance of a building or highway, including moving, demolition, and excavating in which a promisee has hired a promisor to perform work, purporting to indemnify the promisee, his contractors, agents, or employees against liability for damages arising out of injury to persons or property as a result of the negligence of the promisee or his contractors, agents, or employees. This statute does not affect the validity of an insurance contract or workmen's compensation. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
South Carolina	S.C. Code Sec. 32-2-10	Probable	Unknown	This statute holds that agreements in or associated with the design, planning, construction, alteration, repair, or maintenance of a building, structure, road, etc. purporting to indemnify the promisee against liability resulting from the promisee's sole negligence are unenforceable, notwithstanding any other provision of law. The statute does not affect any agreements where the promisor indemnifies the promisee against liability for damages resulting from the negligence, in whole or in part, of the promisor. Additionally, the statute does not affect any insurance contract or worker's compensation agreements. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
South Dakota	S.D. Codified Laws 56-3-18	Probable	Yes	This statute renders void and unenforceable agreements in or affecting construction contracts that purport to indemnify the promisee against liability for damages caused by the sole negligence of the promisee. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	S.D. Codified Laws 56-3-16,17	Probable	Yes	This statute requires that all construction contracts containing indemnification provisions include the following provision: The obligations of the contractor shall not extend to the liability of the architect or engineer arising out of the following: • The preparation or approval of maps, drawings, opinions, reports, surveys, designs, or specifications or • The architect or engineer's giving or failure to give directions, provided this is the primary cause of the injury or damage. Any indemnification provision in a construction contract in conflict with the preceding requirement is rendered unlawful and unenforceable. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
South Dakota (continued from previous page)	S.D. Codified Laws 56-3-2	Probable	Unknown	This statute renders void all agreements to indemnify a person against an act, thereafter to be done, if the act involved moral turpitude and was known by the person to be unlawful at the time it was done. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.
	S.D. Codified Laws 34A-13-10	No	Unknown	This statute holds that any person who is an owner or operator of a petroleum tank at any time during or after a release, may not avoid liability by any indemnification or hold harmless agreement. However, the statute does not prohibit the following: • A person who may be liable from entering into an agreement by which the person is thereby indemnified for part or all liability; • The enforcement of an insurance, hold harmless, or indemnification agreement; or • A cause of action brought by a person who may be liable or by an insurer or guarantor by right of subrogation. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Tennessee	Tenn. Code Ann. Sec. 62-6-123	Probable	Yes	This statute renders void agreements in connection with contracts relative to the construction, alteration, repair, or maintenance of a building including moving, demolition, and excavating purporting to indemnify the promisee against liability for damages to persons or property caused by the sole negligence of the promisee, his agents, or employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Texas	Tex. Rev. Civ. Stat. Ann. Art. 130.001	Probable	Yes	This statute renders void covenants in connection with construction contracts that provide for a contractor to indemnify a registered architect or engineer or their agents or employees from liability for damage caused by defects in plans, designs, or specifications or negligence of the architect or engineer that results in injury or death or damage to property. This statute does not apply to insurance contracts or workers' compensation agreements. This statute also does not apply to owners of real property or their employees and does not prohibit a covenant that indemnifies an owner of real property or his employees or allocates, limits, or excludes liability in connection with construction contracts between an owner and a registered architect or engineer. This statute also does not apply to a contract in which an architect or engineer or their employees are indemnified from liability for negligent acts other than those described in this chapter (130) and negligent acts of the contractor or subcontractor or their employees. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

ATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
tah	Utah Code Ann. Sec. 13-8-1	Probable	Yes	This statute renders void and unenforceable all agreements affecting construction contracts that purport to indemnify the promisee against damages caused by the promisee's sole negligence. This statute does not affect any agreements entered into on or before May 13, 1969. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
	Utah Code Ann. Sec. 13-8-2	Probable	Unknown	This statute holds that agreements between a property owner and contractor and a contractor and subcontractor may not limit the owner's or design professional's (i.e., architect, engineer, or land surveyor) liability to the contractor or subcontractor, respectively, for any claim arising from services performed by the design professional in connection with the development of land. This statute does not affect any agreements that limit the liability of a design professional to an owner or to another design professional. Additionally, this statute does not affect any agreements in existence as of May 1, 1988. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The statute is silent and its supporting case law has not addressed the statute's application to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Vermont	None	---	---	No anti-indemnification statutes were identified for this state.
Virginia	Va. Code Sec. 11-4.1	Probable	No	This statute renders void and unenforceable agreements affecting construction contracts that purport to indemnify a party to the contract against liability resulting from that party's sole negligence. This statute applies to contracts between contractors and any public body. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Washington	Wash. Rev. Code Ann. Sec. 4.24.115	Probable	Yes	This statute renders void agreements in connection with contracts (entered into after June 11, 1986) relative to construction, alteration, repair, improvement, or maintenance of any building, highway, railroad, or structure, including moving and demolition, purporting to indemnify against liability caused by the sole negligence of the indemnitee or his agents or employees. This statute does not apply in cases where damages are caused by the concurrent negligence of the indemnitee or his agents or employees, and the indemnitor or his agents or employees, only to the extent of the indemnitor's negligence and may waive the indemnitor's immunity under industrial insurance, Title 51 RCW, if the agreement expressly provides therefore and it was mutually negotiated by the parties. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private parties and public entities and the statute is, therefore, applicable to both private parties and public entities.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
West Virginia	W.Va. Code Sec. 55-8-14	Probable	Yes	This statute renders void agreements in connection with contracts (entered into after June 6, 1975) relative to construction, alteration, repair, improvement, or maintenance of any building, highway, railroad, utility, or structure, including moving and demolition, purporting to indemnify against liability for damages to persons or property caused by the sole negligence of the indemnitee or his agents or employees. It does not apply to construction bonds or insurance contracts. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.
Wisconsin	Wis. Stat. Ann. 895.49	Probable	Yes	This statute renders void provisions to limit or eliminate tort liability in connection with contracts (entered into after July 1, 1978) relating to construction, alteration, repair, or maintenance of a building or structure, including moving, demolition, or excavation. This statute does not apply to insurance contracts or worker's compensation plans. Although the statute and supporting case law do not specifically address RACs, the statute is probably applicable to RAC activities. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

ANTI-INDEMNIFICATION SUMMARY TABLE

STATE NAME	ANTI-INDEMNIFICATION STATUTES	STATUTE APPLICABLE TO RACs	STATUTE APPLICABLE TO PRIVATE CONTRACTS	COMMENTS
Wyoming	Wyo. Stat. Sec. 30-1-131	Unknown	Yes	This statute renders void covenants contained in agreements (entered into after May 27, 1977) pertaining to wells for oil, gas, or water, or mines for minerals, purporting to indemnify the indemnitee against liability for damages for injury to persons or property arising out of the following: • The sole or concurrent negligence of the indemnitee or his agents, employees, or subcontractors or • Any accident occurring in operations under the supervision of the indemnitee or his employees or representatives. This statute does not affect the validity of any insurance contract or worker's compensation benefits. The supporting case law involved private party actions and the statute is, therefore, applicable to private contracts.

NATIONAL SECURITY INDUSTRIAL ASSOCIATION ENVIRONMENT COMMITTEE
INTERAGENCY SUBCOMMITTEE

CONTRACTOR LIABILITY AND INDEMNIFICATION WHITE PAPER

Ironic as it may seem, many risk managers today believe that it is safer for businesses to produce weapons and ammunition than it is for them to become involved with environmental pollution abatement and cleanup work. Even though it is dangerous to handle explosives and armaments, the risk is fairly well defined and so it is possible to predict financial exposure. In contrast, the risk to those businesses who engage in environmental work is not well defined today. The law is still emerging in the environmental liability arena, and it is quite difficult to predict financial exposure except to say that in the worst case a business could face financial ruin.

Regrettably, many businesses that have the resources and skills to engage in innovative research into environmental technologies or manage complex cleanup operations have chosen to avoid such work for fear of openended environmental liabilities. This is particularly so for defense contractors who are aggressively looking for new markets but who do not wish to "bet the company" in the process.

Moreover, the open-ended risk associated with environmental liability is not confined just to those businesses who wish to enter into the environmental marketplace. Government contractors generally who work predominantly or exclusively for the Department of Defense (DoD) now find themselves facing potentially enormous cleanup expense due to the effects of such statutes as the Resource Conservation and Recovery Act, Superfund (CERCLA) and State strict liability statutes.

As a result, the Congress is actively examining whether and under what circumstances should the Government indemnify its contractors from environmental liability. One Congressional initiative is focusing on environmental restoration and Response Action Contractors (RACs) who have expressed reluctance to bid on DoD environmental restoration contracts due to the unavailability of insurance and the concern that they would be held liable for claims and damages as the "owner" of the property. Senate Armed Services Committee, S. Rep. No. 102-113.

It is the position of the NSIA that the issue of environmental liability, as it applies to all Government contractors, should be examined at this time. Broadly speaking, there are three classes of contractors, and any one business may simultaneously fit into all three categories. Category one consists of the remedial action or cleanup contractor who is typically a construction or engineering firm. Category two consists of companies

that desire to develop or manufacture environmental pollution abatement technology. Category three consists of those companies which have worked predominantly or exclusively for the Government and who now face environmental cleanup liability arising out of or related to that Government work. Included in this third category are Government-owned, contractor-operated (GOCO) contractors and Department of Energy Management and Operations (M&O) contractors.

I. BARRIERS AND DISINCENTIVES DISCOURAGE MANY FROM PURSUING ENVIRONMENTAL WORK

Companies wishing to do cleanup work or offer technology to the Government must initially confront the basic issue of whether they are willing to "bet their company" in the interest of doing the work. This probably is the most important barrier to companies who are looking at making an entry into the field. For those companies historically doing this type of work, the decision is easier to make because they may perceive their liabilities to be large already and the additional exposure that they would incur merely to be incremental in nature. However, for companies looking to enter into the field, unless effective shields are structured to protect the companies from liability, the concern of liability may be too great to permit entry.

The liability question should be looked at as a composite of several separate questions. First, there are liabilities arising out of CERCLA for strict liability. Second, there are liabilities for negligence under CERCLA. Then, there are liabilities arising out of other related federal laws such as RCRA. Next, there are liabilities under state law for strict liability and for negligence. Finally, there are criminal liabilities which confront not only corporations but also individuals. The contracting community has repeatedly requested protection from the Government from these liabilities by way of indemnification; however, the Government has been reluctant to provide this type of protection on the basis that an open-ended obligation would violate the Anti-Deficiency Act or that such indemnification runs against public policy as in the case of providing immunity from prosecution. Contractors often point out that no sensible company would want to "bet its company" or risk criminal liability and, therefore, have threatened to keep out of the marketplace. The Government's response frequently has been that there will always be some contractors who will be sufficiently attracted to the work that they will pursue the opportunity even in the face of these apparent obstacles.

A. Inconsistent Federal Policies

Government contractors must comply with numerous environmental statutes. Unlike commercial contractors, however, Government contractors are often caught between the requirements of the environmental statutes and the laws, regulations, policies and contract specifications unique to Government contracting, particularly at GOCO

facilities and Department of Energy (DoE) M&O facilities. This dilemma also confronts contractor-owned, contractor-operated (COCO) facilities, the use of which is committed primarily or wholly to the objectives of the Federal Government.

Legal nuances such as sovereign immunity and the Justice Department's unitary executive theory has led the Environmental Protection Agency (EPA) increasingly to direct its aggressive enforcement policy at Government contractors as the operators of federally-owned facilities. As a result, the DoD, the National Aeronautics and Space Administration (NASA), and DoE have been prompted finally to acknowledge the need explicitly to allocate environmental responsibility in Government procurement regulations. However, efforts to address this issue uniformly in the Federal Acquisition Regulation (FAR) have bogged down, and DoE and DoD have each resorted to independent, and widely divergent, initiatives in an effort to fill this regulatory gap.

B. Other Disincentives

Many Government contractors are also discouraged from pursuing environmental cleanup work or offering new technology because of a variety of other reasons, including:

- Lack of expertise in a particular area or fear of venturing into a product line that is not an area of natural strength.
- Dealing with a process that is highly political in nature and therefore not the usual type of arena in which Government contractors operate.
- Recognizing that where there is possibility of publicity, it is usually negative in nature.
- Recognizing that under the M&O contracts for DoE, the level of fees tends to be very low and DoE does not compensate for home office overhead.
- Recognizing that the level of engineering that has to be applied to new technologies tends to be very expensive.
- The companies that have perhaps the best technical solutions to offer are ones that have worked in other arenas such as defense and may need considerable help in transferring their skills and technology to the environmental arena.
- The companies involved may need to enter into teaming arrangements with firms who have considerable environmental expertise, but to do so may mean that they will have to expose themselves not only to environmental risks on their own part but to the environmental liabilities on the part of their teammates.

To overcome many of these obstacles, it may be worthwhile to look at mechanisms to induce contractors to enter into the cleanup or environ-

mental technology arena. Some of these will be reviewed later in this paper after the following discussion on indemnification and cost allowability.

II. INDEMNIFICATION AND COST ALLOWABILITY - AN OVERVIEW OF THE PROBLEM

A. Recent Developments Potentially Expose Government Contractors to Increased Environmental Costs and Liabilities

1. Department of Justice's Unitary Executive Theory

The Department of Justice (DoJ) maintains that the Environmental Protection Agency (EPA) is constitutionally precluded from implementing formal enforcement actions against other federal agencies. See Hearing Before the Subcomm. on Transportation, Tourism, and Hazardous Materials of the House Comm. on Energy and Commerce on the Solid Waste Disposal Act, 100th Cong., 2d Sess. (1988) (statement of Roger J. Marzaulla, Acting Assistant Attorney General, Land and Natural Resources Division). DoJ's position is based on the "unitary executive" theory, which precludes judicial resolution of disputes between EPA and other federal agencies because those agencies are all part of the Executive Branch, and such a lawsuit would be no more than the Government suing itself.

In order to secure compliance at federally-owned facilities, and in response to DoJ's prohibition on lawsuits against other federal agencies, EPA has, on occasion, proceeded directly against the contractor as the operator of the facilities. For example, in 1987, DoJ brought suit, on behalf of EPA, against a contractor for alleged Clean Air Act violations at a GOCO facility. See United States v. General Dynamics Corp., C.A. No. CA-4-87-312K (N.D. Tex. May 7, 1987). Defendant argued, inter alia, that the Air Force, as the owner of the facility was the liable party for any Clean Air Act violations. In denying Defendant's motion to dismiss, the court agreed with DoJ that the Act may be enforced against either owners or operators, that General Dynamics was the "operator," and, therefore, the action could proceed as pleaded. However, as is discussed in more detail below, the case recently settled, and as part of the settlement agreement, General Dynamics was reimbursed for all fines and penalties assessed against it under the Clean Air Act.

While the "unitary executive" theory applies specifically to situations where there are GOCO contractors, the principle behind the theory has broader application; namely that the contractor is ultimately and inevitably asked to bear responsibility for environmental cleanup or compliance.

2. Sovereign Immunity and the Government Contractor Defense

The Federal Government has waived its sovereign immunity for purposes of the environmental statutes. Under most statutes, however, the waiver is limited. The

Government contractor defense is based on the theory that the contractor should assume the Government's immunity against third party liability to the extent the liability arises out of the contractor's compliance with Government specifications. The Supreme Court has established that the defense is available in the context of federal procurement to the extent the procurement constitutes a "discretionary function." See Boyle v. United Technologies Corp., 487 U.S. 500 (1988); Berkovitz v. United States, 486 U.S. 531 (1988).

The law established in Boyle and Berkovitz was recently applied in a tort suit arising out of operations at the DoE-owned Fernald Feed Material Production Center. See Crawford v. National Lead Co., 29 Env't rep. Cas. 1049 (S.D. Ohio 1989). In an order addressing the parties' respective motions for summary judgment, the court denied Defendants' use of the Government contractor defense based on a finding that the discretionary function exception would not apply because Defendants' discharge of radioactive materials into the environment violated pertinent environmental statutes. Citing the decision in Berkovitz, the court explained that "there is no discretion to violate specific environmental standards, . . . and if such violations occurred, the [Government contractor] defense does not apply." Id. at 1054 n.8.

B. Current Agency Practice Regarding Recovery of Environmental Liabilities and Compliance Costs is Uneven

1. Indemnity Under Law & Contract

a. DoD & NASA Contractors

The indemnity possibly available to DoD and NASA contractors for environmental liabilities and compliance costs is based both on statutes and Federal Acquisition Regulation ("FAR") contract clauses. First, Public Law No. 85-804, 72 Stat. 972 (codified at 50 U.S.C. 1431-1435 (1982)) ("P.L. 85-804"), empowers the President to authorize agencies exercising functions related to the national defense to grant certain forms of extraordinary contractual relief, including indemnity, to their contractors. Importantly, indemnity provisions granted pursuant to P.L. 85-804 are not subject to the Anti-Deficiency Act, 31 U.S.C. 1341-1342 (1982), which generally serves to prohibit open-ended indemnity provisions in Government contracts.

FAR 52.250-1, the clause implementing P.L. 85-804, states that, "this indemnification applies only to the extent that the claim, loss, or damage (1) arises out of or results from a risk defined in this contract as unusually hazardous or nuclear and (2) is not compensated for by liabilities and compliance costs incurred under Government contracts. For example, the Secretary of the Army recently authorized broad P.L. 85-804 indemnity for GOCO ammunition plant contracts to protect the operating contractors against most environmental liabilities. The Army P.L. 85-804 indemnity clause defines unusually hazardous risks to include sudden or nonsudden releases into the environment, whether on-site or

off-site, "of any substance or material (including products) the handling of which is or becomes regulated under law," subject to certain conditions. A contractor would be indemnified against any fines or penalties imposed for a nonsudden release not caused by contractor bad faith or willful misconduct, provided that the act causing noncompliance was authorized by the contracting officer. The clause explicitly states, however, that any "criminal fines or penalties or the costs of defending, settling, or otherwise participating in any criminal actions" are not indemnified under the P.L. 85-804 provision.

Indemnity also is available to DoD and NASA contractors under FAR 52.228-7, "Insurance-Liability to Third Persons." The clause provides the contractor "shall be reimbursed for certain liabilities. . . to third persons not compensated by insurance or otherwise without regard to and as an exception to the limitation of costs or limitation of funds clause in the contract." The indemnity available under FAR 52.228-7, however, is subject to the Anti-Deficiency Act; thus, protection is limited to the availability of appropriated funds.

GOCO contractors also may recover remediation costs under FAR 52.245-8, "Liability for the Facilities," although the clause does not provide a defense to liability, a contractor may be able to recover site remediation costs, such as groundwater contamination, as reimbursable costs under the contract.

b. DoE Contractors

In addition to Price-Anderson Act indemnity, P.L. 85-804 indemnity for nuclear and unusually hazardous risks is available also to DoE contractors for environmental costs and liabilities. DoE additionally has non-statutory, general contract authority to provide indemnity to contractors "against liability for uninsured nonnuclear risks." DEAR 950.7011(c).

Contractually based protections are another source of indemnity currently available to DoE contractors. The principal indemnity contract clause used by DoE is the "Litigation and Claims" clause. DEAR 970.5204-31. Under this clause, claims against an M&O contractor arising out of the performance of the contract will be defended or settled at Government expense so long as the liabilities are not the result of willful misconduct or lack of good faith on the part of the contractor's officers, directors, or supervising representatives.

c. FAR Environmental Cost Principle

In September 1991, the new Assistant Administrator for Procurement of NASA reversed the position of her predecessor and asked the FAR Council to re-open the environmental cost principle case. The case was stalled since December 1990. The principle would allow contractors to recover a portion of their environmental cleaning costs from the Government, provided that the contractor did not, when the pollution occurred, violate then-current environmental laws or regulations and took steps to

minimize any environmental damage. A more detailed discussion about the cost principle appears below.

III. THREE CLASSES OF CONTRACTORS CONFRONT ENVIRONMENTAL LIABILITIES DIFFERENTLY – THEIR PROBLEMS AND RECOMMENDATIONS

A. Remedial Action Contractors

The problems confronting businesses that seek to minimize their environmental risks have crystallized around remedial action contractors (RACs) who perform cleanup operations. For RACs, the most threatening aspect of prospective participation in Government cleanup programs is the inability to secure sufficient bonding or insurance and the Government agencies' unwillingness to indemnify contractors for liabilities which might arise as a result of performance of federal remediation contracts. The costs associated with environmental liabilities for the defense industry as a whole are expected to total in the many billions of dollars. Many defense contractors will be faced with liabilities which, even in the best of times, would have impaired their financial stability. In today's economy, these liabilities could be crippling. This problem must be addressed if the Department of Defense is to attract and maintain the industrial base required to maximize its efficiency in administering its clean-up programs.

In recognition of this situation, the Congress directed the DoD in the conference report to the 1991 National Defense Authorization Act to prepare a report, in conjunction with RACs, on the issue of contractor liability. DoD issued its report in July 1991. Although DoD recognized a number of concerns expressed by RACs in performing hazardous waste and material cleanup contracts, including the absence of adequate coverage and the need for indemnification, DoD also expressed its view that it was currently able to obtain adequate, qualified competition for its remediation contracts. DoD recommended considering "better acquisition planning" including unspecified contract strategies, reducing amounts of bonds required for construction contracts and permitting irrevocable letters of credit in lieu of bonds. DoD also stated that two recommendations merited "further consideration:" (i) bond; and (ii) limiting a response action contractor's liability to innocent third parties, except where negligence is involved.

DoD provided the Congressional Armed Services committees with draft language proposing some limited indemnification coverage for contractors performing DoD hazardous waste and material cleanup contracts in instances where insurance is unavailable. Although contractors had hoped that DoD would embrace P.L. 85-804 coverage for all such contracts, DoD instead chose to offer indemnification coverage where contractors are held strictly liable to third parties and contractor employees (without a demonstration of fault or negligence) unless the damage or injury resulted

from the contractor's negligence, willful misconduct or failure to follow the contract's terms. However, unlike P.L. 85-804, which has no funding restrictions, payment for indemnification would only be made from: (i) funds obligated for the contract; (ii) funds "available" to the DoD contracting component for "environmental restoration not otherwise obligated;" or (iii) funds specifically appropriated for indemnification. In its Committee Report (No. 102-113), the Senate Armed Services Committee stated that it was "very disappointed in the content of the report submitted by DoD" because, in their opinion, it failed to respond to or address the issue of contractor liability and indemnity. In the Committee's opinion, the Report merely stated that the issue required "further analysis."

Recommendation

NSIA recognizes that RAC's cannot be expected to accept unlimited liability for environmental risks not caused by their fault or negligence. Moreover, NSIA supports the position of the Senate Armed Services Committee as reflected in S.1507, 102 Cong., 1st Sess., that limits the liability of surety companies for environmental restoration work on non-superfund DoD sites to the costs necessary to complete the contract, according to the contract plans and specifications, up to the sum of the bond.

Further, NSIA recommends that the Congress and DoD adopt the following indemnification provision to be applied in most remedial action contracts:

Contracts for Environmental Cleanup: Indemnification Provisions

(a) The Secretary of Defense has determined that contracts with a component of the Department of Defense for the cleanup of hazardous materials or hazardous waste to environmentally restore installations currently or previously owned by the Department of Defense expose contractors performing such work to unusually hazardous risks.

(b) The Secretary of Defense has also determined that adequate insurance at a reasonable cost to cover such unusually hazardous risks is unavailable in the marketplace.

(c) The Secretary of Defense has determined further that the contractors' exposure to such unusually hazardous risks will continue indefinitely, subjecting even the most financially sound contractor to serious financial hardship.

(d) The Secretary of Defense has concluded that, given the unusually hazardous risk associated with these hazardous material or waste cleanup contracts, the importance of the cleanup effort to the public and the absence of adequate insurance to cover the unlimited financial risk to contractors performing such cleanup work, the use of an indemni-

fication clause under 50 U.S.C. Sections 1431-1435 (Public Law 85-804) in these contracts will facilitate the national defense.

(e) Pursuant to the authority vested in the Secretary of Defense by 50 U.S.C. Sections 1431-1435 (Public Law 85-804) and Executive Order 10789, as amended, the contracting officer shall insert the indemnification clause in FAR 52.250-1, Indemnification Order Public Law 85-804, in all Department of Defense contracts for the cleanup of hazardous materials or hazardous waste, and shall authorize prime contractors to extend such coverage to their subcontractors at any time.

B. Pollution Abatement Technology Companies

Many defense contractors believe that the technologies developed in support of defense programs could be effectively modified for use in the federal Government's cleanup activities. However, at this time, these contractors are confronted with a substantial number of disincentives and few, if any, incentives for pursuing such an ambitious undertaking.

In his opening remarks for an April 24, 1991 hearing before the Environmental Restoration Panel of the House Armed Services Committee on these matters, Chairman Richard Ray aptly described the objectives which the Department of Defense must pursue in this regard. The Chairman stated that the Department's cleanup obligations rest upon five pillars. The third and fifth of these are particularly relevant:

> "Third, DoD must be able to develop and transfer new clean-up technologies that will accelerate the clean-up program and make it more cost-effective.
>
> . . .
>
> "Last, but not least, DoD must address contractor-related problems to attract qualified environmental contractors and to develop the best contracting vehicles to support a better and faster clean-up process."

Pollution abatement technology companies are just as concerned about open ended strict liability risk as RACs, and they are aware that no insurance is available to cover this exposure. In the absence of some type of risk-sharing mechanism or limitation of liability such as imposing a negligence or willful misconduct standard or a dollar limitation, many businesses who have the skills and resources to develop new technologies will remain on the sidelines. This is unfortunate, not only for the Government that needs the benefit of new clean-up and pollution control technology, but also for the defense contractors who wish to maintain a viable business base.

Recommendations to Encourage DoD Technology Companies to Enter into the Environmental Pollution Control and Abatement Marketplace

We recommend that the Congress and DoD adopt a statutory provision structured to limit the liability of contractors for environmental impairment to situations where the damage is caused by their negligent acts or omissions and then to an amount not to exceed certain specified amounts that can be covered by surety bonds or other forms of insurance. The provision can be drafted along the lines of our recommended language for indemnifying RACs or that provision can be expanded to cover pollution abatement technology companies as well.

Recommendations to Encourage Proactive Compliance

1. Incorporate Environmental Awareness and Compliance as an Evaluation Factor in the Contractor Selection Process

We recommend use of a best environmental value approach as a way to select contractors in negotiated procurements. Congress has already considered the use of environment-related evaluation factors in certain types of procurements. For example, in the Agricultural Commodity-Based Plastics Development At of 1989 (proposed in January 1989 in both Senate Bill 244 and House Rule 683) the Administrator of the General Services Administration was required to identify and make available in the General Services Administration inventory products that could be manufactured from environmentally safe degradable plastics/agricultural commodity-based plastics. In discussing the award or contracts for these products, the proposed Act included a sliding scale evaluation scheme that would consider, in addition to price and performance, the environmental benefits of each product and the benefits that would be accorded to the long-term energy independence of the United States. Although the proposed Act was not enacted into law, the provision concerning use of evaluation factors considering environmental benefits could be a model for future legislation that is more broadly based.

2. Aggressively Implement the Strategic Environmental Research and Development Program which was Enacted as Part of the National Defense authorization Act for Fiscal Year 1991 (Pub. L, No. 101-510, 104 Stat. 1485 (1990).

This program, sponsored by Senator Sam Nunn of Georgia, Chairman of the Senate Armed Services Committee, was designed to redirect the investment made in defense programs to address environmental research and development issues in the areas of gathering and analyzing data, advanced energy technologies, and technologies for environmental cleanup. However, although $200 million was authorized for this program in FY 91, only $150 million was appropriated, and the Department of Defense has recently suggested that only $19.1 million of the appropriated funds will be used for the program this fiscal year. To date, no strong Executive Branch sponsor has emerged; and there has

been little action taken in connection with this program.

3. Use Contractual and Other Incentives to Promote Environmental Consciousness.

The utilization of incentives, instead of penalties, in support of environmental regulation, may indeed be helpful in creating a proactive approach for Government contractors to perform their contracts in an environmentally safe manner. Incentives may take many forms including the following:

a. Increase Research and Development Funding

The Government can create a real incentive for contractors to perform research and development beneficial to the environment by authorizing and appropriating funds for the express purpose of paying contractors to develop environmentally beneficial processes. For instance, the Budget of the United States for Fiscal Year 1992 proposes the expansion of research under the jurisdiction of the Environmental Protection Agency to $422 million.

Another recent legislative development in this area relates to the issue of reimbursement for independent research and development costs incurred in developing efficient and effective technology for achieving environmental benefits. In this regard, the National Defense Authorization Act for Fiscal Year 1991 required the Secretary of Defense to issue new and broader regulations which provide for the reimbursement of contractor independent research and development (IR&D) costs "when work for which payment is made is of potential interest to the Department of Defense." This provision further provides that these regulations "shall encourage contractors to engage in research and development activities that develop efficient and effective technologies for achieving such environmental benefits as improved environmental data gathering, environmental cleanup and restoration, pollution-reduction in manufacturing, environmental conservation, and environmentally safe management of facilities." In keeping with this congressional mandate, the Federal Acquisition Regulatory Council is currently in the process of developing regulations which would encourage contractors to invest in the environmental research and development arena.

These are encouraging developments, but more must be done to provide a clear signal to the contracting community that DoD is committed to the development of meaningful technologies which can be used for environmental remediation.

b. Increase Flexibility in the Data Rights Area

Currently, the Government's general policy with regard to rights in technical data is that the Government obtains unlimited rights in technical data first produced in the performance of a Government contract, manuals or instructional material for installation, operation,

or routine maintenance or repair of items delivered, and form, fit and function data. The Government also obtains unlimited rights to all other data delivered under a Government contract unless the data qualifies as limited rights data. Data qualifies as limited rights data if the data was developed with private funds and if the data is properly marked and identified as limited rights data.

The Government should reconsider its current data rights policy in regards to the environmental area. By relaxing its policy concerning the automatic expropriation of unlimited rights in data in those instances where the Government reimburses a contractor for some of the costs of developing new processes and procedures which enhance the Government's abilities to discharge its remediation obligations, the Government will encourage otherwise reluctant contractors to pursue the innovative technologies needed to address the Nation's pressing environmental problems.

c. Develop Tax Incentives

Taxes may be used as an incentive in influencing contractor behavior as a credit or deduction for developing or using an environmentally beneficial material or process in the performance of a Government contract.

d. Use Special Contract Incentives

Contractors performing work under a Government contract should be given economic incentives to develop and implement changes in their work processes or products that are environmentally beneficial.

One means of encouraging contractors operating under award fee contracts to perform their work in an environmentally safe manner is to tie award fee determinations to compliance with environmental laws. Although neither DoD nor DoE require consideration of a contractor's environmental compliance in award fee determinations, both agencies are beginning to evaluate the merit and feasibility of such a program. For example, DoE is considering making no less than 51% of an award fee based upon a contractor's compliance with environmental, safety and health requirements. If a contractor fails to comply with all three categories, it may have to forfeit all of its award fee.

Another means is to use a process analogous to the mechanism employed in the value engineering arena. Contractors can be encouraged to recommend environmentally beneficial changes which, if adopted by the Government, would provide them with certain designated monetary benefits.

e. Increase Profit and Properly Structure Contracts

Contracts which the federal agencies issue frequently are either structured improperly for the work involved or do not allow for sufficient profit on the work involved to merit the vulnerability to the performance risks or liabilities for which they are exposed. For example, in performing construction work, the Government

agencies typically will want the contractor to agree to a fixed priced type contract even though the contractors often will have no true idea of the extent of work involved once excavation begins and traditionally will seek protection using the differing site condition clause or some similar type of protection under the contractual vehicle. As law exists now, there is little adequate contractual protection other than the differing sites condition clause that addresses circumstances when a contractor under a fixed price contract finds unusual amounts of hazardous waste or toxicity in the soil or water beneath the surface.

Another area of concern is that the contracts typically do not allow for integrated work by the contractors. Agencies should consider the use of performance specifications to the maximum extent practical and combining design, construction and operation where treatment facilities are contemplated. Finally, the contracts should be structured in such a way as to provide incentives to the contractor to perform well by using incentive or award fee mechanisms. In this light, it is important to reward contractors for taking unusual risks and to reduce the value of awards proportionately where risks are reduced.

C. Government Contractors who Face Liability Arising out of or Related to their Government Work

1. Allowability of Environmental Costs

Contractors with firm fixed-price contracts have very limited potential for recovering the increased costs of complying with environmental laws. The Sovereign Act doctrine precludes recovery under the "changes" clause if the sole reason for the increased costs is a change in the applicable environmental laws. See e.g., Warner Electric Inc., VABCA No. 2106, 85-2 BCA 18,131. The contractor, however, may bid on a fixed-price contract with the cost of a reserve fund for environmental liabilities and compliance costs included in the price. See FAR 31.102.

For cost-reimbursement contracts, the prospects are brighter for recovering costs associated with environmental compliance under existing FAR clauses. While no provision in the FAR directly addresses the allowability of the various costs arising out of environmental compliance, several FAR provisions indirectly provide for recovery of these various costs. First, pursuant to FAR 31.205-7(c)(1), future costs reflecting contingencies are recoverable when they "arise from presently known and existing conditions, the effects of which are foreseeable within reasonable limits of accuracy." Accordingly, a contractor may negotiate an advance agreement to cover reasonable estimates of future environmental costs identified by conducting environmental assessments.

FAR 31.205-19(a)(3)(i) makes allowable uninsured losses which are incurred in a particular fiscal period and lump sum settlements entered

into and paid within a year of the settlement data. Environmental restoration costs that are excluded from insurance coverage based on either a pollution exclusion clause or the definition of other terms in a Comprehensive General Liability policy may be regarded as uninsured losses and settlements within the meaning of this provision.

FAR 31.205-24, "Maintenance and repair costs," provides that the contractor may recover costs for the "upkeep of property. . .," including both normal maintenance and repair costs and, assuming certain accounting limitations, "extraordinary maintenance and repair costs." The provision specifically allows costs for "plant and equipment, including rehabilitation," and thus, may apply to on-site environmental costs.

FAR 31.205-15, "Fines, penalties, and mischarging costs," provides that fines and penalties are unallowable "except when incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the contracting officer." Thus, to the extent a DoD or NASA contractor can establish that penalties have been imposed as a result of the contractor's compliance with the terms and conditions of a Government contract with a contracting officer's written instructions, the contractor may be able to recover any fines and penalties as allowable costs. This precise issue arose in the recently settled case, United States v. General Dynamics, supra. Significantly, in a pre-trial conference held before the case settled, the court indicated that General Dynamics would be able to recover any fines and penalties assessed against it under the Clean Air Act if General Dynamics could show at trial that it was acting in compliance with the terms and conditions of the Air Force contract at the time any violations occurred. In the settlement agreement, the Government reimbursed General Dynamics for the fines and penalties assessed against General Dynamics for Clean Air Act violations. The agreement stipulates, however, that General Dynamics' reimbursement was not based on the fines and penalties clause of the contract.

FAR 31.205-31, "Plant reconversion costs," allows "the cost of removing Government property and the restoration or rehabilitation costs caused by such removal." The cost of remediation for waste which resulted from a previous contract or series of contracts performed at a COCO facility with Government-furnished property may be recoverable under this provision. In some instances, DoE has agreed informally to fund the decommissioning and decontamination of a private facility based in part on this cost principle.

The vast majority of Government contracts contain a Government property clause which provides, in pertinent part, that "the Government shall retain title to all Government-furnished property." See id, FAR 52.245-2, -5. Other related FAR clauses, when read together, make the Government legal owner of all materials supplied to a Government contractor, including resulting scrap and waste.

National Metal Moulding co. v. United States, 76 Ct. Cl. 194 (1932). The cost of cleanup activities often includes the cost of removing Government property and, in that circumstance, should be allowable. For example, a contractor is arguing in pending litigation that the Government is liable for the cost of cleaning up spilled chemicals that have seeped into the ground water because the chemicals were owned and supplied by the Government.

2. Recent Proposals and Interim - Final Regulations

a. Proposed FAR Cost Principle for Environmental Compliance

A second draft of revised FAR 31.205-9, "Environmental Costs," was approved by the DAR Council on March 10, 1990. The DAR Council Committee Report accompanying the text of the draft cost principle clarified that the cost principle would make allowable current pollution prevention costs incurred with respect to ongoing operations. It would have drawn a major distinction based on the allowability of costs to remedy past environmental damage. For GOCO facilities, these costs would have been unallowable prospectively, subject to a few listed exceptions.

If adopted in this form, the cost principle would have made it impossible for COCO contractors, and more difficult for GOCO contractors, to recover CERCLA cleanup costs and other environmental costs. However, this second draft was rejected by DoD in May, and a third draft was proposed that would have allowed recovery of part of a contractor's cleanup costs incurred by both GOCO and COCO contractors, "provided that the contractor did not violate existing laws or regulations and took steps to minimize environmental damage and cleanup costs. . . A contractor's cost recovery would be proportionate to the ratio of Government-to-commercial business conducted at the facility." 54 Fed. Cont. Rep. (BNA) 585-86 (Oct. 22, 1990).

b. DEAR Cost Accountability Rule

The DoE issued a final rule on June 19, 1991 amending the DoE Acquisition Regulation (DEAR) cost allowability provisions for M&O contractors (56 Fed. Reg. 28099). The rule also applies to DoE support contractors and subcontractors (cost reimbursement and fixed price) of DOE M&O and support contractors.

Historically, DoE has protected its M&O contractors from essentially all major financial risks such as damage to Government property, third party claims and fines and penalties by treating such items as reimbursable under the contract. This reimbursement policy recognized that the contractors were operating the U.S. Government's nuclear weapons complex for and on behalf of the Government.

The new rule changes the reimbursement policy and imposes limitations on allowability of "avoidable costs" for certain profit making M&O con-

tractors and subcontractors which are: fines and penalties, direct costs, bonds and insurance, loss of or damage to Government property, and litigation expenses and judgments.

(1) Fines and Penalties. The new rule and the implementing contract clause make fines and penalties unallowable for "an area of responsibility clearly placed on the contractor or subcontractor." However, no guidance concerning "clearly placed" is provided. The definition of fines and penalties includes both criminal and civil fines and penalties. With respect to civil fines and penalties, DoE will apparently continue to reimburse those that are not the result of willful misconduct or bad faith.

(2) Direct costs. Also unallowable under the new rule are avoidable direct costs, that is, those costs incurred as the result of negligence or misconduct by the contractor's or subcontractor's employees. Direct costs would include, for example, additional expenses for research and development or production. DoE has defined "negligence" as "the failure to exercise that standard of care which a reasonable and prudent person would exercise under the same or similar circumstances in an identical or similar environment."

(3) Bonds and Insurance. The rule provides that the cost of insurance to cover avoidable costs is unallowable, unless required by the contracting officer. However, insurance against avoidable costs that exceed the ceiling or cap appears to be an allowable cost.

(4) Loss of or Damage to Government Property. The contractor or subcontractor will be liable for costs and expenses to repair or replace Government property damaged as the result of negligence or willful misconduct. This provision applies to costs resulting from circumstances "clearly within" the contractor's or subcontractor's "sole and exclusive control." No guidance is provided on what constitutes "sole and exclusive control."

(5) Litigation and Claims. The new litigation and claims clause makes significant changes. Although DoE may retain control over litigation and claims in its discretion, the contractor is faced with paying the expenses and judgments from its own funds and filing a claim for reimbursement under the disputes process.

These unallowable avoidable costs will be the responsibility of the contractor up to a ceiling or cap of the contractor's fee or profit for the contractor's six month evaluation period. In other words, most of these unallowable avoidable costs will be reimbursable above the cap, with the exception of criminal fines and penalties and insurance covering unallowable costs. However, reimbursement above the cap is still subject to the availability of funds, i.e., it is not an indemnity.

The flowdown of the ceiling or cap to subcontractors, cost-type and fixed price, creates an important protection for subcontractors. The liability of subcontractors for avoidable costs also will be capped at their fee or profit. However, it is unclear under the rule exactly what the relationship between the M&O and its subcontractors will be for unallowable avoidable costs incurred by the subcontractor and whether the M&O or DoE will ultimately pay those costs.

Recommendations

The costs associated with environmental obligations and liabilities for the defense industry as a whole are expected to total in the many billions of dollars. Many defense contractors will be faced with liabilities which, even in the best of times, would have impaired their financial stability. In today's environment, these liabilities could be crippling, particularly if the contractors affected are unable to recover the deleted costs due to the reduced business base or inequitable Government treatment of the costs for contract costing purposes.

As previously discussed, little environmental regulation existed prior to 1970. Today, the Superfund Act and other remedial statutes impose significant obligations on contractors for ongoing compliance, as well as liabilities for environmental damage related to past activities, even in circumstances where the contractor did not participate in those activities and is not otherwise responsible for the damage. As a general proposition, environmental costs are no different from any other general management cost reasonably incurred to comply with laws and regulations, except that the costs incurred for environmental matters may be particularly large. Accordingly, and absent compelling reasons to the contrary, environmental matters should be treated no differently for Government contract costing purposes from any other necessary cost of doing business.

The current regulatory coverage with respect to environmental costs, while arguably supporting their allowability, is woefully inadequate in that it is simply too conducive to disputes and costly litigation. No provision in the FAR directly addresses the allowability of environmental costs. Clearly, promulgation of a cost principle dealing specifically with environmental costs is required. That cost principle should, at a minimum:

- Make it clear that, generally speaking, environmental costs, including costs to clean up contamination caused by past activities, are ordinary and necessary expenses of doing business and, therefore, allowable contract costs.

- Clearly distinguish between unallowable fines and penalties and allowable environmental costs.

- Clearly distinguish between unallowable costs associated with legal and other proceedings, and environmental costs incurred

pursuant to judicial decisions or administrative rulings resulting from such proceedings.

- Emphasize the importance of equitable treatment for all parties and specifically require the negotiation of advance agreements to ensure such treatment when the usual methods of measuring costs, assigning them to cost accounting periods, and allocating them to cost objectives would produce inequitable results.

Additionally, as a general matter, the cost principles should be specifically modified to require use of the accrual basis of accounting for contract costing purposes. In this regard, environmental and other costs attributable to liabilities that are probable and reasonably estimable should be recognized as allowable in the period in which the obligation arises. If the obligation is to be settled beyond one year but in the reasonably foreseeable future, the liability and delineated expense should be recorded at the present value of the amount ultimately to be paid.

Conforming changes may have to be made to other selected cost principles to ensure they are interpreted and applied consistently with the foregoing recommendations (e.g., FAR 31.205-7, "Contingencies"; FAR 31.205-15, "Fines and Penalties"; FAR 31.205-41, "Taxes"; etc.).

In summary, existing statutory and contractual provisions related to environmental compliance costs and liabilities are inadequate to address and delineate responsibility fully between the Government and its contractors. While contractors certainly must bear responsibility for willful and knowing violations of environmental laws and regulations, the Government too must pay its fair share of pollution prevention and cleanup costs. To that end, the Army's recent decision to provide P.L. 85-804 indemnity to its GOCO ammunition plant contractors strikes a better balance between greater contractor accountability, on the one hand, and Government responsibility for unusually hazardous risks, including pollution prevention and cleanup costs on the other.

IV. PROCUREMENT POLICY: ENVIRONMENTAL VALUE VS. LOWEST COST -- SOME FINAL THOUGHTS

A. Policy Gap

There is a general perception among Government contractors that although some Government officials are deeply concerned with environmental policy, that concern does not exist within the Government's procurement ranks. Even if there is an awareness of environmental issues among Government procurement officials, it is of secondary importance, certainly as compared to their mission of actually purchasing the goods and services the Government requires. Thus, contractors feel caught in a gap between Government policy makers, who articulate great concern for the environment, and Government procurement officials, who are more concerned with satisfying their customers.

If the procurement community, both public and private, is to address environmental issues seriously, while at the same time satisfying the Government's needs for goods and services, this gap must be overcome - Government procurement will have to be responsive to environmental concerns. Undoubtedly, there are many things that can be done to close - and, eventually, eliminate - the gap.

In addition to overcoming the Government's policy-performance gap with respect to environmental issues, there must also be a focus on the development of a pro-active approach of rewarding contractors for being good environmental citizens.

Recommendations for Contracting Officer Training and Authority

1. Formalize Training

We would encourage formalizing the process of training and sensitizing Government procurement officials, with emphasis on the environmental requirements of both contractors and the Government and the goal of meeting these requirements while also satisfying the Government's procurement needs. Environmental compliance should become an integral part of the Government procurement officials' agenda.

2. Emphasize Flexibility

Both through training and sensitizing, discussed above, and formal directives and/or regulations, flexibility should be emphasized for addressing environmental requirements in performing Government contracts. For example, where necessary to address an environmental requirement, Government procurement officials should be able (and willing) to revise and/or waive or grant deviations for Government specifications or other contract requirements to permit environmental compliance without compromising the true needs of the Government customer. Flexibility, compromise, and innovation must replace the rigidity that the contractor community now perceives to exist.

3. Establish Environmental Advocates

Recognizing the natural tension that may exist between environmental and other performance issues and the historical lack or emphasis on environmental issues, each DoD department and civilian agency should appoint a senior agency official to be an Environmental Advocate, along the same lines as the Competition Advocates now within DoD. These officials would work to bridge the policy-performance gap where they feel that environmental concerns are being unduly underemphasized or even overloaded.

These are only a few ways of improving the Government's responsiveness to the environmental issues that confront contractors performing Government issued contracts. The intent of such initiatives should be to create a better balance than now exists between environmental issues and pure

contract performance. In time, hopefully, environmental issues would be thought of as an integral part of the contracting process, not as a matter of relative insignificance.

This paper was prepared by the Interagency Subcommittee of the National Security Industrial Association Environment Committee, under the direction of Stephen M. Sorett, Esq. Contributors included:

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Recd 5 May 93

DEPARTMENT OF THE ARMY
OFFICE OF THE JUDGE ADVOCATE GENERAL
901 NORTH STUART STREET
ARLINGTON, VA 22203-1837

REPLY TO
ATTENTION OF

DAJA-EL

5 May 1993

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE FOR ENVIRONMENT, ATTN: DASD-E (MR. SHUN LING), ROOM 3E139, THE PENTAGON, WASHINGTON, D.C. 20310-2200

SUBJECT: Review of 27 March Draft

1. This responds to your informal request for review of your proposed 27 March Draft report in response to the requirements in Section 332 of the FY 93 National Defense Authorization Act.

2. It is not possible to comment finally on the positions taken in the 27 March Draft because it does not include a detailed discussion of the availability of P.L. 85-804 to indemnify cleanup contractors. The 27 March Draft at page 6 notes that three statutory authorities are available to indemnify contractors performing environmental restoration work (including P.L. 85-804) and references a comprehensive discussion of these statutes provided by the Office of the DOD General Counsel. At page 9 the 27 March Draft concludes that existing statutory authority provides DOD with adequate latitude for indemnification if it becomes necessary to offer indemnification in the future to assure adequate competition and qualified contractors. The 27 March Draft at page 24, restates this basic conclusion by providing that the SECDEF "does not recommend additional authority for indemnification of contractors performing environmental restoration. Adequate indemnification options exist within the authorities and regulations presently available to the DOD for contracting for environmental restorations contractors at its sites."

3. The comprehensive analysis of the existing authority has not been available for review. A significant factor in determining the adequacy of existing authority is the extent to which P.L. 85-804 can be used to indemnify DOD restoration contractors. In a 27 August 1992 opinion, the Congressional Research Service (CRS), concludes that P.L. 85-804 is not available to indemnify cleanup contractors at Federal facilities unless the cleanup is viewed as facilitating the operation of the Federal facility. The CRS opines that P.L. 85-804 would not be available where the only nexus between the cleanup and the national defense is that the contamination was caused by a defense related activity or occurs at a defense related facility. The CRS does conclude that P.L. 85-804 would provide authority for indemnification where a cleanup has arguable linkage to "facilitating the national

defense", as for example, where the cleanup is conducive to the safe functioning of a defense facility. Since many cleanups at Federal facilities may not be directly linked to an immediate threat to the safe operation of the installation, the application of P.L. 85-804 to many cleanups on active installations remains unclear without the DOD General Counsel opinion. Further, indemnification at formerly used defense sites as well as at closing bases appear to be outside the permissive scope of P.L. 85-804 as interpreted by the CRS.

4. In addition to evaluating current authorities, the 27 March Draft looks at the demonstrated need for the indemnification of cleanup contractors. The report focuses narrowly on cleanup contractors and concludes that DOD has obtained adequate competition and qualified contractors without the use of indemnification. The 27 March Drfaft concludes that DOD has not needed to use the indemnification authorities available and does not need additional authority. The Army's recent experience at the Spring Valley, Formerly Used Defense Site (FUDS), illustrates the difficulty in discussing indemnification of solely "cleanup contractors" and the availability of existing remedies. On 5 January 1993, construction crews unearthed World War I munitions in the Spring Valley neighborhood of D.C., in the area of former Army posts, Camp American University and Camp Leach. Those installations were used during World War I to conduct chemical warfare, research, development, testing and training. Pursuant to an emergency CERCLA removal action, 141 intact munitions were moved from the area. The Army is continuing its remedial activities throughout the Spring Valley area by conducting a number of tests to determine if additional munitions remain in the area. The Army is utilizing a contractor, EOD Technologies, to conduct these tests. While not technically a "cleanup contractor", EOD Technologies may be conducting intrusive testing on individual homeowners lots throughout the Spring Valley area. The homeowners in Spring Valley expressed great concern about their ability to recover damages from the United States under the Federal Torts Claims Act (FTCA) in the event of contractor negligence. In attempting to secure rights of entry to allow the Army to enter the property of homeowners in the area to conduct these tests, the Army determined it was in the Army's and the public's best interest to insure our contractor carried adequate insurance. Since the FUDS site was not on the National Priority List (NPL) and Phase II of our operations were not technically a removal, Section 119 of CERCLA was not available to provide indemnification. In addition, consistent with the discussion above, P.L. 85-804 does not clearly provide authority to

indemnify our contractor at this former Army site. Because of the high cost of insurance, in my opinion, the Army could have concluded that indemnification was appropriate for our contractor if that option had clearly been available. This case highlights that in unusual cases there may be a public interest in issues such as indemnification and the availability of remedies in the event of accidents that goes beyond the more narrow question of obtaining the minimum number of adequate contractors.

5. In addition to the need for indemnification to insure adequate competition, the 27 March Draft should discuss the need for indemnification to support the future use of accelerated cleanups and the use of innovative technology. One of the existing authorities for indemnification cited in the 27 March Draft is 10 U.S.C. 2354 which provides indemnification authority for extremely hazardous R&D. That authority merits some additional discussion. The Office of Federal Facility Enforcement, EPA has a Ten-Point Strategic Plan for Federal facilities. Two of the ten-points are Accelerating Cleanup and Developing Innovative Technology during federal facility remediation. In my opinion, the 27 March Draft should evaluate the adequacy of the existing authority to meet these future needs of DOD to engage in innovative activities.

6. Finally, I have enclosed a copy of the 10th Circuit decision in Daigle v. Shell Oil. The case involves a toxic tort suit against the United States and Shell Oil by a group of individuals who reside near Rocky Mountain Arsenal in Colorado. Plaintiffs contended that they suffered personal injury and property damage as a result of airborne pollutants released during the Arsenal cleanup by Shell and the United States. Specifically the suit focused on the remediation of Basin F, an area used to impound hazardous waste generated on the Arsenal. In the process of exposing soils and sludges which had been covered by hazardous liquids, strong odors developed and blew over the plaintiff's homes. The plaintiff's sought CERCLA response costs for medical monitoring, as well as damage claims under tort theories including strict liability. The tort claims against the United States have been dismissed based on the "discretionary function exception" to the FTCA and the 10th Circuit held that medical monitoring was not a proper response cost under CERCLA. The suit continues with Shell as the remaining defendant. The government

contractor was not sued in this case but the case is illustrative of the risks that could be associated with complex Federal cleanups.

Encls

WILLIAM J. MCGOWAN
Colonel, JA
Chief, Environmental Law
Law

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330-1000

OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY (ENVIRONMENT)
OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
(PROUCTION AND LOGISTICS)

SUBJECT: Report on Idmenification of Contractors Performing Environmental Restoration (Your Memo, January 8, 1993) - INFORMATION MEMORANDUM

Reference question 6 of subject memorandum. In the time frame indicated (April 1, 1992 through November 30, 1992) the Air Force awarded no response action contracts greater than $5,000,000. My POC is LTC Fink, (202) 697-9297.

GARY D. VEST
Deputy Assistant Secretary of the Air Force
(Environment, Safety and Occupational Health)

1. In response to your request, we provide the following comments to the Strawman "Indemnification of Contractors Performing Environment Restoration".

a. In our opinion, Congress has not asked the proper questions in order to adequately determine whether a need for additional authority for indemnification exists. The fact that thus far we have been able to obtain adequate competition for our contracts without providing indemnification, does not necessarily indicate there is no need to indemnify our contractors against the liabilities they may incur as a result of contract performance. The facts seem to indicate that the pressures of the marketplace force industry to compete and perform in situations that place them in a position where they are compelled to accept unreasonable financial risks.

b. Additionally, the lack of litigation involving federal remedial action contractors is not an adequate indicator to make the determination that the contractors will not be involved future litigation. As the subject paper indicates, we have just begun the actual remediation efforts, where the greatest liabilities exist, specifically the "long tail" liability that can occur long after the effort has been completed.

c. From our perspective, the existing indemnification authorities are inadequate. Public Law 85-804 has limited application, in that the particular effort must "facilitate the national defense" and the activity must be defined as "unusually hazardous or nuclear". In addition the usage is in retrospect because, in accordance with the Federal Acquisition Regulation (FAR) 50.403, a contract must be in place before the contractor can request indemnification. Then, only the Secretary of the Air Force may approve the request if he determines the facts meet the criteria set forth in the FAR. When the Government awards the contract, the contractor and the contracting agency have no assurance that indemnification under Public Law 85-804 will be granted.

d. Indemnification pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), section 119, is limited to response action activities at an NPL or removal action site. We will not be able to provide indemnification under CERCLA § 119 at non-NPL sites or for non-

CERCLA contaminants, such as petroleum. In addition the application of indemnification pursuant to CERCLA is ambiguous because the federal agencies, other than EPA, do not have implementing regulations. Also no empirical data exists to determine its adequacy.

e. The indemnification available pursuant to 10 U.S.C. § 2354, "Contracts: indemnification provisions", is limited to contracts that are for research or development. Remedial action contracts are not considered research and development efforts.

f. For the reasons stated above, we believe legislation that specifically authorizes indemnification for contractors performing remedial action contracts is necessary. We are not advocating that contractor negligence be covered, only nonnegligent performance for which adequate, cost-effective, insurance is not available, to include coverage for strict liability, liability to third parties, and long term liability. We are preparing to issue a request for proposal (RFP) for our largest environmental remedial action efforts, which we anticipate will result in a total of $1.1 billion in contracts awarded. Nearly half of the contractors who responded with comments on the draft RFP expressed concern over the lack of indemnification and thought we should include some sort of indemnification, or risk sharing. We agree, but at this time we are unaware of an authority that will grant us indemnification that we can include in our RFP.

Appendix 2
Competition Data from DoD Components

Contents

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-8000

PRODUCTION AND LOGISTICS

JAN 8 1993

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF THE ARMY
(ENVIRONMENT, SAFETY AND OCCUPATIONAL HEALTH),
OASA (IL&E)
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(ENVIRONMENT AND SAFETY), OASN (I&E)
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE
(ENVIRONMENT, SAFETY AND OCCUPATIONAL HEALTH),
SAF/MI
DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA-W)

SUBJECT: Report on Indemnification of Contractors Performing Environmental Restoration

We have been working with your staff and representatives of the Environmental Protection Agency, Department of Justice, Department of Energy, and the Office of General Counsel in preparing a report to Congress as required by section 332 of the Fiscal Year 1993 National Defense Authorization Act (Public Law 102-484). The previously established indemnification work group reconvened on November 30 and met again on December 15, 1992. The next meeting is scheduled for January 21, 1993, at 10:00 a.m. in my conference room.

We have sent a letter to nine contractor and environmental associations for information which they would be in a position to provide (Attachment 1). In order to complete the report, however, we need information about the department's recent experience. Please respond to the information request of Attachment (2) no later than February 16, 1993. If you have any other information that we should consider in preparing the report, please provide that as well.

Thank you for your support to date. My point of contact is Dr. S. Ling at (703) 695-8355.

Thomas E. Baca
Deputy Assistant Secretary of Defense
(Environment)

Attachments

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-8000

PRODUCTION AND LOGISTICS

Lawrence F. Skibbie, Lt. General, USA(Ret.)
President, American Defense Preparedness Association
2101 Wilson Blvd, Suite 400
Arlington, VA 22201-3061

Dear General Skibbie:

The Department of Defense is preparing a report to Congress on indemnification of contractors performing environmental restoration. The report is required by section 332 of the Fiscal Year 1993 National Defense Authorization Act (Public Law 102-484).

To make our report as accurate as possible, we would like to consider any factual information you may have on the following aspects of environmental restoration contracting:

(1) The extent to which contractors performing environmental restoration work at Federal, state and private sites have actually been exposed to, or involved in, litigation, claims, and liability related to this work since 1980.

(2) The type and extent of indemnification currently provided by Federal or state agencies, or private entities for environmental restoration work.

(3) The availability, coverage, cost and type of insurance commercially available to environmental restoration contractors.

If you provided documented information to this office or in public hearings in the past, you may just reference them. We would also like to consider any new factual information that updates or quantifies the previously provided information.

Your response is strictly voluntary, and must be at no cost to the government. If you wish to contribute any information on these issues for our consideration, we request your response by February 1, 1993. My point of contact is Dr. S. Ling at 703-695-8355.

Sincerely,

Thomas E. Baca
Deputy Assistant Secretary of Defense
(Environment)

ATTACHMENT 1

DATA FOR REPORT ON INDEMNIFICATION OF CONTRACTORS PERFORMING ENVIRONMENTAL RESTORATION

1. All approved or pending uses by your department of Public Law 85-804 authority, 10 U.S.C. 2354 authority, or CERCLA section 119 authority to indemnify environmental restoration contractors.

2. The extent to which environmental restoration contractors at your installations and sites have been exposed to litigation, claims, or liability related to such environmental restoration work since 1980.

3. Any instances where your department has reimbursed environmental restoration contractors on cost-reimbursement contracts for liabilities to third parties related to the environmental restoration work.

4. Any instances where your department was unable to award a contract for environmental restoration work due to the lack of adequate competition or qualified contractors.

5. Your views as to whether additional indemnification authority is necessary to ensure adequate competition and qualified contractors for environmental restoration contractors.

If your replies to any of the questions above are affirmative, please identify a point of contact so we may obtain additional information.

In addition, for response action contracts greater than $5 million awarded between April 1 and November 30, 1992, provide contract number, title, award amount and name of winning contractor, name of all other qualified bidders and their respective bids. (Response to this question only may be submitted on March 15, 1993.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332-2300

024B
12 February 93

From: Commander, Naval Facilities Engineering Command
To: Deputy Assistant Secretary of Defense (Environment)

Subj: DATA FOR REPORT ON INDEMNIFICATION OF CONTRACTORS PERFORMING ENVIRONMENTAL RESTORATION

Ref: (a) ODASD(E) ltr dated 8 January 93
(b) FAR 5.403(a), Requests from Members of Congress
(c) Phoncon between Dr. Ling (ODASD(E)) and Ms. Jones (NAVFACENGCOM Code 024B) on 5 Feb 93

Encl: (1) Listing of Response Action Contracts Greater than $5 Million

1. Reference (a) requested our response to an information request no later than 16 February 93. The following information is provided in response:

a. There have been no approved or pending uses by the U.S. Naval Facilities Engineering Command (NAVFACENGCOM) of Public Law 85-804 authority, 10 U.S.C. 2354 authority, or CERCLA section 119 authority to indemnify environmental restoration contractors.

b. No environmental restoration contractors at NAVFACENGCOM sites have been exposed to litigation, claims, or liability related to such environmental restoration work since 1980.

c. There have been no instances when NAVFACENGCOM has reimbursed environmental restoration contractors on cost-reimbursement contracts for liabilities to third parties related to the environmental restoration work.

d. There have been no instances in which NAVFACENGCOM has been unable to award a contract for environmental restoration work due to lack of adequate competition or qualified contractors.

e. Based on experience to date, additional indemnification authority is not necessary to ensure adequate competition and qualified contractors for environmental restoration contracts.

f. In accordance with reference (b), the information contained in enclosure (1) is business confidential information which contains a listing of response action contracts greater than $5 million awarded between 1 April and 30 November 92 and the proposers. As such, this information should not be released without the consent of the contracting officer.

8 March 93

MEMORANDUM

From: Commander, Naval Facilities Engineering Command
To: Office of the Deputy Assistant Secretary of Defense, Environment, Shun Ling

Subj: COMMENTS ON STRAWMAN

Ref: (a) ODASD(E) fax dtd 8 March 93

1. Reference (a) requested our input on the strawman for the Remedial Action Contract Indemnification Workgroup. In paragraph three of (2), you noted questions on seven contracts. The following information is provided in response:

N62467-88-C-0383 -
Contract closed out. Files closed out. Bid abstract was lost.

N62474-89-C-7090 -
Contract procured through 8(a) small business procedures.

N62477-89-C-0814 -
Portion of work under MCON construction contract done by the MCON contractor. Recommend deleting this contract from the list.

N62477-90-C-0169 -
FSC Contract. Delivery Orders totaling $196,449 were for removal at two sites under this contract. Recommend deleting this contract from the list.

N62477-92-M-0067 -
Small Purchase for $7,100. This contract does not fall under competitive procedures.

N62477-92-M-0131 -
Small Purchase for $4,559. This contract does not fall under competitive procedures.

N62477-92-D-0082 -
Sole Source Negotiation for $37,000.

2. In paragraph five of (2), you questioned which contracts were for remedial design or remedial action. All the contracts in question were for remedial action. Due to discussions with ODASD(E) staff, our first data submission in 1992 specifically excluded professional architect-engineer services. However, our data request submission in 1993, at your direction, pertained to both professional and non-professional services; only three contracts greater than $5 million were pertinent. These contracts were also remedial actions.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332-2300

TELECOPY COVER SHEET

DATE: 9 MAR 93

TIME:

FROM: Amy Jones CODE: 024B

TELEPHONE NO: COMMERCIAL 703 325 7654

AUTOVON 221 7654

NO. OF PAGES INCLUDING THIS COVER SHEET: 3

COMMENTS:

TO: Shun Ling TELECOPY NO. 703 697 7548

PLEASE SEND ANY RETURN TRANSMISSIONS TO (703) 325-0169.

b) Amount for actual site remediation (including amounts expended in prior years) rather than studies, expressed in dollars and as a percentage of total dollars for work currently underway.

Answer: Site remediation for FY92 and prior is $163 million. Since this figure includes expenditures as well as work-in-progress it should be expressed as a percentage of work underway plus prior year expenditures. It is 20% of all work.

c) Projected amount of future work, expressed as a ratio to total dollars for all work currently underway.

Answer: As reported in the DOD Installation Restoration Program Cost Estimate report of September 1991, Navy's estimated cost of future work is $2.9 billion. Ratio is 2900:361.

d) Amount of actual site remediation currently underway and associated with base closure activities, expressed as a percentage of total dollars for all work currently underway.

Answer: The amount of site remediation associated with base closure is $5.1 million for Base Closure I and II. This would be 1% of the total work underway.

e) Projected amount of future work associated with base closure activities expressed as a percentage of total dollars for all work currently underway.

Answer: The projected amount of future work for environmental in the Base Closure Budgets is $26 million under Base Closure I and $177 million under Base Closure II. These figures include the cost of environmental restoration, compliance and planning. This would be 7% of the projected amount of future work in DERA.

5. Please provide a list of between five and ten contractors that you consider to be "leading" remedial action contractors who do or have done work for DOD or EPA, or who you have reason to believe does a significant amount of remedial work for persons other than the Federal agencies, and indicate for each contractor listed (a) the basis for inclusion in the list, (b) the dollar amount of remedial contract work the contractor is now performing for your Service, (c) the percent this is of all remedial contract work now being performed for your Service, (d) the total dollar amount of work that has been performed by this contractor, (e) the percent this is of all remedial contract work that has been performed for your Service, and (f) whether the contractor engages solely or principally in RI/FS work, in RD/RA work, or in both.

Answer: Enclosure (4) contains construction contractor performance evaluations obtained through CCASS for those contractors whose ratings were available. This Command can only comment on the qualification of the awardee. Awardees are scrutinized in accordance with FAR Subpart 9.104 which states, "To be determined responsible, a prospective contractor must -

Answer: Section 336 of the FY92/93 DOD Authorization Act codified a change to 10 U.S.C. 2701 that, in general, provides for a surety the same standard of liability (or indemnification) as applies to its principal in direct contracts for response actions under the DERP. Since the application of the law applies only to sureties for DOD contracts under the DERP, its implementation is appropriate in the DFARS and no FAR coverage is required. A recommended change to the DFARS would alert contracting officers to the limits on the surety's liability in the event of default or third party liability claims. It would also highlight the differences of Miller Act coverage applicable to other construction contracts.

In addition, DOD has reduced the magnitude of the individual bonds by requiring bonds only for construction activities under the contract, rather than for 100% of the contract amount as was previously the case. Also, our eight remedial action contracts in the aggregate amount of $150 million awarded out of our Naval Facilities Contracts Office, Pt. Hueneme, CA, are cost reimbursable and thus do not require bonds.

Testimony from Thomas Baca, Deputy Assistant Secretary of Defense (Environment), states that "individual bonds in the amount of $5 million or less do appear to be available without much difficulty. For bonds in the $5-10 million range, availability depends on the specific circumstances such as perception or risk and past history dealings between the contractor and the surety. Surety bonds for amounts greater than $10 million might still be a problem for contractors. Contracting officers have been monitoring this area. By closely defining the scope of bond coverage required DOD has been able to avoid a problem." Mr. Baca also announced on 10 March 1992 that DOD would provide the House Armed Services Committee a plan for a test program to address industry concern within 90 days.

10. Provide an alphabetized list of all contractors who met DOD's criteria for eligibility to compete for cleanup contracts and who submitted bids for such contracts in FY 1991 and FY 1992. Provide an alphabetized list of all contractors, generally considered qualified to compete for cleanup contracts and "well-regarded" in the industry who have stated to DOD that because of the risk they will not compete for DOD cleanup contracts. Provide an alphabetized list of those contracts bidding on cleanup contracts awarded by your Service in FY 1991 or 1992 whom you would characterize as being "well-regarded" in the industry.

Answer: NAVFACENGCOM uses Brooks Act selection for Architect-Engineer (A-E) contracts such as the Comprehensive Long Term Environmental Action, Navy, "CLEAN" contract to procure the study and design phases of environmental restoration projects and competitive selection for standard construction or services contracts for the actual remediation phase.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended through P.L. 99-499, October 17, 1986, requires that response action contractors..."for program management, construction management, architectural and engineering, surveying and mapping, and related services shall be

Thorne Environmental
United Equipment, Inc.
Waste Abatement Technology
Waste-Tron
Woodington Corp.

LIST OF CONTRACTS LET TO DATE

CONTRACT NUMBER	# OF BIDS	DOLLAR AMT. IN 1000's
N47408-91-D-3043	6	15000.00
N47408-92-D-3042	8	40000.00
N47408-92-D-3044	8	20000.00
N47408-92-D-3045	8	15000.00
N47408-92-D-3056	11	10000.00
N47408-92-D-3058	10	10000.00
N47408-92-D-3059	11	25000.00
N47408-92-D-3083	8	15000.00
N62467-88-C-0383	0	356.00
N62467-89-C-0529	7	476.00
N62467-89-C-7223	4	77.00
N62467-89-C-9025	7	494.00
N62467-90-C-0683	6	498.00
N62467-90-C-0684	8	368.00
N62467-90-C-0701	13	177.00
N62467-91-C-9211	2	38.00
N62470-88-C-8114	4	427.00
N62470-89-C-9232	4	350.00
N62470-90-C-5669	13	52.00
N62470-91-C-3205	10	74.00
N62470-91-C-3836	2	95.00
N62470-91-C-3837	6	79.00
N62470-91-C-4025	15	115.00
N62470-91-C-4033	15	29.00
N62470-91-C-4415	9	142.00
N62470-91-C-6475	10	25.00
N62470-91-M-9151	2	15.00
N62472-88-C-0432	6	382.00
N62472-90-C-0051	10	2066.00
N62472-90-C-0400	10	216.00
N62472-90-C-0401	14	199.00
N62472-90-C-0405	12	189.00
N62472-90-C-0413	15	189.00
N62472-90-C-0459	23	309.00
N62472-91-C-0403	10	157.00
N62472-92-C-0001	3	2613.00
N62474-89-C-7090	0	448.00
N62474-90-C-1366	23	165.00
N62474-91-C-9477	6	481.00
N62477-89-C-0184	0	14.00
N62477-90-C-0169	0	2328.00
N62477-90-D-0045	13	876.00
N62477-92-D-0082	1	37.00
N62477-92-M-0067	0	7.00
N62477-92-M-0131	1	4.00
N62742-91-C-0503	3	1370.00
N62742-91-D-0515	2	502.00
N68711-91-D-0302	3	147.00
N68711-91-D-0309	6	181.00
N68711-92-D-4869	6	0.00
N68860-90-C-0066	8	564.00

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

MAY 6 1993

MEMORANDUM FOR DEPUTY UNDER SECRETARY (ENVIRONMENTAL SECURITY)
OFFICE OF THE UNDER SECRETARY OF DEFENSE
(ACQUISITION)

SUBJECT: Report on Indemnification of Contractors Performing Environmental Restoration (Your Memo, January 8, 1993) - INFORMATION MEMORANDUM

Attached is our response to your request for information regarding Air Force experience with response action contractors and indemnification. While there appears to be adequate participation in the competitive contracting process for restoration contracts, I am concerned that there are hidden costs the government is paying as a consequence of lack of indemnification. Although, it has been impossible to date to detail these costs and any test contracting program would be prone to artificial influences, I believe it would be prudent to provide indemnification for long term contractor liability due to changing legal and environmental standards.

Provided at Attachment 2 is a listing of contract actions that exceeded $5 million. These contracts are Indefinite Delivery Indefinite Quantity (IDIQ) contracts. The selection of the winning contractor was based primarily on technical capabilities of the company to meet the required tasks, rather than a specific contract bid. I have not included a list of all contract respondents.

Any questions concerning this response should be addressed to my POC, Lt Col Fink, (703) 697-9297.

GARY D. VEST
Deputy Assistant Secretary of the Air Force
(Environment, Safety and Occupational Health)

2 Attachments
1. Air Force Responses to Indemnification Questions
2. Contract Actions Exceeding $5M

CONTRACT ACTIONS EXCEEDING $5 MILLION

Contract Number	# of Bidders	Gov EST ($000) (Ceiling)	Actual Cost ($000)	Description	Project Type	Contamination	Contract Type	Contract SUB Type	Location
F41624-92-D-8004	6	$25,000	$25,000	Landfill Capping	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8008	6	$25,000	$25,000	Landfill Capping	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8002	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8006	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8007	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8005	12	$25,000	$25,000	Pump & Treat	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8009	12	$25,000	$25,000	Pump & Treat	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8003	8	$25,000	$25,000	Soil Venting/Bioremediation	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8034	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8035	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8036	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8037	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
	AWARDED TO								
F41624-92-D-8004		International Technology Corp							
F41624-92-D-8008		Hensel Phelps Construction Company							
F41624-92-D-8002		Metcalf & Eddy							
F41624-92-D-8006		Halliburton NUS Env Corp							
F41624-92-D-8007		Ogden Environmental & Energy Svcs							
F41624-92-D-8005		E.A. Engineering, Science & Technology, Inc							
F41624-92-D-8009		Roy F. Weston, Inc							
F41624-92-D-8003		Earth Technology Corp							
F41624-92-D-8034		Jacobs Engineering Group, Inc							
F41624-92-D-8035		International Technology Corp							
F41624-92-D-8036		Engineering Science							
F41624-92-D-8037		CH2M Hill							

ATCH 2

CONTRACT ACTIONS EXCEEDING $5 MILLION

Contract Number	# of Bidders	Gov EST ($000) (Ceiling)	Actual Cost ($000)	Description	Project Type	Contamination	Contract Type	Contract SUB Type	Location
F41624-92-D-8004	5	$25,000	$25,000	Landfill Capping	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8008	5	$25,000	$25,000	Landfill Capping	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8002	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8006	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8007	18	$25,000	$25,000	Soil/Tank Removal	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8005	12	$25,000	$25,000	Pump & Treat	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8009	12	$25,000	$25,000	Pump & Treat	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8003	8	$25,000	$25,000	Soil Venting/Bioremediation	RA	Mixed	IDIQ	CPFF	Nationwide
F41624-92-D-8034	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8035	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8036	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
F41624-92-D-8037	55	$25,000	$25,000	A & E Design Title I & II	RD	Mixed	IDIQ	FFP	Nationwide
	AWARDED TO								
F41624-92-D-8004		International Technology Corp							
F41624-92-D-8008		Hensel Phelps Construction Company							
F41624-92-D-8002		Metcalf & Eddy							
F41624-92-D-8006		Halliburton NUS Env Corp							
F41624-92-D-8007		Ogden Environmental & Energy Svcs							
F41624-92-D-8005		E.A. Engineering, Science & Technology, Inc							
F41624-92-D-8009		Roy F. Weston, Inc							
F41624-92-D-8003		Earth Technology Corp							
F41624-92-D-8034		Jacobs Engineering Group, Inc							
F41624-92-D-8035		International Technology Corp							
F41624-92-D-8036		Engineering Science							
F41624-92-D-8037		CH2M Hill							

General Response to Reviewers

Please review this 27 March 1993 Draft and FAX comments to 703-697-7548 or express mail them to me to arrive at DASD(E), 400 Army Navy Drive, Suite 206, Arlington, VA, 22202 bu COB 5 April 1993. If any of you have more factual information to add or can collect from within your organization or private sector contacts, such as how PRPs address indemnification of environmental restoration contractors, please solicit the data and forward to me. The Hill staffers are very much interested in this subject.

Thanks for your quick turn around on this review.

Thanks for your reviews on the "Strawaman". They really helped. As you can see from the copies of the comments, the comments reflect the perspective of the reviewers. Some notes on my approach may help explain why I wrote and formatted the report as is.

- o I consider the audience to be the Congress with the likelihood that the members of Congress may only have time to read the executive summary and the conclusions.

- o I believe the staffers will be the ones to review the report in detail and therefore wrote and formatted it based on what I understood to be their needs from meetings with them.
  - oo They wanted as much factual information as possible.
  - oo They wanted to know the process we used, therefore, the short description of the methodology.

- o Some commentors believed I was giving too much space to the contractors' views. However, the contractors have been promulgating their views for quite a while in particular their list of cases. I have heard many of the government participants say the cases are not relevant. However, I have not seen this position in writings to Congress. I considered it important to discuss those that had close relevance and to dismiss the ones that were really stretching the point. I could have just said here they are in attachment xxx with no commenting. However, this missed the requirement to "review and report."

- o Initial plans had been to just answer the questions. However, Dr. Burman of OMB did not consider it appropriate to avoid issues. Therefore if we did not fully agree with positions presented we did state our views.

- o How much to include as attachments was also an issue. The sense I got from the staffers is they want the "information," not just our review and comments on the "information."

- o An attempt has been made to judiciously balance both the government information and the private sector information.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, DC 20310-0110

MAY 11 1993

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE (ENVIRONMENT)

SUBJECT: Report on Indemnification of Contractors Performing Environmental Restoration

In response to your memorandum of January 8, 1993, on this subject, the Army has not had difficulty in awarding environmental restoration contracts due to a lack of competition or qualified contractors. Although there are some indications that indemnification of our response action contractors may be warranted in the future, additional indemnification authority does not appear necessary to ensure adequate competition from qualified contractors for environmental restoration contracts at this time.

In response to your specific questions: (1) There have been no approved or pending uses by the Army of Public Law 85-804 authority or 10 U.S.C. 2354 authority to indemnify environmental restoration contractors for efforts under the Defense Environmental Restoration Program (DERP). (2) No Army contractor has provided notice of litigation or claims action initiated against them arising from efforts performed under the DERP, and (3) The Army has not reimbursed remediation contractors for liabilities to third parties. The responses to questions 4 and 5 are summarized in the first paragraph.

A summarization of response action contracts awards greater than $5 million awarded between 1 Apr and 30 Nov 92 is attached.

The point of contact in this office is Mr. Rick Newsome at extension (703) 614-9531.

Lewis D. Walker
Deputy Assistant Secretary of the Army
(Environment, Safety and Occupational Health)
OASA(I,L&E)

Attachment

cf: SAGC ENVR-EH CETHA-CO

U.S. ARMY CORPS OF ENGINEERS
DATA FOR REPORT ON INDEMNIFICATION OF CONTRACTORS PERFORMING ENVIRONMENTAL RESTORATION

1. There have been no approved or pending uses by the U.S. Army Corps of Engineers (USACE) of Public Law 85-804 authority, or 10 United States Code (U.S.C.) 2354 authority to indemnify environmental restoration contractors. USACE has never provided indemnification on Defense Environmental Restoration Program (DERP) projects. However, since October 1989, 84 Superfund projects were placed under contract for EPA by USACE; 82 of the projects included a clause which indicates that CERCLA 119 indemnification may be available subject to approval by EPA. Contract information prior to October 1989 is not readily available. There have been several approved 85-804 indemnification requests under the Chemical Stockpile Disposal Program; however for the purposes of this report, we did not consider chemical demilitarization to be environmental restoration.

2. No USACE environmental restoration contractor has provided notice of litigation or claims action being brought against it. However, all such contractors view environmental restoration work as exposing them to potential liability.

3. There have been no instances when the U.S. Army Corps of Engineers has reimbursed environmental restoration contractors on cost-reimbursement contracts for liabilities to third parties related to the environmental restoration work.

4. There have been no instances in which the U.S. Army Corps of Engineers has been unable to award a contract for environmental restoration work due to lack of adequate competition or qualified contractors.

5. Under present market conditions, additional indemnification authority does not appear necessary to ensure adequate competition from qualified contractors for environmental restoration contracts. Although the U. S. Army Corps of Engineers has experienced adequate competition from qualified contractors for environmental restoration contracts under its program, it may be appropriate to establish a DOD indemnification policy which would be implemented should market conditions become less favorable.

6. Response action contracts greater than $5 million awarded between April 1 and November 30, 1992 are provided with contract number, title, award amount and name of winning contractor, and names of all other qualified bidders on the next page.

DEFENSE LOGISTICS AGENCY
HEADQUARTERS
CAMERON STATION
ALEXANDRIA, VIRGINIA 22304-6100

IN REPLY
REFER TO DLA-W

19 [illegible] 1993

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF DEFENSE (ENVIRONMENT), OASD(P&L)

SUBJECT: Report on Indemnification of Contractors Performing Environmental Restoration

We have had no instances where indemnification has become an issue with any of our response action contractors. Therefore, the response to all of the questions in your 8 January 1993 memorandum is negative.

Our point of contact is Mr. Dennis Lillo, 274-6124.

JAMES E. JENKINS
Colonel, USA
Staff Director
Installation Services and
Environmental Protection

DLA IRP CONTRACT AWARDS 1987 - 1992

INSTALLATION	CONTRACTOR	POC	WORK DESCRIPTION	CONTRACT NO.	DELIVERY ORDER	AWARD AMOUNT
DDRW Tracy, CA	James M Montgomery	Robert Ramsey 801 272 1900	GW Pilot Plant	DACA87 92 D 0010	3	$591,743
			Well Monitoring	"	2	$569,445
			RI/FS Phase I	"	5	$1,388,393
			RI/FS Phase II	"	6	$1,280,108
	Woodward Clyde Assoc	Mike Sinor 510 874 3173	RI/FS	DACA87-86 C-0019		$1,591,523
			RI	DACA87 90-D 0029	1,2,3,4	$1,834,280
	Engr Design & Geosciences	Chuck Higgins 615 333 0630	Aquifer Evaluation	DACA87-88 D 0079	1,2,4	$173,429
	Ensotech	Jeto Sabbenwahl 818 767 2222	GW Pilot Plant	DACA87-89 C-0088		$1,555,872
	IT Corporation	John McCabe 510 372 5224	Soil Invest/Removal	DACA87-90 D 0010		$193,799
	AEPCO	James Whang 301 670-6770	PI Sowco Eval	DACA87 87 D 0098		$232,984
Sharonal Equipment Supply Site, Akron OH	International Consult. Inc	Paul Haney 513 252 0341	RI/FS	DACA87-92-D-0005	1,2	$753,902
	IT Corporation	Al Mayers 513 782-4700	Removal Action	DACW45-90-D 9002		$4,838,211
DFSP Escanaba, MI	Engineering Science	Kitty Leonard 385 451 9560	RI/FS	DACA87-90 D-0030	2	$480,000

DLA IRP CONTRACT AWARDS 1987 - 1992

INSTALLATION	CONTRACTOR	POC	WORK DESCRIPTION	CONTRACT NO	DELIVERY ORDER	AWARD AMOUNT
Arctic Surplus Site Fairbanks, AK	CH2M Corporation	John Hickey 410 423 3526	Removal Action	DACW45 89 D 9516		$5,[illegible],763
	Shannon & Wilson, Inc	John Abbott 907 479 0600	RI/FS	DACA85 92 R 0026		$507,435
DFSP Point Sur, CA	James M Montgomery	Robert Ramsey 801 272 1000	RD	DACA87 92 D 0019	4	$507,368
DFSP San Pedro, CA	Woodward Clyde Consult	Larry Barker 714 835 6886	RI/FS	DACA87 89 C 0059		$1,230,978
DFSP Norwalk, CA	Woodward Clyde Consult	Larry Barker 714 835 6886	RI/FS	DACA87 90 D 0029	5	$727,020

October 22, 1993

SUMMARY OF COMPETITION WITHOUT INDEMNIFICATION IN FY93

Contracts Competed by the U.S. Army Corps of Engineers(USACE)

Remedial Design: 9 contracts awarded, $3.7 million total value

Remedial Action: 11 contracts awarded,$100 million total value

- Largest contract awarded:
  Incineration project, value of $46M
- Second largest project:
  Groundwater treatment, value of $21M

Contracts Competed by the U.S. Environmental Protection Agency(EPA)

Remedial Program Support: RAC contract - In Progress 3 contracts solicited for solicitation — sufficient competition on technical proposals

Removal Program Support: ~~ERRS contract~~

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Appendix 3
Agency Comments from Working Group on Draft Report

Contents

U.S. Department of Justice

Washington, D.C. 20530

JAxelrad:emm

November 16, 1993

Mr. Earl DeHart
Chairman
Inter-Agency Indemnification
Working Group
Office of the Under Secretary
of Defense
Washington, D.C. 20301-3000

Dear Mr. DeHart:

This follows your November 15, 1993, letter which responds to my November 10, 1993, letter to Sherri Goodman, Deputy Under Secretary of Defense for Environmental Security.

It is not at all feasible to provide detailed comments on the draft furnished to us on November 4. For the reasons set forth in my November 10, letter, I again suggest that sufficient time be provided to permit preparation and review of our comments upon the draft.

A cursory examination of portions of the draft indicates that additional review would assist in meeting your goal of completion of a "balanced and objective submission." In order to assist in the time available, we provide a few comments below by way of example. If additional time were permitted, we would make more detailed and complete comments and would consult with other components within the Department of Justice.

Discussion of the Federal Tort Claims Act's Discretionary Function Exception.

At pages 28 et seq., the draft includes a discussion of contractors' concerns regarding the discretionary function exception to the Federal Tort Claims Act ("FTCA"). The draft summary of contractors' concerns is full and complete. The

draft, however, does not place these concerns in the context of the overall balance struck by Congress when it enacted the FTCA. The FTCA applies to all kinds of activities on the part of federal agencies and their employees. The exceptions and exclusions applicable to environmental restoration contractors are no different from the exceptions and exclusions applicable across the board to all persons presenting tort claims arising from acts or omissions of federal employees.

We are concerned that unclear, and potentially mislead language is used in the draft. For instance, at page 28 the first paragraph states that the exception "has been **ineffective** in most hazardous waste cases." In the last full paragraph commencing on the same page, the draft says that "for damage claims resulting from government activities, however, Congress has been **less generous.**" Language such as the examples provided (emphasis supplied) does not appear to be a necessary part of the draft nor does it appear to be "balanced and objective."

In light of the discussion of case authorities, it might well be useful to the Congress to include cases highlighting the relationship of the discretionary function exception to other provisions of the FTCA applicable to claims related to those discussed in the text. See, e.g., Employers Insurance of Wausau v. United States, 830 F. Supp. 453 (N.D. Ill. 1993); United States v. Nicolet, Inc., 1987 U.S. Dist. LEXIS 5076 (E.D. Pa., March 20, 1987). Finally, it is not correct to suggest that Daigle v. Shell Oil, cited at page 36, "is an example '[d]emonstrating the difficulty of applying the Gaubert rule . . . .'" Rather, Daigle illustrates the application of Gaubert, rather than the "difficulty of applying" the Supreme Court's ruling. Moreover, the speculation at the end of the discussion, raises more questions than a "balanced and objective submission" would appropriately include.

The text of the report

More generally, we are concerned that the choice of language in the report is not always "balanced and objective." By way of example only, the first two sentences in the paragraph under the heading "**Indemnification Policies**," on page vii, could be revised as follows:

> Indemnification of environmental restoration contractors is **very much the exception** [far from universal] in **both** [either] the public [or] **and** private sectors. **Most** federal agencies do not [routinely] provide indemnification, although **some on occasion** provide limited contractor protection through particular contract clauses. **Only** a few states provide indemnification for their

environmental restoration contractors. **Some states** [but even more] provide immunity.

Words added are in bold; deletions are bracketed. We believe that the entire report should be similarly reviewed in order to avoid skewing the report unnecessarily.

Very truly yours,

JEFFREY AXELRAD
Director, Torts Branch
Civil Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 17 1993

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. Earl DeHart
Office of the Deputy Under Secretary of Defense
(Environmental Security)
Department of Defense
The Pentagon, Rm 3E767
Washington D.C. 20301-3000

Re: Revised Draft "Report to Congress on the Indemnification of Contractors Performing Environmental Restoration"

Dear Mr. DeHart:

Thank you for the opportunity to comment on the revised draft of the Department of Defense Indemnification Report. The report reads much better than its predecessor and has more useful information. I do have the following comments:

- The executive summary and Paragraph 1 state that CERCLA 119 applies to contractors carrying out remedial actions (p.6). This should read "carrying out response actions". CERCLA 119 is not limited to remedial actions - remedial investigations and design work may also be indemnified under CERCLA 119 authority.

- In the exclusion section, Paragraph 1, (p.7), please add that RCRA facilities may not be indemnified. In addition, it should be clear that 119(a) provides only Federal strict liability protection, not protection from State laws.

- The report should note that indemnification costs, i.e., claim payments, are subject to cost recovery. These recovered costs would factor into any cost benefit analysis of insurance versus indemnification.

- The discussion on cost reimbursement contract clauses that offer contractors protection should be expanded. In addition, the section states that "DoD **might** have an additional form of protection..." (emphasis added). Other instances of may and might appear, although it is

clear that the use of contract clauses for indemnification on cost reimbursement contracts is available. We agree that these clauses are not preferable, even though they are available.

- In Paragraph 5, (p.41), the discussion on the Coast Guard's use of 119 states that there is a conflict in using 119 for indemnification due to the prerequisite for soliciting without indemnification first. EPA does not see it as a conflict, rather it is a requirement that limits the amount of indemnification offered by the government. It is likely that if the Coast Guard needs to use indemnification provisions it will be because firms will not work without it, thereby meeting the "lack of competition due to indemnification" requirement.

- The discussion in Paragraph 8 centers on the cost differences between offering indemnification and purchasing insurance. The cost of offering indemnification implies an unlimited amount, which in EPA's case is no longer true. If any indemnification were to be offered in the future it would be limited in some way. Limited indemnification should be reflected in the cost benefit discussion.

- Again in Paragraph 8, (p.50), statements are made that under ideal conditions there will be no difference in cost to the government in indemnifying contractors rather than purchasing insurance. Data on how this conclusion is reached should be presented clearly. The discussion on indemnification versus insurance does not support the conclusion. If the government purchased claims-made insurance policies each year for each of its contracts, including the purchase of some insurance to cover tail periods, the price would be high. In comparison, a limited indemnification policy that had deductibles and defined terms similar to insurance policies would be more cost effective as profit and fees would not be incurred by the Government.

- Please add the cost of insurance purchased by firms who do not receive indemnification into the cost benefit section. EPA has preliminary information that indicates that when indemnification is not offered on cost reimbursement type contracts, firms purchase insurance to cover their risk. These insurance costs are an allowable cost eligible for reimbursement if they are found to be fair and reasonable.

I am forwarding my copy of the draft document with annotated comments. I have noted some areas that need to be edited to tighten up the flow. At times the discussion strays from the point, resulting in confusion to the reader.

I look forward to reading the final report. This report goes a long way towards building the knowledge base on indemnification of environmental response contractors. Please don't hesitate to call me on 202-260-6674 if you have any questions or need a point clarified.

Sincerely,

Barbara McDonough

Barbara McDonough

cc: Tim Fields
Paul Nadeau
Ika Joiner
Carol Cowgill
Bill Topping

(1)

THE UNDER SECRETARY OF DEFENSE

WASHINGTON, DC 20301-3000

ACQUISITION

Therefore I am not requesting any additional indemnification authority at this time. We will continue to monitor the situation to ensure that DOD environmental restoration work is performed efficiently and in a cost effective manner.

Honorable Ronald V. Dellums
Chairman, Committee on Armed Services
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

I am pleased to provide this *Report to Congress on the Indemnification of Contractors Performing Environmental Restoration*. This document addresses the eight points of inquiry required by § 332 of the National Defense Authorization Act for Fiscal Year 1993, Pub. L. 102-484.

The report shows that, to date, the Department of Defense has generally received sufficient numbers of responses to environmental restoration solicitations and has successfully obtained qualified contractors even though we have not offered statutory indemnification provisions. However, current data is insufficient to fully assess the adequacy of competition and the quality of contractors that might perform environmental restoration work for the Department in the future. The report does note that the available indemnification authorities may not cover all potentially important categories of environmental restoration contractors or contract circumstances.

In addition to the adequacy of competition question, we have identified several other important aspects of the indemnification issue that were outside the scope of this report. These include the following:

- Who will compensate for damages and injuries that result from the Department's environmental restoration activity if the contractor has insufficient assets, insurance is inadequate, and there is no government guarantee?
- How will indemnification affect contractor performance?
- What are the fairness issues of exposing contractors for years to liabilities that may be the result of situations they did not create and over which they had little control?
- What is the impact of indemnification on short-term and long-term environmental restoration costs?
- What is the effect of indemnification on the continued development of environmental impairment liability insurance?
- How will changes made in the upcoming CERCLA reauthorization affect the indemnification issue?
- What is the cost to the taxpayer and the Federal Treasury of indemnification?

Therefore, although the report focuses on the specific indemnification issues that are raised in § 332 of Pub. L. 102-484, we believe a broader analysis is needed before we can consider any changes to the Department's indemnification policy. We are already proceeding with such an analysis and expect to complete our studies in the spring of 1994.

A similar letter has been sent to the Ranking Republican and the Senate Committee on Armed Services.

Sincerely,

cc: Honorable Floyd Spence
Ranking Republican

Executive Summary

This report on indemnification of contractors performing environmental restoration is provided to Congress by the Department of Defense (DoD) in response to § 332 of the National Defense Authorization Act for Fiscal Year 1993, Pub. L. 102-484. It was developed in consultation with the Department of Justice, the Environmental Protection Agency, the Office of Management and Budget, and other federal agencies. It is based primarily on information obtained from these government agencies, contractor trade associations, the insurance industry, and private parties performing environmental restoration.

DoD has access to three statutory indemnification authorities: Pub. L. 85-804, 10 USC § 2354, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 119. In addition, DoD's general contracting authority permits the inclusion of certain clauses into cost-reimbursement contracts that provide some environmental restoration contractors performing work on DoD installations with limited liability protection. The use of these indemnification authorities or contract clauses may not provide protection for all types of environmental restoration contractors or contract situations. Many environmental restoration contractors performing work at sites other than National Priorities List sites and some construction contractors may not be covered under the existing protection mechanisms. Chapter 2 provides more detailed information on these indemnification authorities and contract clauses.

The data from the DoD components indicate there has been no difficulty in obtaining qualified environmental restoration contractors without offering indemnification. However, it is unclear if there are segments of the contracting community that could provide even better services at a lower cost to DoD, but that decline to bid because of the lack of indemnification. Based on the data provided by the DoD components, it appears that very few large defense firms and a limited number of large environmental companies have responded to DoD environmental restoration solicitations. Several large acquisitions currently under way may provide DoD an opportunity to better evaluate the issue of adequate competition. See Chapter 3 for more detailed information on the adequacy of competition for DoD's environmental restoration contracts.

Contractors that have performed the sorts of activities an environmental restoration contractor would perform, e.g., soil excavation and movement, have been found to be Potentially Responsible Parties (PRPs) as defined by CERCLA, and held liable for contribution to other PRPs. However, in only one case so far has an environmental restoration contractor actually been found liable for CERCLA cleanup costs. No contractor, either an "ordinary construction contractor" that has undertaken restoration-like activities that encountered hazardous waste or an actual environmental restoration contractor, has been found liable for claims for damages or personal injury resulting from a release from a hazardous waste site. However, there is nothing in the law that statistically diminishes the viability of these claims. Courts have refused to dismiss them in pending cases, and thus have cleared the way for litigation to proceed. See Chapter 4 for more detailed information on the liabilities and associated litigation faced by environmental restoration contractors.

Most federal agencies, including DoD, do not regularly offer statutory indemnification to environmental restoration contractors. However, some federal agencies do provide limited protection through their general contracting authority. State agencies have widely varying practices. Eight states have indemnified environmental restoration contractors under state authority in the past, although at least one state no longer offers this indemnification. Fourteen states provide contractors with immunity rather than indemnification; this means that an injured party may have no way to obtain compensation for damages. By their nature, private party indemnification practices are difficult to ascertain. DoD received information from 17 major PRPs. Although there are exceptions, this evidence suggests that most private parties provide, at most, only very narrow indemnification to their environmental restoration contractors. See Chapter 5 for more detailed information on the indemnification practices of federal agencies, state agencies, and private parties. See Chapter 7 for more detailed information on past DoD indemnification practices.

Environmental impairment liability (EIL) insurance is becoming more widely available and at somewhat more reasonable prices. This is particularly true for policies that can take advantage of bulk-rate pricing by covering several large contracts. It may be that the better terms and lower costs available on

multi-contract policies are due more to the increased negotiating power than to the "economies of scale" that typically impact bulk-rate costs. EIL policies still do not cover the "long-tail" liabilities—those that occur decades after the policy is written and the premiums paid. This is particularly important in the context of environmental restoration because many of the health effects that may occur as a result of an environmental restoration are not expected to surface for 10 to 30 years. See Chapter 6 for more detailed information on EIL insurance availability, coverage, and rates.

This report does not make any recommendations regarding the desirability of additional indemnification authorities. However, it does discuss possible costs and benefits of various indemnification authorities. One important but often overlooked cost is the social cost associated with the policy of not providing indemnification to environmental restoration contractors. Who pays for the losses and injuries of citizens exposed to a release from a DoD site if the government is not required to compensate them and the contractor lacks insurance and the financial resources to do so? This situation is a very real possibility and in fact exists on a smaller scale at the state-run cleanups that have provided immunity, rather than indemnification or insurance, for their environmental restoration contractors. See Chapter 8 for more detailed information on possible indemnification policy costs and benefits.

Chapter 1: Introduction

This report on indemnification of contractors performing environmental restoration is provided to Congress in response to § 332 of the National Defense Authorization Act for Fiscal Year 1993, Pub. L. 102-484. It was prepared by the Department of Defense (DoD) in consultation with a government agency working group consisting of representatives from the Department of Energy (DoE), the Department of Justice (DoJ), the U.S. Environmental Protection Agency (EPA), and the Office of Management and Budget (OMB).[1] The report is based primarily on information obtained from the working group, contractor trade associations, the insurance industry, and private parties performing environmental restoration. Additional information was obtained from congressional hearings, journal articles, and other publicly available sources.

The body of the report is organized into chapters that correspond to the eight paragraphs in § 332. With one exception, each chapter contains the response to one paragraph. Because paragraphs (2) and (3) are closely related and have a common response, they were answered together in a single chapter. Thus, there are seven rather than eight chapters following this introduction.

Each of the seven chapters has a similar structure, composed of four distinct parts. Each chapter begins with a verbatim quotation of the paragraph from § 332 that the chapter addresses. Next, it presents a synopsis of the response to that paragraph, which can be used to gain insight into the response without reading all of the details. The remainder of the chapter text provides the detailed response to the subject paragraph. Notes for the responses to the paragraphs are found at the end of each chapter.

This introduction presents an overview of the indemnification issues that pertain to this report. It also provides pointers to the chapter(s) in the report containing more detailed information on each issue. Lastly, it presents some basic terminology and definitions that are used in the remainder of the report.

OVERVIEW OF THE INDEMNIFICATION ISSUE

Definitions of "Environmental Restoration Contractor" and "Indemnification"

Environmental restoration contractors, as used in this report, are defined as those contractors who are hired specifically to perform environmental restoration activities in connection with previously contaminated sites. Therefore, contractors that perform environmental restoration as part of another function, such as operating defense facilities, are not considered to be environmental restoration contractors, *per se*. Environmental restoration contractors perform many types of work: environmental studies, design, construction, transportation, storage, disposal, and management. Different categories of environmental restoration contractors may be exposed to different kinds of liabilities, and each may have different risk management options open to them.

The term environmental restoration contractor is broader than response action contractor (RAC), as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).[2] RACs are those environmental restoration contractors that perform work at National Priorities List (NPL) sites or perform removal actions at any site. Most DoD environmental restoration is performed at non-NPL sites and includes work other than removal actions.

Indemnification is an agreement whereby one party (the United States) agrees to reimburse a second party (the environmental restoration contractor) for liability to third parties or enforcement agencies for damages or cleanup costs that result from the contractor's performance of work under contract to the government. It is therefore a contractual obligation that allocates risk of liabilities between the contracting parties.[3]

Indemnification in Context

The issue of whether or not DoD contractors that perform environmental restoration should be indemnified is [illegible] by a risk-sharing mechanism seems straightforward, comprising a simple waiver. However, [illegible] is a comprehensive manner involves a complex, and interacting set of economic and governmental relationships, risk allocation and liability theories,

Indemnification is a risk transfer mechanism whereby one party agrees to be liable for another party's actions. In this context,

The issue of whether [illegible] is needed or appropriate [illegible] to protect

public policy considerations, and specific indemnification mechanisms.

While there are statutory provisions that permit the government to indemnify contractors under various circumstances, use of these authorities is not the only way that risk sharing is allocated in government environmental contracts. Under the cost principles of FAR part 31, the contractor's liability costs can also be compensated through the general contracting authority of DoD, to the extent that they are considered allowable costs.

The question at the core of the DoD indemnification issue is "who pays for the losses and injuries caused by a release from a DoD site during environmental restoration?" Environmental restoration contractors are concerned that they will be liable for paying a disproportionately large share of this compensation, even though many actions are beyond their control.[4] After all, they were hired to clean up the contamination; they had no part in creating it in the first place. The government, on the other hand, is interested in obtaining the best environmental restoration value possible. If the government absorbs some of the contractors' liabilities, then the incentive for quality performance may be diminished and potential future outlays faced by the government may increase.

Theories of Liability

There are various theories of liability under which claims may be asserted, and these theories apply in varying degrees to environmental restoration work. This discussion will focus on liabilities for which indemnification may be appropriate.[5] These fall into two main categories: (1) liability for CERCLA cleanup costs, and (2) liability for personal injury and property damage, called tort liability. Liability for CERCLA cleanup costs is generally controlled by federal law, i.e., CERCLA.[6] Liability for personal injury and property damage is generally controlled by state law, and therefore varies significantly from state to state.

CERCLA Cleanup Liability. CERCLA imposes strict liability for cleanup costs on all persons, including the federal government, falling into any of four categories. These categories are: (1) owner or operator of the facility; (2) former owner or operator at the time of disposal; (3) a person who arranged for disposal of hazardous substances at a facility, known as a generator; or (4) transporters who select the disposal facility, including the federal government. Strict liability is a doctrine that imposes liability without regard to fault. This means that a contractor subject to strict liability could perform flawlessly, but if its action caused a release of hazardous waste or damage, the contractor is liable. Chapter 4 provides additional detail about CERCLA cleanup liabilities.

Most contributors of materials to a hazardous waste site have been held to be "jointly and severally" liable for cleanup costs. This means that the claimant can sue any of the contributors and recover the entire judgment from that single contributor. That contributor can then sue the other contributors to recover their shares of the judgment, but in the meantime, the claimant is paid. In general, courts hold defendants jointly and severally liable when the damage caused is difficult to divide among the defendants. Recent Appeals Court decisions put the automatic application of joint and several liability for CERCLA cleanup costs into question. Chapter 4 provides more detail on CERCLA cleanup liability.

Personal Injury and Property Damage Liability. States may impose either a strict liability or negligence standard for personal injury and property damage (tort) liabilities. Generally, if a state court finds that the activity is "ultrahazardous," then strict liability (liability without fault) applies. Courts have varied in their determination whether hazardous waste cleanup is considered an "ultrahazardous" activity. If the activity is determined not to be ultrahazardous, then the defendant must be found to be negligent in order to be liable for tort damages.

Negligence is defined as the failure to exercise due care. Professional negligence imposes a slightly higher standard, i.e., failure to comply with the generally accepted standards of the industry. Since the environmental restoration field continues to develop at a rapid rate, it is difficult to define professional standards of conduct. In the event of litigation, there is also a possibility that the "then current" standards, rather than those in place when the activity occurred, could be imposed. Chapter 4 provides additional information on tort liabilities and how they may apply to environmental restoration contractors.

One of the environmental restoration contractors' major concerns is that the federal government may be immune from tort liability on actions for which both

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Indemnification can be examined from at least four perspectives: (1) public policy considerations (2) cost considerations (3) contractor performance, and (4) contractor considerations. **Public policy considerations** ask the question of whether it is necessary or appropriate for the general taxpaying public to assume the financial liabilities for environmental restoration contractors' business decisions and actions. Is this work so unusually hazardous or so new and difficult that normal business relationships should be changed to shift the risk to the US taxpayer? **Cost considerations** are difficult to quantify and are therefore essentially unknown. What is known is that providing indemnification is like writing a blank check to be presented to the government and the US taxpayer at some future time. This open ended commitment to some future payout also raises serious questions about the potential disruption to government services being provided at that time when there is a limit on the amount of money the government can spend. **Contractor performance** is also likely to be affected by indemnification provisions. If the government absorbs some of the contractors ' liabilities, then the incentive for quality performance may be diminished. The change in the quality of the contractors' work may result in increased costs to the US taxpayer as more accidents occur from negligent contractor performance. **Contractor considerations** include the contractors concern that the risk of performing environmental restoration work without indemnification is too great; they maintain that they, in effect "bet the company" every time they bid. Furthermore contractors contend that they are merely cleaning up the contamination and that they had no part in creating it, and that to hold them responsible is unfair. They warn that DOD will soon be unable to obtain adequate competition, and consequently that its environmental restoration costs will be higher than they need to be.

the contractor and the government bear direct responsibility. This may leave the contractor exposed as the only remaining target for such claims. If a judgment is assessed against the contractor and the contractor does not have adequate insurance, or is otherwise unable to pay, the injured parties may go uncompensated. Chapter 4 discusses the federal government's immunity to certain tort claims. Chapter 8 addresses the social cost that results from injured parties who are unable to obtain compensation for their injuries.

"Long-Tail" Liabilities

Many of the aspects of liability found in environmental restoration contracting are similar in principle to those that are routinely addressed in contracts that deal with real property development or modification for the government. However, some significant differences have infused environmental restoration contracting with additional risks. Primary among these is the uncertainty of "long-tail" liabilities. Because health effects from hazardous material exposures during environmental restoration activities may not become apparent for years or even decades after the completion of the work, contractors are exposed to tort liability for an indefinite period of time. These long-tail liabilities are particularly significant because insurance may no longer be in force, and claims against the government may not be possible. Chapter 5 provides further information on the availability, coverage and cost of environmental impairment liability insurance. Chapter 2 provides information on the coverage and timeframes of various indemnification authorities and other contractor protection mechanisms.

Indemnification considerations INSERT A

The government can examine the indemnification issue from at least three perspectives: (1) fair contracting practice, (2) the social cost aspect, and (3) cost considerations. Fair contracting practice addresses the question of whether or not it is equitable for environmental restoration contractors to be exposed, for years, to liabilities sometimes resulting from situations they did not create and over which they had little control. If not, should the government assume this liability through indemnification or other risk-sharing mechanisms?

The social cost aspect occurs when parties injured because of environmental restoration of DoD sites do not have a way to obtain compensation for their injuries. In terms of public policy, should the government provide compensation to these parties? This question is briefly addressed above and is discussed in more detail in Chapter 8.

The cost considerations for indemnification are often described in terms of the adequacy of competition needed to obtain the best environmental restoration value possible. Contractors contend that the risk of performing environmental restoration work without indemnification is too great; they maintain that they, in effect, "bet the company" every time they bid. They warn that DoD will soon be unable to obtain adequate competition, and consequently that its environmental restoration costs will be higher than they need to be.

DoD has not yet experienced this lack of competition in terms of sufficient numbers of qualified bidders. However that does not necessarily mean that DoD obtains the best competition possible and therefore obtains the best environmental restoration value possible. Chapter 3 provides further insights and information on the adequacy of competition for DoD environmental restoration contracts. Chapter 8 discusses the costs of various indemnification policies.

Since DOD has not experienced problems in obtaining qualified contractors, contracts concern may simply be "worst case fears"

Indemnification Policies

Indemnification of environmental restoration contractors is the exception in both public and private sectors. Most federal agencies do not routinely provide indemnification, although some provide limited contractor protection through particular contract clauses. A few states provide indemnification for their environmental restoration contractors, but even more provide immunity. This means that the contractor is protected and the state does not incur additional liabilities. It also means that injured parties do not have a way of obtaining compensation for their injuries. Anecdotal evidence suggests that most private parties who engage in environmental restoration contracting do not offer broad indemnification coverage, although some provide limited protection. Chapter 5 provides more details on the indemnification practices of federal agencies, state agencies, and private parties. Chapter 7 provides details about DoD's use of the indemnification authorities and other contractor protection mechanisms.

limited information

since the work undertaken in these contracts may not generally meet the criteria for using Pub. L. 85-804.

Regulatory Provisions

Regulatory implementation is found in FAR subpart 50.4, "Residual Powers," with a prescribed contract clause at FAR 52.250-1.

Scope of Coverage

The contractual indemnification provided by Pub. L. 85-804 is very broad and applies to any losses not compensated by insurance, including reasonable expenses of litigation and settlement, third-party claims for injury or damage, loss or damage to the property of the contractor, loss or damage to the property of the government, and claims arising from indemnification agreements between the contractor and its subcontractors. The implementing FAR clause, FAR 52.250-1 does not directly address contractor pollution liability, which in some instances might be more extensive than the "loss, damage, or lost use of property" covered in the clauses. It is not clear if claims asserted by regulatory entities for environmental cleanup costs would be considered third-party claims. It would cover claims based on strict liability (that is, liability without fault), as well as those arising from contractor negligence. The agency may tailor the application of this authority to the specific circumstances of an environmental restoration contracting situation. Indemnification under the Pub. L. 85-804 may be extended to subcontractors with contracting officer approval.

Pub. L. 85-804 has not been used to indemnify DoD contractors performing on environmental restoration contracts. A provision that would specifically enable use of Pub. L. 85-804 for environmental restoration activities at current and former military installations and facilities that was included in the FY 93 Defense Authorization bill prompted a critical response from some members of Congress.[24,25] [illegible]

Exclusion

The protection afforded under Pub. L. 85-804 does not cover willful misconduct or lack of good faith on the part of the contractor's principal officials including directors, officers, managers, superintendents, or other representatives supervising or directing (1) substantially all of the contractor's business, (2) substantially all of the contractors' operations at any one plant or separate location where this contract is being performed, or (3) a separate and complete major industrial operation connected with the performance of this contract.[26]

Anti-Deficiency Act

Indemnification under Pub. L. 85-804 is not limited by available appropriations and is thus exempt from the Anti-Deficiency Act.

Timeframe

Indemnification under Pub. L. 85-804 is not limited in time.

Qualifications

Pub. L. 85-804 indemnification must be approved in advance by an official at the level of secretary of a military department. For the activity to qualify under this authority, it must meet the following three qualifications that are documented as findings in a "Memorandum of Decision".[27]

(1) Unusually hazardous or nuclear in nature

The activity for which indemnification is to be provided must be unusually hazardous or nuclear in nature. The FAR does not define "unusually hazardous" risks in connection with using Pub. L. 85-804, but leaves the identification of these risks to be specified in the contract and approved by the approval authority.

In environmental restoration contracting, the risk circumstances related to response actions taken by the contractor can differ markedly in different instances. Some environmental restoration actions could involve recovering large amounts of highly toxic substances found in dump sites. Other situations could be described as "unusually hazardous" only because small but measurable quantities of listed wastes (substances identified as hazardous in the EPA's "Hazardous Waste Management System"[28]) are involved in the cleanup. Most of DoD's contamination results from chemical residues that are not dissimilar to those routinely addressed in the commercial sector. While the substances may be listed as hazardous, they may not be unusually so.

The restatement of Torts (2nd) provides a widely recognized framework for determining whether an activity is abnormally dangerous. Section 520 lists six

Administrative Requirements

As discussed above, when approving a proposal for the exercise of Pub. L. 85-804 indemnification, the approving authority must prepare a Memorandum of Decision justifying its use.

The process for approving the use of Pub. L. 85-804 authority can be somewhat protracted and cumbersome. It is normally used in connection with requests for indemnification related to large contracts that may span significant timeframes and involve serious technological difficulties. The process is not at all well-suited for dealing with the multitude of relatively small contract actions that are dealt with under the Defense Environmental Restoration Program (DERP). FAR Part 50.403 outlines the information that must be supplied by the contractors, especially representations of financial responsibility. FAR 50.403-2 describes the steps that the contracting officer must pursue to act on indemnification requests. This approval process must be negotiated for each individual contract under which this authority is to be used, unless some blanket authority is separately established for a class or kind of contract. Additionally, the agencies must report to Congress on their use of Pub. L. 85-804 authority.[35] These requirements are extensive and time-consuming and might also be sufficient to discourage the general use of the authority.

10 USC 2354, "CONTRACTS-INDEMNIFICATION PROVISIONS"

Regulatory Provisions

Regulatory implementation of this authority is found at DoD FAR Supplement (DFARS) 235.070, and the prescribed clauses are found at DFARS 252.235-7000 for fixed-price contracts and 252.235-7001 for cost-reimbursement contracts.

Scope of Coverage

10 USC § 2354 provides for indemnification under DoD Research and Development contracts or contracts that contain research and development components. Most environmental work for DoD is not likely to be accomplished through research and development contracts, but this authority would be available for work that might be acquired in such a way. For example, this might include testing innovative environmental cleanup technologies. Then, if indemnification is needed, § 2354 authority might be appropriate for such work.

Both DoD and EPA expect that innovative technology will accelerate the cleanup program, improve pollution prevention efforts, and save money over the long run. Both agencies support a research and development program aimed at delivering innovative cleanup techniques to the field as soon as possible.[36,37] DoD's Strategic Environmental Research and Development Program (SERDP) is designed to facilitate the introduction of new environmental technology into the DoD's operations and cleanup actions. The EPA's SITE program is funded by various sources and engages in cooperative agreements with federal installations to test its technology.

Indemnification may extend to third-party claims,[38] contractor property loss or damage, and Government property loss or damage arising out of risks defined in the contract as unusually hazardous.[39] However, some courts might rule, as they have in the context of CERCLA, that cleanup costs are not property damages.[40] Indemnification under § 2354 may be extended to subcontractors,[41] and could include claims or losses based on strict liability. Contracts involving both research and development and other work may provide for indemnification under the authority of both § 2354 and Pub. L. 85-804. Pub. L. 85-804 would apply only to work to which § 2354 does not apply.[42] Indemnification authority may flow down to lower tiers of subcontractors upon the contracting office's prior approval.

Exclusions

Claims must not be compensated by insurance.

Loss or damage must not result from willful misconduct or lack of good faith on the part of any of the contractor's directors, officers, managers, superintendents or other equivalent representatives who have supervision or direction of (1) substantially all of the contractor's business, (2) substantially all of the contractor's operations at any one plant or separate location where this contract is being performed, or (3) a separate and complete major industrial operation connected with the performance of this contract.

Claims must not be for a liability assumed under any other contract or agreement unless approved by the contracting officer.

Chapter 2: Indemnification Authorities

SUMMARY OF AUTHORITIES

Table 1-1 summarizes the primary attributes of the authorities available to DoD to indemnify environmental restoration contractors.

Pub. L. 85-804 provides DoD with broad, discretionary authority to indemnify contractors performing unusually hazardous activities if indemnification would facilitate the national defense. Although this authority has been used sparingly in other hazardous defense-related situations, it is available for use, to a limited practical extent, on environmental restoration contracts if the need arises. While the use of the authority is discretionary, the criteria for its application are specific and may be difficult to meet in many instances of DoD environmental restoration contracts. It may also be difficult to rationalize its applicability to cleanup of closing bases since their future use will be for civilian purposes rather than actually in the "national defense." Procedural complexity and a tradition of sparing use may serve to limit the authority's practical applicability to the increasing number of environmental restoration contracts and the expanding scope of the work that is being accomplished. Application of Pub. L. 85-804 is discretionary and not subject to judicial review. However, Congress reviews its use, and key members of Congress have expressed substantial opposition to employing it to indemnify environmental restoration contractors.

§ 2354 is powerful but very limited in its application since it applies only to research and development work.

CERCLA § 119(c) is available to indemnify RACs performing remedial action on NPL sites. Indemnification for RACs performing removal actions under CERCLA § 119(c) has been interpreted as being available at any site. The statutory definition of "RACs" is less encompassing than that of "environmental restoration contractor" as called for in § 332. Indemnification for contractors performing remedial actions under CERCLA § 119(c) applies at the less than 6 percent of DoD's installations that are on the NPL. Since NPL installations are the most extensively contaminated and have more actual sites than the average installation, the sites on DoD's NPL installations comprise about 22 percent of DoD's total sites requiring remediation. Also, the Hazard Ranking System[84] was applied to all DoD installations, and only the worst installations achieved a sufficiently high score to be listed on the NPL. Thus, the installations where this authority does apply for remedial actions are likely to be the worst cases. Nonetheless, a significant majority of DoD sites do not meet the criteria for use of CERCLA § 119(c) indemnification in the case of remedial actions and related work at such sites. Additionally, EPA's guidelines (e.g., the multiple solicitation requirement) impose administrative obstacles to the efficient implementation of its use in DoD.

DoD's general contracting authority permits a form of protection from environmentally-related costs through the reimbursement of allowable costs and through the "Insurance—Liability to Third Persons" clause, 52.228-7. The clause does not apply to firm fixed price contracts, such as those most often used for construction projects in the remedial action phase of environmental restoration work. Additionally, the FAR specifically excludes architect-engineer contracts from use of the insurance clause

Chapter 3: Adequacy of Competition

Response to § 332, Paragraphs (2) and (3)

Paragraph (2): The extent to which the authorities referred to in paragraph (1) are available to ensure adequate competition and qualified contractors for actions not governed by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.), and the extent to which additional authority to ensure adequate competition and qualified contractors is necessary for such actions.

Paragraph (3): The extent to which the indemnification authority provided in § 119 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 is necessary to ensure adequate competition and qualified contractors to perform remedial actions at military installations listed on the National Priorities List or removal actions pursuant to such Act.

SYNOPSIS

Environmental restoration at DoD sites is addressed via the Defense Environmental Restoration Program (DERP). Although conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)[1], response actions undertaken by this program are not limited to CERCLA National Priorities List (NPL) sites. As noted in Chapter 2, the great majority of DoD installations are not listed on the NPL, and thus may not be eligible for the indemnification provided in CERCLA § 119. In other respects, the qualitative differences between NPL and non-NPL sites are minimal, and the issues regarding competition and quality of contractors are common to both situations. Therefore, DoD has chosen to respond to Paragraphs (2) and (3) together. There is a common question addressed in the two paragraphs: to what extent is indemnification needed to ensure adequate competition and qualified contractors?

To respond to these issues, DoD has examined the available data regarding contracting and indemnification, and has looked at the relationship between risk management and competition. A review of the status of the DoD restoration program, an analysis of the risks associated with environmental restoration, and a survey of the characteristics of the contractor community were undertaken to further define adequate competition and qualified contractors.

The DERP has yet to face the majority of its remedial actions, but is rapidly approaching a shift in the program where remediation dominates contract solicitations. Although risks arise in all phases of investigation and cleanup, the exposure to liability may increase as activities which disturb, remove, treat, transport, or dispose of wastes take place. Although current data is limited to case studies, the representatives of the contractor community, and certain large firms in particular, state that these combinations of circumstances make their continued competition for DoD environmental restoration contracts too risky. On the other hand, firms appearing on the *Environment Today*[2] list of the top 100 environmental contracting companies routinely appear as bidders and winners on DoD environmental restoration contracts.

From the standpoint of DoD, competition in environmental restoration contracting is desirable to obtain the best value. To date, DoD has had no difficulty in obtaining sufficient numbers of qualified bidders for environmental restoration work without offering indemnification. However, there are indications that some major DoD contractors and several large environmental firms are not participating in DoD environmental restoration work. The limited evidence available is insufficient to conclude whether these segments are declining to bid because of indemnification issues, or that these segments could provide better value to the environmental restoration efforts of DoD.

CURRENT DATA ON CONTRACTING AND INDEMNIFICATION

DoD has not provided indemnification to environmental restoration contractors, so the evidence will be limited to the results of competitions conducted without it. (Examples of DoD's use of the indemnification authorities described in Chapter 2 are contained in Chapters 5 and 7).

The DoD Components provided procurement information and data to this study for purposes of helping ascertain whether adequate competition currently exists for environmental contracts and to what extent indemnification is needed to ensure that it exists. The data was provided in response to an information request from the Office of the Assistant Secretary of Defense (Environmental) (OASD[E][3]). The data provided is highly variable in coverage and completeness

not relevant to issue

(12)

Lastly, the Army notes a situation where some type of indemnification may have been appropriate, but which was not covered under existing indemnification authorities[8]. This case points out the need for considering the social costs in addition to the competition aspects when discussing indemnification issues. In January 1993, construction crews working in the Spring Valley neighborhood of Washington, DC, unearthed 141 intact chemical munitions dating from World War I. This led to the discovery that this residential area had once been a testing ground for chemical warfare. The 141 munitions were removed under a CERCLA removal action. The Army is now continuing its remedial activities throughout the area to determine if additional munitions remain in the area.[9] The contractor hired by the Army may be conducting intrusive testing on individual homeowner's lots throughout the Spring Valley area. The homeowners have expressed great concern about their ability to recover damages from the United States in the event of contractor negligence. Since the formerly used defense site is not on the NPL, indemnification was not possible through CERCLA § 119. Army officials also concluded that significant uncertainty regarding the applicability of Pub. L. 85-804 to a FUDS cleanup and the administrative process required for Pub. L. 85-804 approval, made that authority unavailable. Therefore, the Army opted to reimburse the contractor for costly insurance. Army attorneys relate that had clear indemnification authority been available, its use would have been recommended.[10]

RISK MANAGEMENT AND COMPETITION

The available data regarding the number and competency of firms responding to solicitations show that adequate competition currently exists. However, the data are insufficient to conclude that DoD is necessarily obtaining the best environmental restoration value possible.

Competition must be thought of not only in terms of the number of respondents, but also whether the companies with the right qualifications are responding. Indeed, the issues of competition and quality of respondent are inseparable in this context. As a result, both DoD and the contractor community have vested interests in increasing competition for remedial action contracts. For DoD, increased competition means better application of cleanup technologies, including innovative technologies, at the most reasonable price to the government. For the contractor community, increased competition is an indicator of a more favorable business environment, one in which contractors freely enter the market and are willing to propose innovative solutions to hazardous waste problems. In order to examine this issue in more detail, the relationships between risk, competition, and quality of contractors must be explored.

The issue of adequate competition in the environmental restoration marketplace is linked to a company's ability to manage risk—in this case, the risks associated with the various liabilities a company is exposed to in the course of performing environmental restoration. There are two broad strategies a company has for dealing with risk it does not wish to assume: (1) reduce or shift the penalties that might accrue from realized liabilities, or (2) reduce exposure to liability.

The first strategy for risk management has focused on the purchase of insurance (where available and adequate), various forms of cost reimbursement, and indemnification to limit the financial risk to remedial action contractors. Because insurance may be difficult to obtain at a reasonable price and have significant limitations in its coverage, it generally has not been a practical solution to the issue. (See Chapter 6). Cost-reimbursement strategies have a limited timeframe during which claims can be made (see Chapter 2), and therefore cannot be relied upon by a contractor to relieve it from "long-tail" liability. (This is liability for claims based on injuries that occurred while the contract was being performed, but which are not discovered until years later. Health effects resulting from chemical exposure typically do not manifest themselves for periods of 10 to 30 years.) Finally, indemnification has not been widely provided.

The inadequacy or unavailability of strategies for shifting the burden of liability leaves the concerned contractor with the only remaining option—reducing exposure to liability. This can be accomplished by refusing certain types of work (an option open to individual contractors[11] but which has not been practiced to date by the marketplace as a whole), creating subsidiaries or other business strategies designed to protect the assets of the parent company,[12] or performing work in a manner that increases the certainty of environmental decision making. DoD insists on quality work and holds environmental restoration contractors to a high standard of performance. However, certainty is often an unattainable goal in environmental work, either in the determination of the nature and

extent of contamination or the selection of an appropriate remedial technology. Extending the investigation phase of site restoration in an attempt to achieve certainty in an uncertain environment, and avoiding innovative technologies and solutions that may carry a higher risk of failure, are strategies which may be taken by the contractor in an effort to minimize its liability. These strategies have drawbacks both for the contractor community and the government. An overly conservative approach to cleanup is no guarantee against possible future liability for the contractor, nor is it always consistent with DoD goals of using the most effective technologies, including innovative technologies, to expedite cleanup in a manner protective of human health and the environment.

Some members of the contractor community have expressed concern about their ability to compete on future remedial action contracts without access to some type of risk management. This is not a universal concern, as evidenced by the number of firms that do compete, but has been strongly expressed by a few prominent firms and trade associations. The remedy discussed most often is some form of indemnification. To fully consider the need for indemnification—or some other strategy—and its impact on competition, it is necessary to assess if the adequate competition shown by the current data is likely to be maintained in the future as the restoration program matures. This can be done by examining (1) the progression of the restoration program from investigation to cleanup, (2) the opportunities for exposure to liabilities, and (3) the character of the environmental restoration contractor community.

Conventional wisdom regarding the impact of liability on competition within the restoration contractor community rests on three main assumptions. First, that the majority of contracts let to date in the DoD environmental restoration program deal with the investigation phase, and that as the program matures, more and more work will be done in the cleanup arena. Secondly, it has been assumed that exposure to liability increases as the program proceeds. That is, remedial design and remedial action contractors performing cleanup work are assumed to be at greater risk than are contractors performing the investigation work associated with preliminary assessment/site investigation (PA/SI) or remedial investigation/feasibility study (RI/FS) projects. Finally, it is argued that both large and small firms will be required for the successful completion of remedial projects, because of the unique qualities that a diverse population of firms can apply to the problem. The characteristics of those segments of the contracting community, the determination of their ability to compete, and an examination of the current makeup of the remedial action contractors already under contract will help determine whether DoD is attracting sufficient contractors with the right qualifications.

PROGRESS OF THE DEFENSE ENVIRONMENTAL RESTORATION PROGRAM

DoD has made significant progress in moving the environmental restoration program into the remediation phase. Looking at data presented in the DERP Annual Reports to Congress for Fiscal Years 1990, 1991, and 1992, the number of site investigations planned continues to decline (from 1,263 in 1990 to 757 in 1992), as sites move into the RI/FS phase.[13] Remedial design/remedial action (RD/RA) continues to account for larger and larger percentages of the activity under way at all bases. However, the number of RA activities projected for the future still outweigh completed RD/RA projects by an approximate fifteen-to-one ratio (4,280 to 289).[14]

The shift in the program away from investigation and toward cleanup has two significant implications. First, regardless of the measurement used, data collected to date on the amount of competition and the quality of contractors has only limited utility in describing future scenarios of increased attention to actual cleanup.

Second, DoD is not alone in making this shift. EPA and Department of Energy (DoE) are undertaking concerted efforts to remediate sites and are also moving towards programs dominated by the cleanup phase. The capacity of the marketplace to meet all of these challenges, although not addressed in this report, could affect the level of competition and the contracting strategies that must be employed to ensure DoD obtains the best value in environmental restoration contracting.

PROGRAM RISKS

The basic elements of the overall environmental restoration program include investigation, design, construction, and operation and maintenance. The latter three of these comprise the cleanup phase. Within each of these elements, a variety of prime and subcontractors are involved in such functions as surveying, sampling, drilling wells, designing and building remedies ranging in complexity from earthen walls to sophisticated

treatment plants, transporting and disposing wastes, and operating and maintaining treatment systems.

The liabilities to which contractors may be exposed are discussed in greater detail in Chapter 4. Simply put, liabilities can be incurred at any phase of the restoration program. They may result from the disturbance, removal, transport, or disposal of hazardous substances, any of which can result in releases to the environment and create liability for cleanup costs, or for property damage or personal injury (tort damages). Professional liability can result from the implementation of a remedial design that ultimately fails to contain wastes, despite the application of best business principles and practices.

Negligence on the part of a contractor that results in a release to the environment can also occur at the investigation phase, because of the inherent uncertainty involved while the nature and extent of contamination is still being explored. Several cases exist in Superfund where groundwater contamination, for example, has been made worse via the inadvertent actions of a contractor involved in drilling wells for its investigations.[15] However, the exposure to suit is generally assumed to increase as waste removal, treatment, transport, or disposal activities increase, and as design, construction, and operation of a treatment or containment system proceeds. The proximity to the damage, both in space and time, make the "hands-on" contractor a more obvious target of litigation than one at earlier stages of the multiyear cleanup process. Therefore, DoD experience to date may not form an adequate database from which to determine the need for indemnification as an incentive for contractors to bid at reasonable prices on DoD work.

CHARACTERISTICS OF THE CONTRACTOR COMMUNITY

A look at the companies that have successfully bid on environmental restoration contracts at DoD in the past shows a range of sizes. Represented within this list are several of the largest environmental engineering firms in the business, as well as several smaller firms which may specialize in a particular technology. These two categories each have qualities affecting their ability and willingness to compete for future DoD remediation contracts.

Large companies may offer several benefits to the government, particularly in the performance of large remedial contracts. In theory, these companies have experience with large, complex projects, and can bring the relevant management and technical skills to bear. Serving as the focal point for the government, they can serve to streamline remedial efforts by coordinating the activities of subcontractors. The largest contractors for DoD are primarily engaged in weapons systems development involving all the steps of the systems development lifecycle, from research and development to test and evaluation, to production. These firms have expertise in moving from conceptual notions of system functionality to manifesting those notions in completed hardware and corresponding support infrastructure, and on the face of it, should be able to transfer that ability to the environmental restoration field. Some of the larger companies, however, are the very companies most vocal in their expression of need for risk-sharing mechanisms to encourage their participation in the remedial action contracting arena. Their argument is twofold: they have the most to lose in exposing assets to liability; and like all other environmental restoration contractors, they have difficulty obtaining adequate insurance and surety bonding[16] for the unknown risks associated with large remediation projects. (See Chapter 6)

Small businesses (those with less than 250 employees) account for 99.7 percent of all companies and 70 percent of U.S. employment.[17] The American Defense Preparedness Association states that as projects exceed $3 million (particularly environmental restoration/construction projects), small contractors are less likely to be able to compete. Concerns over financial stability and overexposure limit the availability of surety bonds required by the Miller Act, freezing these companies from the marketplace as prime contractors. EPA has recognized the importance of these companies in providing innovative technology and has attempted to ensure their participation in the Superfund Program by liberalizing the indemnification coverage and deductibles available to them under CERCLA § 119.[18]

Major DoD Contractors and Environmental Restoration Contracting

In 1990, the 100 largest DoD contracting firms had DoD related revenues in excess of $100 billion, and the ten largest firms in excess of $50 billion. Only one of the ten largest DoD contracting firms has had any significant presence in the environmental contracting field. Raytheon Engineers and Constructors, a subsidiary of Raytheon founded in 1993, appeared on

the "Environment Today's Top 100" list of environmental contractors for the first time this year, weighing in at number 7, with reported environmental revenues of $250 million[19].

In the DoD data examined to date, of the ten largest DoD contractors, only a subsidiary of one of them has entered any bids for environmental work solicited by DoD. This was a single unsuccessful bid for a Navy contract that was awarded to another bidder with a fixed price of about $500,000.[20] Most of this subsidiary has since been sold to another company.[21] It is not clear from the data provided why the largest DoD contractors have not vigorously joined the market for DoD environmental work. Whether lack of indemnification from environmentally related liabilities is the true cause, or if other reasons contribute to their absence from the field is unclear. These other reasons might include a lack of familiarity with the environmental business and a scarcity of in-house expertise with the technology, or strategic business decisions about future growth markets and company positioning. How much each of these, or other factors, influence the degree to which large defense firms participate in environmental restoration contracting remains an open question.

Major Environmental Firms and DoD work

Many other firms prominent in the environmental and construction business are apparently not working for DoD's environmental programs either. A preliminary comparison shows that only 17 firms named on the "Environment Today's Top 100" list are among the contractor's names submitted in the response to the information request from the components. Again, the responses received from the components were not comprehensive and many firms working at lower levels (e.g., at the installation level) within the components may not have been reported. No attempt was made to identify subsidiaries of companies that might be doing business under different names. Also, the "Environment Today's Top 100" list is not necessarily a comprehensive compilation of all the major firms performing under contracts that could be considered as environmental restoration work.

Specific Contractor Assertions

Several major construction and engineering services contractors have stated that the risk they face in performing on DoD environmental projects is too extreme. They often assert that because of the lack of indemnification, they are being asked to "bet the company" just to perform on DoD environmental contracts, a risk they claim they will not take. Representatives from Bechtel Corp.[22], and EBASCO,[23] both among the largest engineering and construction contractors in the country, have made this assertion at different times, and the National Securities Industry Association articulates this point of view for the whole industry.[24] Both these companies have recently bid on and won major Navy environmental restoration contracts without indemnification being offered. However

Participation in carefully selected environmental restoration contracts is a business decision involving many considerations, including capacity utilization, staffing issues, and risk/reward considerations. The Air Force has observed that the pressures of the market place may force industry to compete and to perform in situations that may place the contractor in a position where they are compelled to accept unreasonable financial risks.[25]

Companies sometimes weigh the risks involved with performing on a particular contract and conclude that, in some situations, they can accept the risk of participation in government environmental work without contractual risk sharing arrangements.[26] Both Bechtel Corp. and EBASCO apparently reached that conclusion. Bechtel won a Navy "CLEAN" contract in April, 1993 and EBASCO won a Navy Remedial Action Contract in June, 1993. These contractors enjoy no special indemnification connected with their performance. Their participation in these contracts should not necessarily be viewed as a repudiation of the risk sharing position they previously asserted, but may be a considered business decision given the current market and the specific risks of the work actually involved.

Analysis of Navy Data

Navy data supplied in response to DoD's information request was the most detailed. A preliminary reading of this data set[27] indicates that during FY 1991 and 1992 the Navy issued 52 "cleanup contracts" to 39 cleanup contractors for a total of $167 million in cleanup work. On these 39 contracts, 382 bids (and proposals) were received from 276 different contractors. Of these, the most significant subset are those cost reimbursement contracts for "Remedial Action Contractors" (RACs). While only eight RAC contracts were awarded, they comprise

$150 million of the $167 million total dollar volume contracted in this time period.

The solicitation for RAC contracts attracted 70 proposals for the eight contracts that were to be awarded. From among the 70 proposals, five contractors were selected to receive the eight awards. One contractor won three contracts, for a 27 percent share of the total awarded dollar amount while another contractor won two contracts for a 33 percent share of the total awarded amount. The remaining 40 percent share was distributed among the other three successful proposers. That 70 proposals were received for RAC work seems to indicate that adequate competition was achieved, but it is not evident from the data how diversified the proposer population was for each of the eight contracts. Also, since 60 percent of the RAC contract total funding was concentrated with just two contractors, it might indicate a constrained market for qualified contractors willing to participate.

Reported Contractor Quality and Financial Strength

The Navy provided a large volume of background data on the performance quality and financial strength of many of the contractors that were successful in acquiring Navy cleanup contracts.[28] The data was provided from the Navy's Engineering Field Divisions for environmental design and remedial action type work. The sample does not reflect Army or Air Force experience.

The following is a preliminary interpretation of the information provided by the Navy and represents a reasonable explanation for the way the data are distributed, but may be but one of many such explanations.

The Navy data offer the opportunity to examine the quality of the work that is provided by the construction contractors working on cleanup. Of the 340 contractor evaluations reviewed, only 18 occurrences of "unsatisfactory" were recorded, while 43 instances of "outstanding" were reported. The other option on the three point scale, "satisfactory," was scored for the remaining 279 occurrences. By and large, data for this set of contractors shows no extreme degree of dissatisfaction with the services that are being provided.

The Navy data also provide an opportunity to make some inferences about the financial strength of the Navy construction contractors used in cleanup by examining their net worth as a group. The Navy contractors range in net worth from $60 thousand to about $130 million, or a range of over three orders of magnitude. Of the 50 contractors about which the Navy provided information, 22 had a net worth of less than $1 million, and 43 of less $5 million. Five contractors had reported net worth values in excess of $10 million while two were in excess of $100 million. This information suggests that most Navy contractors for which the information was provided would find it difficult to meet major personal injury claims, especially one involving a number of injured parties, brought under the liability theories discussed in the responses to Paragraph (4).

Data Analysis Summary

The data indicate that DoD is currently receiving adequate numbers of responses from qualified bidders for environmental restoration work. However, determining the "adequacy of competition" may require more than a simple bid count. For example, are important segments of the contracting community declining to bid on non-indemnified work? Would contracting with those segments enable the DoD environmental restoration program to progress more efficiently (better cleanups at lower costs)? Will fewer firms bid on the increasing number of DoD contracts that address actual cleanup, many others having decided that cleanup work exposes the contractor to increased liabilities when compared to investigation work?

Based on the limited data analyzed, there are a few observations that can be offered about competition in DoD environmental restoration contracting that may help provide some insight into answering these questions:

- The data available are incomplete.
- Major DoD contractors do not participate in DoD environmental restoration contracting.
- Many major environmental firms do not participate in DoD environmental restoration contracting although some have participated.
- Choosing to seek a DoD environmental restoration contract is a business decision that weighs the risks of the work, the competition and the current market conditions.

- Quality of contractors is apparently not a problem at present.
- Financial capacity in the contractor community, as measured by net worth, is probably insufficient to meet a major personal injury claim, brought under the liability theories discussed in Chapter 4, from internal resources.

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Chapter 5: Indemnification Practices

Response to § 332, Paragraph (5)

Paragraph (5): The type of indemnification, if any, currently provided to environmental restoration contractors by Federal agencies, by State agencies, and by private entities at sites other than installations and sites referred to in paragraph (1).

SYNOPSIS

Most federal agencies do not regularly offer statutory indemnification to environmental restoration contractors. The Coast Guard is required by their Environmental Compliance and Restoration Authorization to offer indemnification using CERCLA § 119 authority to environmental restoration contractors performing work on NPL sites or performing removal actions. However, no qualified contractor has requested indemnification. Some federal agencies have provided limited protection for environmental restoration contractors through the general contracting authority.

State practices vary widely. Ten states have passed indemnification authorities to cover environmental restoration contractors, but only eight states have used them. New Jersey had an indemnification statute in place from 1986 until 1990, when it expired. A new indemnification authority was passed in 1992. New Jersey did not observe a decrease in competition after the original authority expired, and has never used the new authority.

Fourteen states provide immunity rather than indemnification to environmental restoration contractors. This protects the contractor and does not incur any additional state liabilities. However, the result is that an injured party may have no way to be compensated for damages.

It is difficult to conclusively determine the indemnification practices of private entities. Anecdotal evidence suggests that the practices vary significantly, from offering comprehensive indemnification to refusing to consider indemnification under any circumstances. None of the 17 respondents to DoD's survey of PRP practices provided broad indemnification coverage. Some provided very limited coverage, others provided coverage reluctantly on a case-by-case basis, and still others refused to indemnify under any circumstances.

FEDERAL AGENCIES

EPA is the only federal agency that has established a written policy regarding indemnification of environmental restoration contractors. In general, most agencies, including EPA, do not offer statutory indemnification to environmental restoration contractors, although there have been some exceptions which are discussed below and in Chapter 7. In addition, some agencies provide risk-sharing mechanisms other than indemnification, such as cost reimbursement for certain environmental liabilities.

Department of Defense

DoD generally does not provide indemnification for environmental restoration contractors. DoD did provided limited indemnification during the 1980s under 10 U.S.C. § 2354 for research and development contracts. DoD has also provided for reimbursement of environmental liability costs under cost-reimbursable contracts using FAR Part 31.[1] (See also Chapter 7.)

U.S. Environmental Protection Agency

EPA has used the indemnification authority provided in CERCLA § 119. This section has two key provisions. First, it exempts environmental restoration contractors who work on NPL sites or conduct removal actions ("response action contractors [RACs]") from the federal strict liability standard to which parties responsible for contaminating the site are held. Instead, these contractors are held liable for cleanup costs only if they are found to be negligent, grossly negligent, or engaged in intentional misconduct. This provision is non-discretionary and applies to all RACs (including DoD RACs) regardless of whether or not indemnification is offered. Second, this section effectively provides EPA with discretionary authority to indemnify RACs against third-party suits for negligence in conducting response action activities at National Priorities List (NPL) sites and removal action sites.[2] Prior to January 1993, EPA provided RACs with blanket indemnification for third-party liabilities as a result of negligence with no time or dollar limit. Gross negligence, intentional misconduct, and strict liability actions under state law were not covered.

16 states require environmental restoration contractors to indemnify the state against liability from those contractors' actions.

(19)

(B) There are 41 states that prohibit indemnification of contracts in some form or another. These statutes were passed to assure competent contractor performance and to prohibit contractual abrogation of contractor liabilities.

Private entity indemnification does occur, although it is difficult to quantify. Most PRPs require the contractor to indemnify them.

its restoration activities. In these cases, the environmental restoration contractor is protected and the state does not incur additional liability. However, the cost to the public is that an injured party may have no way to recover damages.

There are 16 states that do not offer either indemnification or immunity to the environmental restoration contractors, but rather, require that the environmental restoration contractors indemnify the state against liability resulting from the contractor's activities. An additional 17 states require contractors to indemnify the state but also offer indemnification or provide immunity to the contractors, and thus view their actions as reciprocal indemnification.

There are 41 states with statutes that probably prohibit indemnification of construction, design and environmental restoration contractors under certain conditions.[8] These statutes vary widely in their scope and coverage. They were passed to assure competent construction and design work by prohibiting companies from contracting away liability for their mistakes. It is unlikely that these statutes would affect federal indemnification of contractors since federal contracting is controlled by federal law.

No correlation was found between state indemnification and the number of contractors responding to solicitations. The geographic location and the budget for the work were the most significant factors influencing the number of responses to solicitations. Almost all states could obtain environmental restoration contractors despite not offering indemnification. The states also have not observed a decrease in the available pool of contractors, an increase in the cost of their services, or a delay in cleanups as a result of not offering indemnification.

New Jersey has had a noteworthy indemnification program, partly because it has had two indemnification statutes. The first one was established in 1986 and expired in 1990. Under this statute, the state gave preferential treatment to environmental restoration contractors that obtained pollution liability insurance and did not request indemnification. In 1992, the current indemnification statute was passed. It allows preferential treatment to be given to contractors who provide occurrence-based insurance coverage in lieu of indemnification. To date, no contractor has been able to obtain occurrence-based insurance[9]. The new program also includes a deductible equal to 30 percent of the contract amount, not to exceed $1.5 million, and a co-payment equal to 10 percent of the total claim, in excess of the deductible, not to exceed the indemnification limit specified within the agreement. The state has authority to offer indemnification and legal defense for claims of up to $25 million for a single occurrence and up to $50 million per contract.

New Jersey has never used the new indemnification authority. They did not see any decrease in competition after the original authority to indemnify contractors expired, so they have not felt the need to use the current indemnification statute. For example, New Jersey recently received 5 responses to a solicitation without indemnification for a remedial design for a Superfund site. This level of competition is comparable to what they would have expected when they did offer indemnification. New Jersey also issued a level-of-effort type solicitation for remedial design on unnamed sites. They wondered if they would obtain adequate competition since the respondents had no site information upon which to judge their liability exposure. New Jersey received 16 responses, so they concluded that lack of indemnification was not a significant factor in competition. They did note that there are some firms who bid when indemnification was offered, but who do not bid now. These firms claim that part of the reason for their changed bidding practice is the lack of indemnification. However, New Jersey has not found the omission of these firms to be a hindrance to adequate competition.

PRIVATE ENTITIES

There appears to be a wide variety of indemnification practices in the private sector. There is anecdotal evidence suggesting that some private parties indemnify and others do not, but it is difficult to determine which is the predominant practice. For example, in testimony before the Environmental Restoration Panel of the House Committee on Armed Services[10], the National Constructor's Association (NCA) provided several examples of actual language taken from private hazardous waste cleanup contracts entered into by NCA member companies. These examples provide a broad range of indemnification. Some include limits for certain types of claims; others do not. Some expressly omit coverage of willful misconduct; others do not. Some require the contractors also to indemnify the private party; others do not.

To obtain more specific data from the private sector, DoD sent a questionnaire to the top 26 Potentially Responsible Parties (PRPs) listed in order of site frequency from the EPA listing dated 31 March 1993. The questionnaire, the list of the firms contacted and the 17 responses received can be found in Appendix 7. Most of the PRPs have large cleanup programs ($10 million to $200 million annually) and many contractors. Most of the PRPs are also involved in all phases of cleanup, from the study phase to site close-out. No indemnification claims have been filed against any of the PRPs that responded.

The responses indicate that several PRPs include very limited contractor indemnification in their standard terms. This indemnification usually excludes coverage for any contractor negligence or willful misconduct. In other cases, the indemnification clause is even more limited, and provides protection only when the PRP was negligent. Some PRPs do not indemnify contractors under any circumstances. Others do so reluctantly on a case-by-case basis when it is necessary to obtain the contractor they desire. For example, Monsanto states, "In such instances, Monsanto may agree to indemnify the contractor against specific features or happenings, but only by the most limited indemnification provision which can be arranged to satisfy that contractor." Conversely, most PRPs require the contractor to indemnify them.

This data may indicate that there is a general sentiment in the private sector against providing environmental restoration contractor indemnification, but that it will be provided to a limited degree on a case-by-case basis when needed.

expand on this —

ENDNOTES:

[1]Memo from Mary Ann Masterson, et al., Department of Energy, to Shun C. Ling, Department of Defense, dated 19 March 1993 (*See* Appendix 1).

[2]GAO Report, Superfund: Contractors Are Being Too Liberally Indemnified by the Government, GAO/RCED-89-160, September 1989, page 14.

[3]Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C.A. §9601-9671 (West 1983 & Supp. 1993).

[4]56 Fed. Reg. 5064 (1991).

[5]14 U.S.C.A §691(e) (West 1990).

[6]Letter to Brigadier General W. O. Bachus, USA (Ret.) from Rear Admiral P. A. Bunch, U.S. Coast Guard, dated 25 January 1993. (*See* Appendix 4.)

[7]State Indemnification Report prepared for EPA, 23 April 1992. (*See* Appendix 1.)

[8]Anti-Indemnification Summary, EPA (*See* Appendix 1).

[9]Data collected by DoD indicates that the pollution liability insurance that is currently available covers only claims made during the 1–3 year life of the policy ("claims made") rather than claims made at any time in the future but arising from occurrences during the life of the policy ("occurrence-based"). *See* also the response to paragraph 6.

[10]*Hearing Before the Environmental Restoration Panel of the Committee on Armed Services House of Representatives*, 102 Cong. 3rd Sess. (1992).

Chapter 6: Insurance

Response to § 332, Paragraph (6)

Paragraph (6): The availability, the coverage, the cost, and the type of insurance commercially available to environmental restoration contractors at current and former military installations and formerly used defense sites.

SYNOPSIS

By the mid-1980s, most of the insurance industry ceased to offer new environmental impairment liability (EIL) insurance policies. However, by the early 1990s, some limited coverage EIL policies became available with very high premiums. The recent trend in the insurance industry has been to make more insurance available to cleanup contractors than in the past.

Advertised rates remain high, although negotiated rates, particularly for large multi-contract (bulk rate) policies are becoming somewhat more reasonable. Policies are still carefully written to limit the insurance company's exposure. Policies covering "long-tail" liabilities—those that occur decades after the policy is written and the premiums paid—are not yet available. (Long-tail coverage is particularly important for environmental restoration contractors because many health effects that may result from an improperly performed environmental cleanup do not emerge for 20 or 30 years.) However, great strides toward providing long-tail coverage have been made on large multi-contract policies by negotiating terms with the insurance companies. It may be that the better terms and lower costs available on multi-contract policies are due more to the increased negotiating power than to the "economies of scale" that typically impact bulk rate costs.

The availability and terms of EIL insurance are highly dependent on the claims history experienced by the insurance industry. The virtual withdrawal of EIL insurance in the 1980s because of increased pollution claims serves as recent evidence of this. If the number of valid claims, or even ones sufficiently arguable to entail significant defense costs, turns out to be high, the availability of insurance could be curtailed from even the somewhat limited amount offered today. Insurance companies have been severely impacted by the emergence of occupational diseases and the enactment of unforeseen environmental legislation. Standard policies written in the 1950s have been held to cover pollution effects and cleanup costs that were not taken into account in calculating premiums for those policies. Insurance companies contesting their liability to cover such costs have been a leading source of hazardous-waste-related litigation costs.[1]

BACKGROUND

Prior to the 1970s, the insurance industry offered comprehensive general liability policies to cover a broad range of commercial liability resulting from accidental personal injury or property damage, usually including pollution incidents. In the late 1960s, the insurance industry added a "pollution exclusion" clause to the standard comprehensive general liability policy. It specified that the policy covered only sudden and accidental pollution incidents. During the 1970s, some insurers developed a specific type of policy, called an environmental impairment liability (EIL) policy, to expressly cover pollution risks. However, by the mid-1980s, new policies of this type were not being offered by most insurers.

The decision to discontinue offering EIL policies was primarily due to the insurance industry's concern that new environmental legislation, coupled with trends in common law and court interpretations of environmental law, had broadened the insurance companies' liability beyond what the companies had intended to insure against.[2] In addition, the insurance industry was experiencing an actual increase in the number and dollar value of claims being filed during this period. The RAND Institute for Civil Justice surveyed four national insurance carriers on claims involving hazardous waste cleanup sites. The claim payments per surveyed firm rose from an average of $9 million in 1986 to over $17 million in 1989. The number of pending claims also rose rapidly during this time, from about 650 per firm to 2,200, and the average number of policyholders that filed claims grew from 200 to 1,000.[3]

The RAND survey also found that an average of 88 percent of the insurer outlays through 1992 have been for transaction costs: either the legal costs of coverage disputes or the legal costs to defend the policyholder.[4] That means that only 12 percent of the claim payments have been for actual indemnification: the costs of site cleanups or third party claims. This is consistent with the small number of final judgments

Chapter 8: Costs of New Authority

Response to § 332, Paragraph (8)

Paragraph (8): The potential costs of any new indemnification authority, if any, recommended by the Secretary of Defense in the report required under this section.

SYNOPSIS

This report ~~makes no recommendations regarding the desirability of~~ additional indemnification authority for environmental restoration contractors working at DoD sites. ~~Rather, this response discusses possible costs and benefits of various indemnification policies.~~

If the government indemnifies an environmental restoration contractor, it in effect becomes the insurance company for the liabilities the contractor is indemnified against. In the simplest case, the government saves the cost of insurance, but increases its potential future outlays for claims against the contractor. Under ideal conditions, there will be no difference in cost to the government for indemnifying contractors rather than purchasing insurance for them.

However, it is clear that ideal conditions do not exist. Most notably, current insurance policies do not provide the long-tail coverage that indemnification could provide (see Chapter 6). Therefore, indemnification would cover more claims than insurance would, and may cost the government more out of pocket expenses than if it had simply purchased insurance. [1]

This potential additional cost must be balanced against the important, but difficult to quantify, social cost that exists if the government relies solely on the somewhat limited insurance coverage currently available and does not indemnify its environmental restoration contractors. This social cost results from the fact that an injured party may have no way to recover damages if insurance does not cover the claim, the contractor has insufficient assets to pay, and the government has not provided indemnification.

Since the government would probably be liable along with the environmental restoration contractor for cleanup costs under CERCLA, indemnifying the contractor for this type of liability might cost the government only moderate additional amounts. However, indemnifying the contractor for third-party claims could potentially cost the government much more. This is because the government would otherwise be immune from state law-based tort claims based on strict liability and have the discretionary function defense available against some negligence claims, leaving the contractor to shoulder such third-party claims itself (see Chapter 4).

Most legal costs are passed through to the government through various mechanisms, regardless of indemnification. Therefore, there may not be much difference in legal costs paid by the government if indemnification is provided or not.

Environmental restoration contractors who perform work without indemnification may avoid innovative technologies because, by definition, the success of these technologies is less certain. Consequently, the use of innovative technologies may incur a higher risk of liabilities. However, estimating the cost to the government resulting from this avoidance of innovative technologies that are potentially less expensive and more efficient, is very difficult.

Offering indemnification to environmental restoration contractors might widen the field of bidders and proposers, improving the chances that DoD would obtain the best environmental restoration value possible. However, there is no clear evidence to suggest that DoD is not currently obtaining sufficient competition to ensure the best value (see Chapter 3).

~~APPROACH~~ FURTHER MONITORING

This report ~~makes no recommendations regarding the desirability of~~ additional indemnification authority for environmental restoration contractors working on DoD's facilities. It is not yet clear whether DoD's future needs for environmental contractors will best be met without using any of the existing indemnification authority available to it (as is its current practice), by applying these existing authorities in some future contracts, or through some new broader authority. Nonetheless, it is apparent that there are both costs and benefits to using, or not using, indemnification authorities on environmental restoration contracts, though they cannot be quantified at the present time. ~~This response will outline some of the ways that indemnification, or the lack of it, might influence the cost of environmental restoration work in DoD.~~

INDEMNIFICATION SUBSTITUTED FOR INSURANCE

When the government indemnifies an environmental restoration contractor, it in effect becomes the insurance company for the liabilities the contractor is indemnified against. Stated simply, the government can either (1) reimburse the contractor for the purchase of insurance to cover the liabilities, thereby transferring the risk to the insurance company, (2) indemnify the contractor for the liabilities, thereby transferring the risk to the government, or (3) do neither, effectively transferring the risk to the public to the extent the contractor lacks the assets to pay a claim.

There will be no cost difference to the government between options 1 and 2 if certain ideal conditions are met: first, that the insurance is priced so that the premiums cover the claims paid by the insurance, the administrative costs, and insurance company's profit; second, that the government's cost of administering the indemnification equals the insurance company's administrative costs and profit; and third and most importantly, that the insurance coverage is equivalent to the indemnification coverage. However, it is unlikely that these ideal conditions hold true. Because of the lack of a claims history, insurance companies are unsure of the proper premium to charge, as evidenced by the rapidly changing premiums, terms and conditions available (see Chapter 6). It is unknown if the government can administer an indemnification program so that the administration costs are equal to the insurance industry's administrative costs and (unknown) profit. Most importantly, it is clear that currently available insurance does not cover the "long-tail" liabilities—those liabilities that result from claims made decades after the environmental restoration work has been completed and the premiums paid—whereas indemnification would presumably be structured to cover these liabilities. Therefore, since indemnification would cover more claims than would insurance, and since insurance is becoming somewhat more reasonably priced, it is possible that indemnification would cost the government more than simply purchasing insurance.

Looking at it another way, if the government wanted to provide protection against long-tail liabilities, indemnification is probably more cost effective than insurance. This is because the only way to cover long-tail liabilities with insurance (if it is possible at all) would be to purchase claims-made insurance year after year. Claims-made insurance is very expensive, so it is likely that indemnification would be less expensive.

Of course, a middle course exists, as well. The government could provide limited indemnification, with deductibles and maximums, that would still provide greater protection than is currently available through insurance. In theory, this indemnification could be structured so that its cost would equal the cost of currently available insurance, but provide broader coverage. In addition, it would have the added benefit of providing incentives, because of its deductible and maximum terms, for the contractor to maintain a high standard of performance.

INSURANCE COSTS WITHOUT INDEMNIFICATION

When indemnification is not offered, concerned contractors tend to purchase insurance, even if its coverage is not as much as they would want. This is especially true for cost reimbursement contracts, where the cost of insurance is generally an allowable cost. With insurance becoming more widely available, and with better coverage, the cost to the government can be substantial. Therefore, this insurance cost must be recognized as a cost associated with the policy of not providing indemnification.

SOCIAL COSTS

There is an often overlooked social cost associated with the policy of not providing indemnification to environmental restoration contractors. That is, who pays for the losses and injuries of citizens exposed to a release from a DoD site if the government need not compensate them and the contractor lacks insurance and the financial resources to do so. As discussed above and in Chapter 6, currently available insurance is not likely to cover all potential claims, particularly the all-important "long-tail" claims. Also, as discussed in Chapter 3, there is evidence that most environmental restoration contractors do not have sufficient financial resources to withstand a substantial claim. This results in the very real possibility that injured parties have no mechanism to obtain compensation for damages resulting from the cleanup of a DoD site. In fact, this situation exists on a smaller scale at state-run cleanups in the fourteen states that have provided immunity, rather than indemnification or insurance, for their environmental restoration contractors (see Chapter 5.)

COST OF CLEANUP

Relieving the contractor from strict liability on government cleanups would obligate the government to pay for cleanup work that became necessary because of the contractor's non-negligent action. This obligation is effectively in place for environmental restoration contractors performing work at NPL sites or performing removal actions, because of CERCLA § 119's statutory waiver for these contractors of strict liability for cleanup costs. However, strict liability for cleanup costs remains in effect for most of the DoD environmental restoration contractors since they perform remediation at non-NPL sites, and therefore do not qualify for the CERCLA § 119 waiver (see Chapter 2). These contractors are currently liable for cleanup costs that may result even though they perform satisfactorily, or even perfectly.

Relieving additional contractors from strict liability under CERCLA would require the government to pay for cleanup costs resulting from the contractor's non-negligent actions that, in the absence of this waiver, the contractor might at least have to share. On the other hand, the government as site owner will normally have joint and several liability, and thus may have to pay for the cleanup costs regardless of the possibility that the contractor might also be liable. This will be particularly true if the contractor is uninsured or has inadequate assets to pay the claim.

Indemnifying environmental restoration contractors against cleanup costs resulting from negligent acts would increase the cost exposure of the government. Responsibility for negligent acts is easier for courts to divide, so joint and several liability is less certain, particularly given the recent Appeals Court decisions on the limited applicability of joint and several liability to CERCLA cleanup costs (see Chapter 4). Therefore, where the contractor is at fault, the government might avoid cleanup liability altogether despite owning the site. Of course, a government agency could avoid legal liability, but then it could be compelled to pay anyway by Congress. Thus the actual cost impacts of protecting contractors from CERCLA cleanup liability are very fact-dependent.

COST OF THIRD-PARTY CLAIMS

The potential cost impacts of assuming the contractor's tort liability to third parties are somewhat different. Tort claims (actions for damages to property or personal injury) introduce a series of governmental immunities that would frequently shield the government from suit, even though it would have been liable if a private party. This might leave the environmental restoration contractor as the sole remaining defendant. If the government indemnified the contractor, the increased cost in a particular case could be substantial.

The most important of the governmental immunities to tort suits for the purposes of this report are the strict liability exception and the discretionary-function exception. Suits against the government must be based on negligence or fault, not on strict liability. (The government is liable for CERCLA cleanup costs without fault, but only because Congress chose to write CERCLA that way.) The "discretionary function" exception provides that the government is immune from suit when the action in question arises from the exercise of a discretionary function—making a choice. Courts have divided sharply over the meaning of this term, but it seems that the choice must be based on "considerations of social, economic, or political policy".[2] Taken together, these two immunities mean that (1) when the government, as site owner, and the contractor are both strictly liable for damages or injuries, the contractor is the only party subject to a judgment, and (2) when the government and the contractor are both liable for a negligent act, but the government is exercising a discretionary function, again the government is immune and the contractor is the only liable party. Providing indemnification under either circumstance means that the government would be paying a judgment it could otherwise avoid. It is difficult to determine, or even guess at, the number of occasions in which these circumstances could arise. Contractors are apparently deeply concerned about them, but it is not clear that they are common.

LEGAL COSTS

The contractor's cost of legal counsel to defend against environmental and third-party claims deriving from environmental work can be onerous. In various ways, many of these costs are paid by the government today as allowable costs or overhead. On firm fixed price contracts, the overhead cost of legal defense, if any, is buried in the bid. There is no data to show how much this is. Some forms of indemnification would eliminate the need for these costs at the contractor's level because the government would provide the defense, generally at lower cost than the private bar. In many

cases, however, the contractor and the government would have sufficiently different interests that both would be represented by counsel, with the government paying for all of them. Since some legal defense costs are already being paid, directly or indirectly, any saving from indemnification is speculative.

INNOVATIVE TECHNOLOGY

Innovative technology in the environmental restoration field is expected to help reduce costs and accelerate cleanup. Substantial uncertainty surrounds innovative technology in this field since environmental restoration contractors have acquired only limited experience with it. The risk of liability associated with using new technology might be substantial, since in many instances it could be considered developmental. Insurance for use of innovative technology is expected to be even more difficult to obtain than for conventional approaches, but no data to demonstrate this has been developed. Similarly, there is no data at present showing that the lack of indemnification is inhibiting introduction of new technology in DoD cleanups or affecting its cost.[3]

INADEQUATE COMPETITION

Indemnification might widen the field of bidders and proposers on DoD environmental restoration contracts and improve the likelihood that the most technically qualified contractors would work on DoD's behalf, at the best possible price. The value of having the most experienced and capable contractors is obvious in principle, but very difficult to evaluate in terms of economics or quality. It is not clear that the present field of bidders represents other than the best qualified ones for the work they seek to do. There are unsubstantiated assertions that there are better ones who will not bid because of lack of indemnification. Some of these assertions date from the time when EPA offered indemnification and other federal agencies, including DoD, did not; some are current. Most federal agencies currently offer cleanup contracts without indemnification, so contractors essentially must choose to do government work without indemnification or look elsewhere. As the Defense Environmental Restoration Program moves further into the RD/RA phase, it may become apparent that there is a problem that only indemnification can solve. Hard evidence for that proposition has yet to emerge.

ENDNOTES:

[1]Note that if the government reimbursed contractors for "claims-made" insurance year after year, so that the insurance coverage was equal to the indemnification coverage, the insurance cost would probably be much higher than the indemnification cost.

[2]*U.S. v. Gaubert*, 499 U.S. 315 (1991).

[3]There is evidence that innovative technologies are being selected more often as remedies at NPL sites. In 1987, innovative technologies were selected at about 5 NPL sites. In 1991, innovative technologies were selected at over 55 NPL sites. This data does not provide information on the adequacy of competition for designing, installing or operating the innovative technologies. It also does it indicate whether indemnification was offered, and how that affected the selection of innovative technologies. *See Cleaning Up the Nation's waste Sites; Markets and Technology Trends*, EPA 542-R-92-012, April 1993.

Appendix 4
Information Collected by Society of American Military Engineers

Contents

DEDICATED TO THE NATIONAL DEFENSE

The Society of
American Military Engineers

P.O. BOX 21289
ALEXANDRIA, VA 22320-2289
(703) 549-3800
FAX 703 684 0231

607 Prince Street
Alexandria, VA 22314-3117

28 January 1993

Rec'd ODASD(E) 29 Jan 93

Mr. Patrick Meehan
Acting Assistant Secretary of Defense
(Environment)
Office of the Assistant Secretary of Defense
Washington, D.C. 20301-8000

Dear Mr. Meehan:

This is with further reference to Mr. Tom Baca's request of 23 December inviting our Society to submit information on contractor indemnification. We always appreciate the opportunity to be of service.

We surveyed our own Sustaining Member affiliates from industry and also the five Engineer Service Chiefs (the Army, Navy, Air Force, Coast Guard and NOAA). We understand that the DoD Engineer Chiefs will be submitting information directly to your office. However, we are enclosing the entire submission from all sources, as follows:

a. From the Engineer Service Chief Offices -- Enclosure 1.

b. From industry members -- Enclosure 2.

Here is a short summary of responses:

a. From the Army: We received the enclosed copy of a draft report that is being prepared for your office (Enclosure 1-1). This report outlines indemnification coverage on Superfund projects, some of which included CERCLA 119 indemnification. They also state that no environmental restoration contractors at U.S. Army Corps of Engineers sites have encountered litigation or liability claims for work since 1980. The paper also shares some of the contract agreement details and provides an opinion on the need for additional indemnification authority, including the availability of adequate competition for environmental restoration contract work under the present indemnification authority.

b. From the Navy: They report that they know of no cases where contractors have been exposed to, or involved in, litigation, claims, and liability related to environmental restoration work. They shared some insight into the insurance issue by including a summary listing the major issues of

United States and one of the states in a dispute over whether an interim action was to be governed by CERCLA, or, as the State argued, by RCRA and the State Hazardous Waste Management Act. The State, having been frustrated in its attempts to move directly against the U.S., and notwithstanding the U.S.'s position that the company was acting solely as a CERCLA RAC, began RCRA enforcement procedures directly against the company. The company, although wholly without fault, was not supported legally by the U.S. The action against the firm was eventually dismissed, but only after the firm incurred significant internal and outside expense in fighting the action. This company was also involved in or exposed to two other lawsuits in the same general region. While the firm was not directly named as defendant, it was required to produce documents and provide deposition testimony with resulting legal fees alone exceeding $400,000. The firm shares its knowledge of state coverage for indemnity, naming New Jersey's negligence standard for hazardous waste work whereby the contractor is not exposed to strict liability. Other state provisions cap the contractor's liability and provide for co-payment in certain cases. They continue by giving examples in private party contracting where various levels of liability are negotiated, with the client assuming all risk above a certain limit, all subject of course to the absence of gross negligence, willful misconduct or a substantial violation of the contract. The firm concludes by discussing the availability and cost of commercial insurance, saying "the insurance market has not changed significantly in the past year. Some policy limits have increased, but all of the available insurance still has a fatal flaw: it is claims - made; a project policy will not be there ten to twenty years after the project is over to cover the liabilities."

It is regrettable that the full report could not be provided due to confidentiality. However, we understand the firm's feeling that the competitive nature of the market and the confidential relevance of the data preclude divulging the source.

We know there are several other reports currently enroute. However, since we understand you need the report by 1 February, we are forwarding the responses received to date and will forward the others as they arrive. We also know that several of our own members have also submitted reports through other agencies. So, hopefully you will receive the full range of information needed.

We wish that time had permitted a more thorough airing of the subject and that more replies had been received, especially from industry. There seems to be little doubt in the minds of our members, especially those in industry, that some government environmental restoration contracts clearly place the firm in jeopardy of unknown dimensions and for indefinite periods of time. Severe economic conditions have forced many companies to seek environmental restoration work, despite the ominous risks

U. S. ARMY CORPS OF ENGINEERS
DATA FOR REPORT ON INDEMNIFICATION OF CONTRACTORS PERFORMING ENVIRONMENTAL RESTORATION

1. There have been no approved or pending uses by the U. S. Army Corps of Engineers (USACE) of Public Law 85-804 authority, or 10 U.S.C. 2354 authority to indemnify environmental restoration contractors. USACE has never provided indemnification on DERP projects. However, since October 1989, 84 Superfund projects were placed under contract for EPA by USACE; 82 of the projects included CERCLA 119 indemnification and two did not. Contract information prior to October 1989 is not readily available. There have been several approved indemnification requests under the Chemical Stockpile Disposal Program, however for the purposes of this report, we did not consider chemical demilitarization to be environmental restoration.

2. No environmental restoration contractors at U. S. Army Corps of Engineers sites have been exposed to litigation, claims or liability related to such environmental restoration work since 1980.

3. There have been no instances when the U.S. Army Corps of Engineers has reimbursed environmental restoration contractors on cost-reimbursement contracts for liabilities to third parties related to the environmental restoration work.

4. There have been no instances in which the U. S. Army Corps of Engineers has been unable to award a contract for environmental restoration work due to lack of adequate competition or qualified contractors.

5. Additional indemnification authority is not necessary to ensure adequate competition and qualified contractors for environmental restoration contracts. The U. S. Army Corps of Engineers has experienced adequate competition and qualified contractors for environmental restoration contracts under the present indemnification authority.

6. Response action contracts greater than $5 million awarded between April 1 and November 30, 1992 are provided with contract number, title, award amount and name of winning contractor, names of all other qualified bidders and their respective bids on the next page.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332-2300

28 Jan 93

Brigadier General W. O. Bachus, USA, Ret.
The Society of American Military Engineers
P.O. Box 21289
Alexandria, VA 22320-2289

Dear BGEN Bachus,

In response to your letter of 4 January 1993 concerning Mr. Tom Baca's request for information for a special report to congress, the following is provided:

(1) The extent to which contractors performing environmental restoration work at Federal, state and private sites have actually been exposed to, or involved in, litigation, claims, and liability related to this work since 1980:

To date, there have been no known exposures. However, data is still being collected from our field activities. This data will be included in a report to Mr. Baca which has been requested by 16 February 1993.

(2) The type and extent of indemnification currently provided by Federal or state agencies, or private entities for environmental restoration work:

No indemnification is currently being provided by the Navy.

(3) The availability, coverage, cost and type of insurance commercially available to environmental restoration contractors:

See enclosure (1).

Very respectfully,

D. L. DELKER
Deputy Commander for
Manpower and Organization

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC

JAN [illegible] 1993

Brigadier General W.O. Bachus, USA, Ret.
Executive Director
The Society of American Military Engineers
P.O. Box 21289
Alexandria, VA 22320-2289

Dear General Bachus:

On behalf of General McCarthy, I am responding to your letter of 4 January 1993 requesting our input to a number of questions posed by Mr. Baca, Deputy Assistant Secretary of Defense (Environment), to the Society of American Military Engineers. We have been discussing a similar request with Mr. Baca's staff concerning environmental restoration contracting and in particular indemnification. From these discussions we have learned that Mr. Baca was going to solicit "outside" expertise in hope of gaining new non-DOD insight into the issue of federal indemnification.

We have no specific cases where contractors performing environmental restoration work at an Air Force installation have been exposed to, or involved in, litigation, claims, and liability related to this work.

Indemnification of contractors is addressed in Public Law (P.L.) 85-504, FAR 52-228.7. Under P.L. 85-504, the contractor must identify the nature of the risk and then the Contracting Officer must forward the request to the service Secretary for approval. We do not have any information pertaining to the type and extent of indemnification provided by states or private entities. A good source for this information may be the S.A.M.E. sustaining members.

We have no information regarding the availability, coverage, cost or types of insurance commercially available to environmental restoration contractors. Again, a recommended source for this information is the S.A.M.E. sustaining members.

We hope this information will assist you in preparing your reply to Mr. Baca. I am certainly available if there are other issues on which we can be assistance. Your staff can contact me at (202)-767-4616.

JAMES M. OWENDOFF, Col, USAF
[illegible]

Enclosure 1 - 2

JAN

U.S. Department of Transportation

United States Coast Guard

Commandant (G-ECV-2)
United States Coast Guard

MAILING ADDRESS:
Washington, DC 20593-0001
(202) 267-1924

11000
25 JAN 1993

Brigadier General W. O. Bachus, USA (Ret.)
Executive Director
The Society of American Military Engineers
P. O. Box 21289
Alexandria, VA 22320-2289

Dear General Bachus:

I am happy to provide the following information requested by your letter of January 4, 1993:

- No response action contractors performing work for the Coast Guard have been involved in litigation related to cleanup work performed on Coast Guard sites.

- Unlike the Defense Environmental Restoration Authorization (DERA), the Coast Guard's Environmental Compliance and Restoration (EC&R) Authorization requires the Coast Guard, for CERCLA cleanup sites, to "...indemnify response action contractors to the extent that adequate insurance is not generally available at a fair price at the time the contractor enters into the contract to cover the contractor's reasonable, potential, long-term liability." (14 USC 681(e), copy attached). To date no response action contractors have requested that the Coast Guard indemnify them for such circumstances. The Oil Pollution Act of 1990 (P.L. 101-380) also contains complex contractor indemnification provisions and requirements, but these apply to pollution incidents for which the Coast Guard has assumed responsibility, under the Act, to clean-up sites where the pollution was caused by a non-Federal party. The Coast Guard has indemnified some contractors performing these type of response actions but I do not think these cases are relevant to the purposes for which you are gathering this information.

RESTORATION PROGRAM

§ 690. Definitions

For the purposes of this chapter—

(1) "environment", "facility", "person", "release", "removal", "remedial", and "response" have the same meaning they have in section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601);

(2) "hazardous substance" has the same meaning it has in section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601), except that it also includes the meaning given "oil" in section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1321); and

(3) "pollutant" has the same meaning it has in section 502 of the Federal Water Pollution Control Act (33 U.S.C. 1362).

(Added Pub.L. 101-225, Title II, § 222(a), Dec. 12, 1989, 103 Stat. 1917.)

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports
1989 Act. House Report No. 101-227, see 1989 U.S.Code Cong. and Adm.News, p. 1368.

Effective Dates
1989 Act. Section effective Dec. 12, 1989, see section 309 of Pub.L. 101-225, set out as a note under section 12101 of Title 46, Shipping.

14 USC 691

§ 691. Environmental Compliance and Restoration Program

(a) The Secretary shall carry out a program of environmental compliance and restoration at current and former Coast Guard facilities.

(b) Program goals include:

(1) Identifying, investigating, and cleaning up contamination from hazardous substances and pollutants.

(2) Correcting other environmental damage that poses an imminent and substantial danger to the public health or welfare or to the environment.

(3) Demolishing and removing unsafe buildings and structures, including buildings and structures at former Coast Guard facilities.

(4) Preventing contamination from hazardous substances and pollutants at current Coast Guard facilities.

(c)(1) The Secretary shall respond to releases of hazardous substances and pollutants—

(A) at each Coast Guard facility the United States owns, leases, or otherwise possesses;

(B) at each Coast Guard facility the United States owned, leased, or otherwise possessed when the actions leading to contamination from hazardous substances or pollutants occurred; and

(C) on each vessel the Coast Guard owns or operates.

(2) Paragraph (1) of this subsection does not apply to a removal or remedial action when a potentially responsible person responds under section 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9622).

(3) The Secretary shall pay a fee or charge imposed by a State authority for permit services for disposing of hazardous substances or pollutants from Coast Guard facilities to the same extent that nongovernmental entities are required to pay for permit services. This paragraph does not apply to a payment that is the responsibility of a lessee, contractor, or other private person.

(d) The Secretary may agree with another Federal agency for that agency to assist in carrying out the Secretary's responsibilities under this chapter. The Secretary may enter into contracts, cooperative agreements, and grant agreements with State and lo-

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Rockville, Maryland 20852

JAN 25 1993

Brigadier General W. O. Bachus, USA, Ret.
The Society of American Military Engineers
607 Prince Street
P.O. Box 21289
Alexandria, Virginia 22320-2289

Dear Walt:

In response to your request to provide input to the Department of Defense's report to Congress on indemnification of contractors performing environmental restoration, I passed your letter from Thomas Baca to NOAA's Office of General Council. We have a hard-working point-of-contact there who checked with many of his colleagues. It seems that NOAA has not yet engaged in any environmental restoration contracting and, therefore, has no experience on which to draw in answering the listed questions.

Sorry we can't be of any assistance on this one.

Sincerely,

Rear Admiral J. Austin Yeager, NOAA
Director, Coast and Geodetic Survey

Enclosure 1 - 5

ARTICLE 61 - ENVIRONMENTAL PROTECTION

A. The Subcontractor shall take all appropriate measures necessary to comply with

(1) applicable Federal, State, and local environmental protection standards and requirements and

(2) DOE environmental protection requirements (including monitoring and reporting requirements) transmitted to the Subcontractor in writing by the Subcontract Administrator. In the event there is a conflict as to applicability of Federal, State, or local environmental standards and requirements, URA will, after consultations with the Subcontractor, provide appropriate guidance. Notwithstanding the foregoing, however, the Contractor shall not be required to develop independent management programs and implementation plans, but rather, shall participate in the Contractor programs and plans.

B. In the event that the Subcontractor fails to comply with said standards and requirements, the Subcontract Administrator shall notify, in writing, the Subcontractor of such noncompliance and the corrective action to be taken. After receipt of such notice, the Subcontractor shall, within a reasonable time agreed upon by the parties, take such corrective action. In the event the Subcontractor fails to take such corrective action, the Subcontract Administrator may, without prejudice to any other legal or contractual rights of URA or DOE, issue an order stopping all or any part of the work; thereafter, a start order for resumption of the work may be issued at the discretion of the Subcontract Administrator. **The Subcontractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage. Such restriction of claims does not apply to Subcontractor for claims of lower tier subcontractors whose actions did not contribute to the cause of such stoppage.**

ARTICLE 62 - SAFETY AND HEALTH

The Subcontractor shall take all reasonable precautions in the performance of the Services under this Subcontract to protect the safety and health of its employees and of members of the public and shall comply with all applicable safety and health regulations and requirements (including reporting requirements) of DOE and the Contractor. The Subcontract Administrator shall notify the Subcontractor, in writing, of any noncompliance with the provisions of this Article 62 and the corrective action to be taken. After receipt of such notice, the Subcontractor shall, within a reasonable time agreed upon by the parties, take corrective action. The Subcontractor shall submit a safety and health management program and implementation plan to the Subcontract Administrator for review and approval within 60 days after the date of execution of this Subcontract. In the event that the Subcontractor fails to comply with said regulations or requirements of the DOE and the Contractor, the Subcontract Administrator may, without prejudice to any other legal or contractual rights, issue an order stopping all or any part of the work; thereafter, a start order for resumption of the work may be issued at the discretion of the Subcontract Administrator. **The Subcontractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage. Such restriction of claims does not apply to Subcontractor for claims of lower tier subcontractors whose actions did not contribute to the cause of such stoppage.**

ARTICLE 63 - PRIORITIES AND ALLOCATIONS

The Subcontractor shall follow the rules and procedures of the Defense Priorities and Allocations System (DPAS) regulation (15 CFR Part 350) in obtaining controlled materials and other products and materials needed for Subcontract performance.

11/17/92

(f) Any claim, loss, or damage resulting from a risk defined in the subcontract as unusually hazardous or as a nuclear risk and against which the Contractor has expressly agreed to indemnify the Subcontractor. otherwise an allowable cost

(7) All other allowable costs are included in "allowable cost" for fee adjustment in accordance with this paragraph E, unless otherwise specifically provided in this subcontract.

F. Subcontract modification. Any changes to the target costs, target fees, minimum fee or maximum fee as provided in this Article B-8 shall be evidenced by a modification to this subcontract signed by the Subcontractor and Contractor.

extend to an Indemnitee for claims, damages, injuries, losses and expenses caused by the sole negligence of said Indemnitee but shall extend and provide full indemnity, defense and hold harmless from and against all claims, damages, injuries, losses and expenses caused by the concurrent negligence of COMMISSION or others and Indemnitee.

Hazardous materials claims are, without limitation thereof, those which arise out of, are related to, or are based upon, the dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, chemicals, solids, liquids, gases, waste materials (including without limitation, materials to be recycled, reconditioned or reclaimed) irritants, contaminants or pollutants in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface (a) soil, (b) water or water-courses, (c) objects, or (d) any tangible or intangible matter, whether or not sudden, accidental, intended, foreseeable, expected, fortuitous or inevitable. The parties further agree that the term "hazardous materials" as used herein shall also include all (1) dangerous wastes, extremely hazardous wastes, pesticides, hazardous household substances, hazardous substances, hazardous waste and moderate risk waste as defined in California Administrative Code Sections 5208 and 5209; and (2) all substances identified on the list of hazardous wastes in 40 C.F.R. Section 261.30 (Subpart D) and Federal OSHA Standards set forth at 29 Parts 1910 and 1926.

C. Project Professional Liability Insurance Program and Project Comprehensive General Liability Insurance Policy

The COMMISSION will use its best efforts to develop a PPLIP and PCGLIP under which the COMMISSION, TRANSCAL I, TRANSCAL I's Subcontractors, and others, as determined by the COMMISSION, shall be included as named insureds. In the event the COMMISSION has in effect, from time to time, a PPLIP and/or PCGLIP then the following provisions shall be applicable during the effective period of such coverage:

1. The PPLIP shall apply as primary professional liability insurance in place of the coverage required under Article 7.A.1(e), and the PCGLIP shall apply as primary comprehensive general liability insurance in

WHEREAS, the AUTHORITY is desirous of having the benefit of PARSONS' engineering services pursuant to THE CONTRACT and is willing to share certain of the risk of claims with PARSONS in exchange for obtaining PARSONS' services under THE CONTRACT.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements hereinafter set forth, IT IS AGREED as follows:

1. Reference is made to a certain Agreement of Insurance between PARSONS and CNA, Policy No. AAE-823-27-70 (the "Policy"), and to the Pollution Exclusion Endorsement contained therein, a copy of which Agreement is annexed hereto as Exhibit A. The quoted terms contained herein have the same meaning as those terms are defined in the Policy.

2. The AUTHORITY hereby agrees to indemnify and defend PARSONS for any "claim" or "claim expense" resulting from "professional services" performed by "you" in connection with THE CONTRACT that arise out of

a. The actual, alleged or threatened discharge, dispersal, release or escape of "pollutants"; or

b. Any governmental or regulatory directive or request that "you" or anyone acting under "your" direction or control test for, monitor, clean up, remove, contain, treat, detoxify or neutralize "pollutants"

to the same extent as CNA would be obligated under the Policy, or any yearly renewals thereof, if the Pollution Exclusion Endorsement contained therein, annexed hereto as part of Exhibit

of this Agreement of Indemnification by the AUTHORITY, PARSONS shall submit to the AUTHORITY every year, on the anniversary of the date of this Agreement, a certification from an insurance broker/agent licensed in New Jersey that professional liability insurance covering pollution liability continues to be so unavailable.

6. If at any time after the date of this Agreement pollution liability insurance reasonable as to cost and coverage is available for THE CONTRACT, PARSONS shall immediately procure that insurance for THE CONTRACT at its own expense. The procurement of such insurance shall reduce, by its amount of coverage, the limits of indemnification being provided herein by the AUTHORITY. If PARSONS is able to obtain pollution liability insurance, that insurance shall be applied first to any "claims" arising out of THE CONTRACT and indemnification under this Agreement shall not be required unless and until said insurance is exhausted.

7. This Agreement shall not operate so as to provide replacement coverage or excess coverage for any other insurance maintained by PARSONS and will not cover "claims" otherwise covered by that insurance.

8. PARSONS shall not be entitled to indemnification under this Agreement unless, within 10 calendar days of the date it is personally served at its New York office with or is in possession of at its New York office any summons, complaint, process, notice, demand or pleading, it delivers the original

to cooperate with the Authority in enforcing subrogation rights to contribution or indemnity against another who may be liable to PARSONS and must do everything necessary to secure these rights and nothing that would jeopardize them.

12. Anything in the foregoing to the contrary notwithstanding, this Agreement embodies the terms of a negotiated contract between the parties, does not constitute an insurance policy and does not create an insurer-insured relationship. The parties acknowledge that any laws applicable to the regulation of insurers or the construction of insurance agreements are inapplicable to this Agreement and that the doctrine of Contra Proferentum does not apply.

13. This Agreement shall be operative from the date of the signing of THE CONTRACT and shall cover claims occurring during THE CONTRACT periods and made not later than six years after the date of completion by PARSONS of the work covered by THE CONTRACT.

14. Nothing in this Agreement shall be construed to create, acknowledge or revive an enforceable right or cause of action in any third party not a signatory hereto.

15. This Agreement supercedes any and all written or oral agreements between the parties hereto concerning any provision for indemnification with respect to THE CONTRACT.

New Jersey Department Of Transportation

1035 Parkway Avenue
CN 600
Trenton, New Jersey 08625
Fax Number: (609) 530-5719

Fax Transmission Cover Page

Please deliver the following to:

Name: Susan Kirk

Location: Parsons Brinckerhoff

Phone: (212) 465-5092

Fax Number: (212) 465-5587

From: Pat Snyder

Date: 1/27/93

According to EPA's state indem. rpt report, this statute was re-established for state-employed RACs on Jan 9, 1992!

Number of pages (including cover page) 2

Comments: Attached is statute which provided DOT with indemnification authority from 1986-90. This authority has expired and we currently do not indemnify any contractors. We had been trying to get the date extended legislatively, but were unsuccessful and risked damage to our contracting procedures if you do not receive all the pages, PLEASE CALL US AS SOON AS POSSIBLE AT (609) 530-2036. pursued further.

DEDICATED TO THE NATIONAL DEFENSE

The Society of
American Military Engineers

607 Prince Street
Alexandria, VA 22314-3117

P.O. BOX 21289
ALEXANDRIA, VA 22320-2289
(703) 549-3800
FAX 703 684 0231

Rec'd OASD(E)
5 Feb. 92

4 February 1993

Dr. S. Ling
Office of the Deputy
Assistant Secretary of Defense (Environment)
Washington, DC 20301-8000

Dear Dr. Ling:

This letter is in response to Mr. Baca's request for information relating to environmental contractor indemnification. I am providing this supplemental material to round out the information provided by S.A.M.E under separate cover on 28 January. Included are:

a. Summary Report of Environmental Contracts Forum held 9-10 Oct 1991
b. Summary Report of Environmental Contracts Forum held 4 March 1992

Not copied. Not for distribution per sender annotation.

c. List of organizations represented at these two forums

d. Market survey of environmental liability insurance, prepared March 1992

e. Response to questions from GZA GeoEnvironmental Inc.

f. Response from firm preferring to remain anonymous

The market survey of liability insurance could presumably be updated if necessary. Please let me know if this would be useful. I will also continue to forward additional material as received. I realize that your deadlines may preclude the use of future submissions.

Thank you for the opportunity to provide our views on this important matter.

Sincerely,

Francis R. Skidmore
Vice President for Environment
S.A.M.E.
(301) 216-0664

Encls: as

Environmental Impairment Liability

Market Survey

Ed. 3/92

JOHNSON & HIGGINS

AMERICAN INTERNATIONAL GROUP

III. **Environmental Engineers & Consultants Insurance**

Insurance Company:	American International Surplus Lines Insurance Company
Best's Rating:	A VIII
Policy Form:	Claims Made and Reported
Limits of Liability:	$5,000,000 each claim/$5,000,000 aggregate
Minimum Premium:	$50,000
Minimum Deductible/SIR:	$100,000
Application:	• Contractors Application • E&O Application signed by CEO
Coverage Features:	Pays on behalf of the Insured all sums the Insured is obligated to pay as compensatory damages arising out of any negligent act, error or omission in the rendering of or failure to render professional services.
Comments:	• Defense costs covered above deductible, subject to limit of liability. • Policy requires claim be made upon the Named Insured and reported to the Company within the Policy Period. • Extended Reporting Period of 36 months available at additional premium not exceeding 200% of annual premium. • Retroactive date will be as of policy inception. • Professional Services are defined in policy Declaration page. • Will write firms involved with Assessments, UST testing, Architect & Design Work, Laboratory Analysis, Remediation Contractors, Superfund Contractors.

ENVIRONMENTAL COMPLIANCE SERVICES INC.

III. Professional Liability for Environmental Consultants & Laboratories

Insurance Company:	Planet Insurance Company
Best's Rating:	A X
Policy Form:	Claims Made with retroactive date
Limits of Liability:	$10,000,000 per occurrence/$10,000,000 aggregate (Blanket and Project Specific Basis)
Minimum Premium:	$25,000 ($1,000,000 limit)
Minimum Deductible/SIR:	$25,000
Application:	ESC's Application for Professional Liability
Coverage Features:	Pays on behalf of the insured all damages resulting from any act, error or omission in Professional Services rendered or that should have been rendered based upon the insured's profession as described on the Declarations page.
Comments:	• Program designed for Environmental Consultants involved with risk assessments, environmental studies, sampling and project management. • Program will now consider covering exposures associated with architectural design and laboratory testing done by consultant, as long as it is not the majority of the exposure. • Defense cost included in limit of liability. • Policy is offered on multi year basis up to 3 years for specific project. Minimum premium - $100,000, minimum retention - $50,000

JDC/3-92

UNITED COASTAL INSURANCE CO.

II. Contractors Pollution Liability

Insurance Company:	United Coastal Insurance Company
Best's Rating:	B+ VI
Policy Form:	Claims Made
Limits of Liability:	Up to $5,000,000 per occurrence/$5,000,000 aggregate
Minimum Premium:	$30,000
Minimum Deductible/SIR:	$2,500
Application:	• Contractors Pollution Liability Application
Coverage Features:	Pays on behalf of the insured all sums the insured has become legally obligated to pay as a result of a pollution condition arising out of the performance of operations designated in the Declaration page.
Comments:	• Defense costs included in limit of liability (outside of limit can be negotiated with a cap). • 12 month optional extended discovery period available. • Premiums are rated based upon receipts of contractor. • Policy will specifically define the individual insureds operations. • Retroactive date can be negotiated.

- United Coastal also offers a combined Contractors Pollution/Professional Liability Program covering both construction and consulting activity.

JDC/3-92

ST. PAUL FIRE & MARINE INS. CO.

LIMITED ABOVE GROUND POLLUTION LIABILITY N/A

Insurance Company:	St. Paul Fire & Marine Insurance Company
Best's Rating:	A XII
Policy Form:	Claims Made
Limits of Liability:	$1,000,000 per occurrence/$1,000,000 aggregate
Minimum Premium:	$25,000-$50,000
Minimum Deductible/SIR:	Unspecified
Application:	• St. Paul's Pollution Liability Application • Risk Assessment
Coverage Features:	Strictly Sudden & Accidental Coverage. Includes bodily injury and property damage caused by the omission, discharge, release or escape of pollutants from insured's premises or worksite. Such a pollution incident must occur above ground, result from an accident, begin and end within a 72 hr. period after the retro date, and result in environmental damages.
Comments:	• Coverage can be purchased on a Stand Alone basis or as part of the General Liability Policy. • When purchased with General Liability Policy, a separate aggregate limit would apply. • St. Paul feels they can be most competitive when pricing this coverage as part of General Liability.

JDC/3-92

THE HOME INSURANCE COMPANY

PROFESSIONAL LIABILITY FOR ENVIRONMENTAL CONSULTANTS

Insurance Company:	The Home of Illinois
Best's Rating:	A XI
Policy Form:	Claims Made and Reported Form
Limits of Liability:	$2,000,000 per loss/$2,000,000 per aggregate
Minimum Premium:	$20,000
Minimum Deductible/SIR:	$10,000
Application:	• Home's Miscellaneous Professional Liability Application • Latest Financials for past two years
Coverage Features:	Pay on the behalf of the Insured all sums the Insured becomes legally obligated to pay as damages resulting from any negligent act, error, or omission committed or alleged to have been committed by the Insured solely while in the performance of professional services described in the Declarations.
Comments:	• Targeting Environmental Consultants in asbestos, groundwater and soil & geotechnical analysis, hydrogeologists, industrial hygienists and testing laboratories. • Coverage can be tailored for each particular risk.

JDC/3-92

GZA
GeoEnvironmental, Inc.

Engineers and
Scientists

January 26, 1993

Mr. Frank Skidmore
Louis Berger and Associates
814 North Diamond - Suite 101
Gaithersburg, Maryland 20878

Dear Frank:

I have been traveling extensively this month but have accumulated some information that may be of interest with regard to indemnification issues. I hope this helps as an initial step. However, I have not had the time to do any detailed analysis.

320 Needham Street
Newton Upper Falls
Massachusetts 02164
617-969-0050
FAX 617-965-7740

1. HWAC has conducted a survey of states with indemnification statutes and has published the results. The State of Massachusetts has an indemnification statute for contractors doing work for the State on sites associated with hazardous waste and hazardous materials. I will be happy to get a copy of the statute if you think this would be useful.

2. The State of Massachusetts has done some innovative contracting for insurance and liability associated with the construction of the Central Artery project. As I understand the situation, the state procures project insurance. Limits and deductibility are significantly more advantageous than an single firm could afford; total costs are also below cumulative costs firms could obtain individually. Contractor "payment" is effectively made by excluding insurance costs for bids. Insurance is currently limited to worker compensation and general liability. Participates are currently assessing professional and pollution liability coverage. If you think this concept may have merit for further review I can attempt to have folks in our organization get more information -- or perhaps state people would be interested in communicating their model to federal interests.

A Subsidiary of GZA
GeoEnvironmental
Technologies, Inc.

3. We routinely use indemnification and limits of liabilities in contracts with private clients. Clients generally accept such provisions; the legal community in the region understands the requirements for such indemnification provisions. As such, there is usually little objection to our indemnification and limited liability provisions.

clearly the worst, these policies still expose X to substantial potential liability (e.g., strict liability based on state law) under Response Action Contracts. In addition, the nuclear incident indemnification under DOE contracts may not extend to the release of hazardous substances, potentially including "mixed wastes".

3. Indemnification (Subcontractor) - We rarely accept the subcontractor's subcontract terms as a matter of course. Our X Standard Terms require our subcontractors to indemnify X except to the extent of X's negligence or misconduct. X rarely provides cross-indemnification except to the extent that X has received flow-down indemnification from the Client (which, as noted above, is a pre-condition to our performing the intrusive work). Note that most of the subcontractors associated with remediation are "specialty" subcontractors or drillers must meet the OSHA health & safety requirements and are fairly savvy with regard to the high potential risks associated with the environmental services. Most of the financially stable and experienced firms require indemnification for pollution release as a prerequisite to the performance of the services.

4. Disposal - Our corporate policy is that we do not arrange for the off-site transportation, storage, treatment, or disposal of hazardous substances, either directly or through our subcontractors. Under CERCLA §107(a)(3) and (4), a party that "arranges" for such activities is then a Potentially Responsible Party ("PRP") for that waste forever. To the extent that we encounter such wastes, we containerize the waste and turn it over to the Client for disposal. In is important to note that we can provide a broad range of consulting services related to these disposal activities (e.g., screen disposal firms, solicit information/prices, monitor removal from the site, etc.) so long as the contract is clear that we are not making the ultimate decision as to such disposal. We are generally successful in having the Client contract this activity directly by pointing out that such activities are expensive and that they avoid our G&A markup and fee by contracting directly for such disposal. Since the Client is already liable as a PRP under CERCLA, it can save substantial dollars by handling the relatively minor function of selecting/contracting directly with the transporter and disposal site. In exchange, we avoid substantial potential liability under CERCLA. Our X Standard Agreements reflect that policy.

5. RCRA Manifests - Signing a RCRA manifest is indicia of "generator" status under RCRA and of PRP status under CERCLA. At a minimum, being listed on the disposal documents is likely to involve X in any future litigation related to that disposal activity (e.g., a subsequent release of materials from the disposal facility to which the wastes were sent). Our policy is to not sign the RCRA Manifest on behalf of our Clients. [NOTE: We do sign the RCRA manifests as "agents" for EPA under the ARCS contracts Our X Standard Agreements reflect this policy pursuant to a letter from EPA confirming that we are not assuming the status of PRPs by this action.

STANDARD CLAUSE (p.2)

or relates to any claimed or actual release or threatened release of Hazardous Materials ("Release") not caused by the gross negligence or misconduct of the Contractor.

7.2 Client shall defend, indemnify and hold Contractor harmless against any Loss, including reasonable attorney fees, to the extent that such Loss relates to the negligence or misconduct of the Client, or relates to any Release except to the extent that such Release is caused by the gross negligence of Contractor.

7.3 Each party shall give prompt notice of claims under this provision to the indemnifying party.

7.4 To the extent that state and/or federal law limits the terms and conditions of this section, it shall be deemed so limited to the extent necessary to comply with such state and federal law. This section shall survive termination of this Agreement.

8 ACKNOWLEDGEMENT

8.1 The Client recognizes that environmental, geologic and geotechnical conditions can vary from those encountered at the times and specific sample locations where samples are taken and that the inherent limits on the availability of data results in some level of uncertainty with respect to the interpretation of that data, despite the use of due professional care.

8.2 The Client further recognizes that commonly used methods for performing environmental investigations including, but not limited to drilling borings and excavation trenches, involve an inherent associated risk. These exploration methods may penetrate existing subsurface or concealed barriers that may result in the flow of contaminant into previously uncontaminated areas. While backfilling the borings and trenches with grout or other means, according to the present state of the practice is intended to provide a seal against such a passageway, it is recognized that such a seal may be imperfect despite the reasonable efforts of Contractor.

9 NOTICE

9.1 Any notice given by either party shall be in writing and shall be deemed given, three (3) days after deposited in the United States mail, postage prepaid, certified return receipt requested, or upon actual delivery to the other party at the following addresses:

TO Client:	TO Contractor:
_____	_____
_____	_____
_____	_____

13. CONFLICTING PROVISIONS

The terms, provisions, covenants, or conditions herein contained shall control in the event of any conflict with any provision, term, covenant or condition in any of the documents attached hereto and made a part hereof, or any work orders, purchase orders, requisitions, or any other forms or documents.

14. INDEMNIFICATION

CONTRACTOR agrees to protect, indemnify, hold harmless and defend OWNER, its subsidiaries and related companies, and the officers, directors, employees, workmen, agents, servants and invitees of OWNER, its subsidiaries and related companies, from and against all losses, damages, demands, claims, suits and other liabilities (including attorney fees and other expenses of litigation) because of

(i) bodily injury, including death at any time resulting therefrom,
(ii) damages to all property, including loss of use thereof and downtime,
(iii) contamination of or adverse effects on the environment, including the cost of cleanup,
(iv) violation of or failure to comply with any applicable law, regulation, rule or order,

which occur, either directly or indirectly, in connection with performance of the Work contemplated hereunder or by reason of CONTRACTOR and its employees, workmen, agents, servants, subcontractors and vendors being present on OWNER's premises, except to the extent the total liability, loss or damage is attributable to and caused by the negligence of OWNER, and

(v) infringement of patent, trade secret or proprietary rights of any third party by any device, process or material not specified by OWNER.

CONTRACTOR's said agreement to protect, indemnify, hold harmless and defend as set forth in the immediately preceding sentence shall not be negated or reduced by virtue of CONTRACTOR's insurance carrier's denial of insurance coverage for the occurrence or event which is the subject matter of the claim and/or refusal to defend CONTRACTOR or OWNER. In addition, CONTRACTOR will pay all cost and expenses, including attorney fees and all other expenses of litigation incurred by OWNER to enforce the foregoing agreement to protect, indemnify, hold harmless and defend OWNER.

In no event shall either party be liable to the other for any incidental, indirect, special or consequential damages whatsoever (including but not limited to, lost profits or interruption of business) arising out of or related to the services supplied under this Agreement.

To the extent that state and/or federal law limits the terms and conditions of this section, it shall be deemed so limited to the extent necessary to comply with such state and federal law. This section shall survive termination of this Agreement.

CONTRACTOR's liability to OWNER under the foregoing indemnity shall be limited to the dollar limits of the insurance provided at paragraph 15 below.

OWNER agrees to protect, indemnify, hold harmless and defend CONTRACTOR with respect to any claims, demands, losses, damages or suits relating to the release or threatened release of hazardous substances, pollutants or contamination which are pre-existing conditions on the property, except to the extent such claims, demands, losses, damages or suits are based upon aggravation of a pre-existing condition by CONTRACTOR.

8.2 [redacted] shall indemnify and hold harmless the Consultant its officers, employees and representatives from and against all claims, actions, and losses, including all expenses incidental to such claims and actions, based on or arising out of damages or injuries to persons or property caused by willful misconduct, or negligent act or omission of [redacted] or any of its agents, subcontractors and employees which arise in connection with this Agreement, except to the extent that such claims and actions arise out of Consultant's willful misconduct, or negligent act or omission.

8.3 [redacted] shall indemnify and hold harmless Consultant against any strict liability arising out of contamination or release of hazardous substances at any Site which is the subject of an Accepted Purchase Order except to the extent that such contamination or release is the result of Consultant's breach of this Agreement or Consultant's negligence or willful misconduct.

8.4 In the event any damages are caused in part by actions or events within Section 8.1 above, and caused in part by actions or events within Section 8.2 above, Consultant and [redacted] shall be proportionately liable to each other and/or to any third person, in proportion to the parties' relative degrees of fault.

8.5 The indemnification obligations of this Article VIII shall survive the termination of this Agreement.

ARTICLE IX - CONSULTANT'S STATUS

9.1 The status of the Consultant shall be that of an independent contractor. [redacted] shall have no control over the employment, discharge, compensation of, or services rendered by, Consultant's employees. Consultant shall pay the contributions measured by the wages of his employees required to be made under the Unemployment Compensation Insurance, Social Security and Retirement Laws or similar laws, state and federal, applicable to the work performed by Consultant or his subcontractors under this Agreement. Consultant shall accept exclusive liability for said contributions and shall indemnify, defend and hold [redacted] harmless from any and all liability arising therefrom.

ARTICLE X - SITE SAFETY

10.1 When consulting services are to be performed at a Site which is owned or leased by [redacted], [redacted] shall inform Consultant and Consultant, Consultant's employees, representatives and agents shall comply with [redacted]'s health and safety policies, plans and requirements.

10.2 If [redacted] provides Consultant with health and safety information, Consultant shall communicate such information to its employees, subcontractors, customers, and agents who may come in contact with a Site.

9.0 INDEMNIFICATION

9.1 Client shall defend, indemnify, and hold harmless [redacted] and its affiliates against all loss, damage, liability, suit, or claim, including reasonable attorney's fees, relating to the Services, except to the extent such loss, damage, liability suit, or claim is based upon the negligence or misconduct of CF Kaiser Engineers, its officers, employees, agents, or representatives.

9.2 *IN NO EVENT SHALL [redacted] OR ITS AFFILIATES BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING BUT NOT LIMITED TO, LOST PROFITS OR INTERRUPTION OF BUSINESS) ARISING OUT OF OR RELATED TO THE SERVICES SUPPLIED UNDER THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.*

10.0 THIRD PARTY BENEFICIARIES

10.1 Client agrees that the Services shall be performed by [redacted] exclusively for the use and benefit of Client and no third party shall have the right to rely on any opinions made hereunder.

11.0 CONFLICTS OF INTEREST

11.1 Since [redacted] and it affiliates serve a large number of very diverse clients which may include companies involved in activities affecting Client, the parties hereto agree that the work hereunder for Client by [redacted] will not be grounds for asserting a conflict of interest or the appearance of a conflict of interest in any unrelated work that [redacted] or its affiliates may be doing for other companies. Specifically, the parties agree that [redacted] or its affiliates may work for other companies in matters that do not involve any confidential information that has been obtained by [redacted] and its affiliates in the course of the current representation of Client. It is further understood that Client will "waive" any conflict of interest in any such case, and will not assert any conflict of interest or any apparent conflict of interest as a ground for disqualifying or terminating [redacted] or its affiliates.

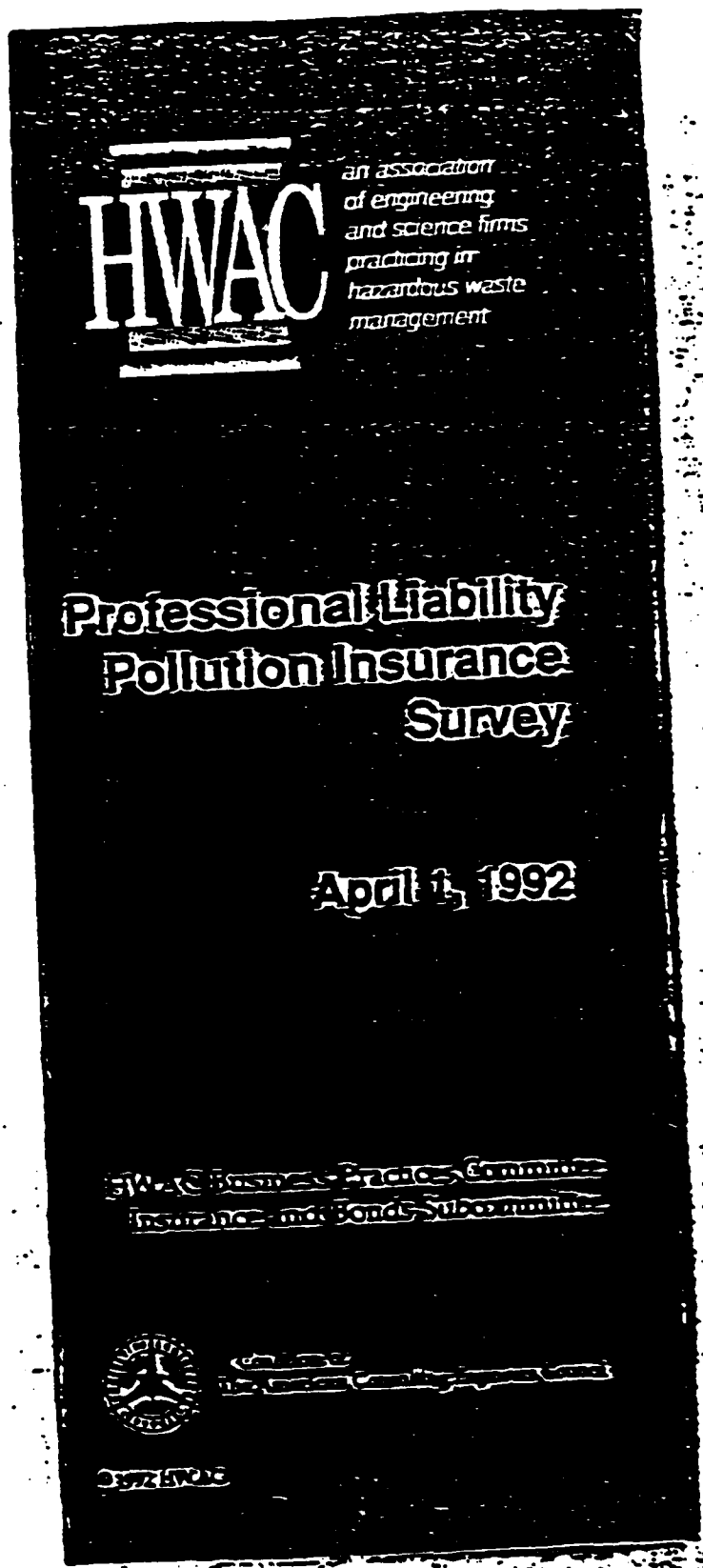
12.0 HEALTH AND SAFETY

12.1 Client shall take all reasonable precautions to provide [redacted] with a safe working environment or to give notice of potentially dangerous areas/occurrences. Client shall defend, indemnify, and save harmless, [redacted] for any loss or damage resulting from negligence on the part of Client to provide for or give notice of an unsafe working environment.

Appendix 5
Insurance Information

Contents

TAB 14 HWAC


HWAC
an association of engineering and science firms practicing in hazardous waste management
Professional Liability Pollution Insurance Survey
April 1, 1992

ENVIRONMENTAL ARCHITECTS AND ENGINEERS
PROFESSIONAL LIABILITY SPECIALTY INSURANCE MARKETS
APRIL 1, 1992

Market	London	Shared Members	United Coastal	Term Insurance Company	Term Ins Ltd. Bermuda Corp.	CNA	DPIC
Insurer	Various London Underwriters	Evanston Insurance Company	United Coastal Insurance Company	Term Insurance Company (a Vermont risk retention group)	Term Ins Ltd. (Bermuda)	CNA	DPIC
Basis Rating	No Best Rating	B+, VI	B+, VI	Not Rated	Not Rated	A+, XV	B+, VIII
Coverage	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made
Product Description	Environmental Consultants Professional Liability Amended Pollution Exclusion	Specified Professional Services E&O Amended Pollution Exclusion	Practice E&O coverage including Pollution and Asbestos	Practice E&O without Pollution Exclusions	E&O without Pollution Exclusions	E&O without Pollution Exclusions	E&O without Pollution Exclusions
Maximum Limits Available	2,000,000/claim 2,000,000 all claims 10,000,000 excess	1,000,000/claim 1,000,000 all claims 1,000,000 Excess Available	7,000,000	1,000,000 per claim and in the aggregate	$5,000,000	$1,000,000 (Sublimit)	$1,000,000 (Sublimit)
Minimum Premium	$10,000	$5,000	$40,000	$15,000	$10,000	5% of policy cost	5% of policy cost
Minimum Self Insured Retention/Deductible	$10,000	$10,000	$5,000	$25,000	$25,000	1% of gross billings	
Target Markets	Environmental Practice	Mid size companies with sales in the $500,000 to $1,000,000 range	All business sizes considered	Civil and Geotech Individual Account Consideration	Geotechs and Environmental Consultants	All Engineers	All Engineers
Is This Work Covered?							
Design/Build Your Work	No	Added	Silent	Yes	No	Yes	Yes
Laboratory Analysis	Yes	Yes	Yes	No	Yes	No	Yes
Asbestos	Yes	Yes	Yes	No	Yes	Yes	Yes
Strict Liability, Fines and Penalties	No	Silent	Yes	Yes	No	Yes	Yes
Underground Tanks	Yes	No	Yes	No	Yes	No	Yes

The coverage provided by these programs has significant limitations; please read the discussion here. Review of any insurance policy with your attorney and insurance advisor is essential.

ingly, the engineer must carefully consider whether the amount of insurance that he is purchasing will be adequate to cover expected risks from doing environmental work.

The engineer should examine the insurance product closely to see if it covers only claims of negligence, or if it will cover other types of claims that may be made against engineers, such as strict

On project specific pollution liability insurance policies, premiums may range from 2½ to 5 percent of gross project invoices. Project specific insurance is available from reputable carriers, but continues to be expensive.

In summary, insurance is not a complete solution to environmental risk. Careful client and project selection and a reasonable contract that

WILLIS CORROON

Environmental
Risk Management
Services
Willis Corroon Plaza
26 Century Boulevard
PO Box 305024
(Zip 37230-5024)
Nashville, TN 37214
Telephone 615-872-3200
Fax 615-872-3333

January 31, 1993

Mr. Vic Wieszek
Department of Defense
400 Army-Navy Drive
Room 206
Arlington, Virginia 22202

RE: Information on Pollution Liability Insurance

Dear Vic:

Long time, no see! Sure is a small world. Prior to leaving office, Mr. Baca had requested some background information on pollution liability insurance from us. I was pleasantly surprised when I called to see who to forward the material to and the secretary said you were handling it.

I guess its been well over a year since we last got together. Since then, I've retired from the Public Health Service and EPA. I'm now working with the Environmental Risk Management Services Division of Willis Corroon in Nashville, TN. (Willis Corroon is one of the largest insurance brokers in the world.)

Mr. Baca had requested background information on the availability and cost of pollution liability insurance, I assume, as part of your continuing development of an indemnification program for DOD clean-up contractors. I've included two comparison tables that list the insurance companies which provide either professional liability or contractors pollution liability coverages. Currently, over $50 million of coverage is available for either professional or contractor's pollution coverage. Both of these policy forms provide pollution liability coverage. Pricing for the first $1,000, 000 to $6,000,000 of coverage will range from approximately 2 percent of yearly revenues for small contracts ($1-2 million in revenue) to less than 1 percent for large contracts.

We have been able to put together contract specific programs that cover the duration of the contract and provide three to four years of extended discovery. This is a very good product for remediation projects. A second good method is to provide a project wrap-up insurance program, in this case the owner buys the coverage and insures all contractors under the policy. This is a very cost effective method since it allows many small subcontractors to be protected and not incur the minimum premiums.

We continue to develop insurance program, that rationally allocate risk between the owner and the contractors. This can be accomplished by requiring pollution insurance for the initial levels of risk transfer, say $1-5 million for small contracts and $10-20 million for large contacts. This coverage should extend three to four years beyond completion of the contract. Also, the costs for the insurance should be reimbursable or incorporated into overhead as other insurance costs are. Then indemnification should be provided above and beyond the insurance protection.

This approach has three benefits, first it places the insurance companies in the position of handling and defending claims within the policy limits freeing the government from

WILLIS CORROON ENVIRONMENTAL RISK MANAGEMENT SERVICES – COMMERCIAL PROPERTY LENDER/OWNER POLLUTION CLEANUP IN

Coes not pertain to environmental restoration.

ET	ENVIRONMENTAL COMPLIANCE SERVICES	ERIC GROUP INC.	GENERAL ENVIRONMENTAL MANAGEMENT	SPHERE DRAKE
IER	Reliance National	Western Alliance/ Admiral Insurance Co.	AIG	National Assurance Corp.
BESTS RATING	A–, XI	A+, VII	A+, XV	A+ IV
CONTACT	Paul Murdoch (800) 327–1414	Glen Sibley (800) 234–9221	Mark Snow (312) 207–2200	Sam Dunlop (404) 452–1355
PRODUCT NAME	Pollution Clean–up Policy First Party Insurance	Property Transfer Legal Liability Insurance	Environmental Remediation (First Party) Insurance	Real Property Environ–mental Impairment Indem.
MAXI*UM LIMITS	$10 M / $20 M	$10 M / $10 M	$10 M / $10 M per site	$1 M / $1 M
MINIMUM RETENTION	$25,000	$10,000	$10,000 per site	5% or 10% of policy limit up to $10k or $20k rspctvly
MINIMUM PREMIUM	$10,000	Variable from $6,000	Variable	$0.38–$3.07 / $100 covg
TARGET MARKETS	Manufacturer, Warehouses Utilities, Hospitals, Lenders Commercial Properties, Real Estate Developers Undeveloped Land	Borrowers, Lenders, Owners, Landlords and Tenants of Commercial Property	Commercial Property > $2M, Office Bldgs, Shopping Ctrs, Multifamily Residential, Land for Development, Schools and Government Buildings, Light Industry.	Property Owners Exposed to CERCLA Clean–ups including banks, and real estate developers.
POLICY TERM	3 Year Maximum	Length of ownership, Length of Loan, or 3 yrs.	3 Year Norm, 5 Year Maximum or Length of Loan	1 Year
INDEMNIFY/PAY ON BEHALF OF	Flexible	Pay on Behalf of	Pays as first–party coverage.	Indemnify
ERAGES				
LY INJURY	N	N (may be ex.anded)	N	N
PERTY DAMAGE (Off–site migration)	N (can be combined)	Y	Y	N
ON–SITE CLEAN–UP	Y	Y	Y	Y
DEFENSE/LITIGATION	N (can be combined)	Y	Y	N
DUE CARE	Y	Y	N	At the Company's Discretion
FINES/PENALTIES	N	Y	N	N
STATUTES COVERED				
CERCLA	Covers governmental action because of Environmental Damage excluding the Outer Continental Shelf Act, and the Deepwater Port Act. Also Excludes Acid Rain and Nuclear.	Y	Y	Y
RCRA		Y	Y	N
CWA		Y	Y	N
CAA		N	Y	N
STATE		Y	Y	N
LOCAL		N	Y	N
FEATURES				
	•Claims–Made •Immediate reporting required •Preacquisition Site Assessment Required. •12 month extension @ not more than 200% of premium. •Applies to Unknown Prior Pollution and onsite pollution after the policy inception.	•Claims–Made. •24 hour report period. •Preacquisition Site Assessment Required. •Covers Clean–up of adjacent propery due to migration. •Applies to Unknown Prior Pollution and onsite pollution after the policy inception.	•45 Day reporting period. •Preacquisition Site Assessment May be Required. •Responds to discovery of Environmental Damage, no mandate or third party claim necessary. Excludes release of herbicide, pesticide, fertilizer. Asbestos, Radioac., electromag. • Applies to unknown prior contamination and onsite pollution after policy incept. •Noncancelable entire pol. per. Renewable Subject to Underwg	•Claims–Made. •Preacquisition Site Assessment Required. •12 month extension @ not more than 200% of premium. •Covers CERCLA/SARA on–site cleanup costs only. •Excludes all prior known environmental impairment. •Site would have to become NPL listed during the policy period for coverage to exist.

S CORROON ENVIRONMENTAL RISK MANAGEMENT SERVICES - ENVIRONMENTAL CONSULTANTS'/ENGINEERS' PROFESSIONAL LIABILITY POLICY COMPARISON - December 1992

KET	AMERICAN EMPIRE SURPLUS LINES	AMERICAN INTERNATIONAL GROUP	AMERICAN SAFETY RRG	ARCHITECTS & ENGINEERS INSURANCE COMPANY - RRG	CNA SHINNERER	DESIGN PROFESSIONALS INSURANCE COMPANY	ENVIRONMENTAL COMPLIANCE SERVICES	FIREMAN'S ENVIRONMENTAL INSURANCE
RER	American Empire Surplus Lines	American International Surplus Lines Ins Co or Lexington Ins. Co.	American Safety Insurance Group, Ltd.	Fronted by National Union (A++, XV)	CNA	Security Ins.or DPIC	Planet Insurance Company	Homestead Ins. Co.
S RATING	A, VIII	A++, XV	Not Rated A - VIII reinsurer	NA III	A+, XV	A-, IX	A-, XI	A, VI
DUCT SCRIPTION	Environmental Engineers Combined General Liability & E&O	Pollution Liability Errors & Ommisions Insurance	ISO General Liability policy with E&O for pollution only.	Pollution Coverage for A&E arising out of Professional Services On Natl. Union paper	Professional Liability Insurance for Architects and Engineers	E&O practice insurance with pollution coverage.	Environmental Consultants Professional Liability	Professional Liability for Environmental Engineers & Consultants
UTION VERAGE	Amendment to the Pollution Exclusion	Pollution Coverage Part	Pollution coverage applies to professional only.	Seperate Coverage Part Endorsed to E&O policy	Pollution endorsed onto E&O policy	Coverage by endorsement to E&O policy	No pollution exclusion	Sudden and Accidental including subcontractors
MUM MIT	$5,000,000 per claim $5,000,000 aggregate	$10,000,000 per claim $10,000,000 aggregate $40,000,000 multi site	$1,000,000 per claim $2,000,000 aggregate	$5,000,000 per chim Higher Limits & Excess Available	$1,000,000 per claim Higher Limits & Excess Available	$1,000,000 per claim $1,000,000 aggregate	$10,000,000 per claim $20,000,000 aggregate Excess Available	$500,000 or $1,000,000 available
MUM MUMS	$5,000	$20,000	$3,750	$35,000	$2,000 for small varies by class..	Greater of $400 - $700 or 5% of practice policy premium	$25,000(>500,000 rev) $10,000(<250,000 rev)	$7,000 or $10,000
MUM SIR/ DUCTIBLE	$5,000	$10,000	$2,500	$25,000	$2,000 varies by size of business.	$2,500	$25,000(>500,000 rev) $15,000(<250,000 rev)	$5,000 or $10,000
ET RKETS	Environmental Consultants	Larger Firms Involved Primarily in Professional Environmental Services.	Asbestos Abatement UST, III, and other Environmental Consultants Labs and training facilities.	Medium to large environmental firms with $2M or more in gross receipts. Wide range of ops.	Architects, Engineers with less than 50% environmental work. No Design Build	Environmental consulting firms not involved in heavy remediation.	Individual Account Consideration Small program for geotech labs, consultants	Environmental risks : asbestos/lead abatement USTs, no Superfund $1 M in revenue or less.
ON ALF" OR MNIFY"	Pay on Behalf	Pay on Behalf	Pay on behalf	Pay on Behalf	Pay on Behalf	Pay on Behalf	Pay on Behalf	Indemnify
O DATE OR ACTS	Retro date negotiable	Retro date negotiable	Retro date negotiable	Retro date negotiable	Retro date avail for accts with 2 or more years prior coverage.	Retro date negotiable	Retro date negotiable	Retro = Inception
K IN GRESS	Covered subject to retro date	Covered subject to retro date	Covered subject to retro date	Covered subject to retro date	Covered subject to prior coverage date	Covered subject to retro date	Covered subject to retro date	Covered subject to retro date
USIONS								
GN/BUILD IATIONS	No Exclusion (covered under GL)	Excluded (can provide (combined form)	Excluded	Excluded	Excluded	Excluded	Excluded (can provide (combined form)	Excluded
ANALYSIS	No Exclusion	No Exclusion	No Exclusion	No Exclusion	No Exclusion But generally not in the market to write professionals involved in these types of activities. Strict Liability not covered.	No Exclusion	Negotiable	No Exclusion
STOS	No Exclusion	No Exclusion	No Exclusion	Exclusion buy-back option		Excluded	Negotiable	No Exclusion
	No Exclusion	No Exclusion	No Exclusion	No Exclusion		No Exclusion	Negotiable	No Exclusion
T RITY 3 AND LUES	Strict Liability not insured, punitive damages are excluded	Strict Liability not insured, statutory liability & punitive damages excluded.	Strict Liability not insured	Not insured		Excluded	No Exclusion for Strict Liability.	Excluded

MILLIS CORROON ENVIRONMENTAL RISK MANAGEMENT SERVICES – COMBINDED CPL AND E&O POLICY COMPARISON – August 5, 1992

MARKET	AMERICAN INTERNATIONAL GROUP	ENVIRONMENTAL COMPLIANCE SERVICES
INSURER	American International Surplus Lines Insurance Company	Planet Insurance Company
BESTS RATING	A+, XV	A–, XI
PRODUCT TITLE AND DESCRIPTION	Contractor's Operations and Professional Services Environmental Insurance Provides CPL and E&O with pollution	Consultants Environmental Liability Insurance Provides CPL and E&O with pollution
POLLUTION EXCLUSION	No Pollution Exclusion	No Pollution Exclusion
MAXIMUM LIMIT	$10,000,000 per claim $10,000,000 aggregate Excess Available	$10,000,000 per claim $20,000,000 aggregate Excess Available
MINIMUM PREMIUMS	$25,000	$20,000
MINIMUM DEDUCTIBLE (SIR)	$50,000	$25,000
TARGET MARKETS	Environmental Engineering and Contracting firms involved in consulting and actual environmental operations	Environmental Engineering and Contracting firms involved in consulting and actual environmental operations
INSURING AGREEMENTS (CLAIMS MADE)	Will Pay for Personal Injury, Property Damage and cleanup costs due to acts, errors or omissions in Professional Services and BI, PD and Cleanup Costs for Pollution Conditions arising out of insured activities.	Will Pay for damages due to act error or omissions in professional services and damages for pollution conditions arising out of the performance of professional services.
"PAY ON BEHALF OR INDEMNIFY"	Pay on Behalf	Pay on Behalf
RETRO DATE /PRIOR ACTS	Retro date negotiable	Retro date negotiable
WORK IN PROGRESS	Covered subject to retro date	Covered subject to retro date
EXCLUSIONS:		
DESIGN/BUILD YOUR WORK	Not Excluded	Not Excluded
OPERATIONS	Not Excluded	Not Excluded
LABORATORY ANALYSIS	Not Excluded	Not Excluded
ASBESTOS	No Exclusion	Excluded, but coverage is endorsable
USTs	Repair is excluded	Repair & maintenance excluded Installation negotiable
STRICT LIABILITY FINES AND PENALTIES	Strict Liability not excluded Punitive damages and criminal fines and penalties are excluded	No Exclusion for Strict Liability

WC 31 Jan 93 14.

Superfund Site PRP-Controlled Pollution Liability Insurance Program

Companies that are named as Potentially Responsible Parties (PRPs) at a Superfund site face liability both for the cost of the site cleanup and for third-party claims that may result from the on-site cleanup activities. Although the cost of the actual cleanup usually cannot be transferred from the PRP group, liability stemming from a remediation contractor's negligence can be transferred, in part, to the responsible contractor. Transferring the risks of the remediation process is best accomplished if the contractor is able to support contractual indemnity agreements through the purchase of adequate pollution liability insurance coverage.

One method of assuring the transfer of this risk is to require each contractor to individually obtain a specified level of appropriate pollution insurance. However, barriers to obtaining this insurance on an individual basis can make this method costly and severely limit the number of potential contractors. An alternative method is to establish a PRP-controlled insurance program to cover all work and contractors at the site. A PRP-controlled insurance program can produce significant benefits in the form of broadened coverage, premium and administrative cost savings, and an expanded base of competing contractors.

A PRP-controlled insurance program can produce significant benefits in the form of broadened coverage, premium and administrative cost savings, and expanded competition among contractors.

How does a PRP-Controlled Insurance Program work?

Because of the pollution liability loss exposures in Superfund cleanup operations, it is in the best interest of the PRP group to require pollution liability insurance coverage for contractors performing professional services or remediation operations at the site. However, high minimum premiums faced by each contractor individually, and the reality that many contractors do not carry pollution coverage on an ongoing basis often make it impractical to require each contractor to purchase a separate policy to cover the cleanup work.

Under a PRP-controlled insurance program for a Superfund site, the PRP group facilitates the purchase of primary pollution insurance protection for itself and all contractors involved in the project. The program can provide Contractors Pollution Liability (CPL) insurance and Environmental Consultants Errors and Omissions (E&O) insurance with pollution coverage. If there is an asbestos exposure, Asbestos Abatement Liability and Asbestos Consultants Errors and Omissions coverages can also be purchased. The program is typically limited to pollution coverages because these are needed to insure the loss exposures of environmental cleanup work but are often not obtainable or afforded by the contractors individually. It is common for contractors to carry general liability and automobile liability insurance coverages on an individual and continuous basis, however, the PRP-controlled program can also include these coverages.

Commonly a program of this type is established by the PRP group purchasing a single CPL or E&O insurance policy or a policy that combines these coverages. Individual contractors are then endorsed onto the policy through the completion of a simplified application process. The PRP group is the named insured on the policy and the contractors are added as additional named insureds.

Why is a PRP-Controlled Insurance Program desirable for Superfund Projects?

PRP groups attempting to minimize their future liability from Superfund cleanup activities may try to pass all pollution liability to their contractors by requiring them to indemnify the PRP group. However, the PRP group must realize that while most contractors are willing to bear responsibility for their negligent acts, errors and omissions in providing services, they are not willing to assume all strict, joint and several liability associated with Superfund cleanup activities. Requiring contractors to carry pollution insurance can result in equitable risk sharing between the PRP group and its contractors. Utilization of a PRP-controlled program is the easiest way to ensure that all contractors working on the project have pollution liability coverage.

When contractors are required by a PRP group to provide pollution liability insurance as part of the group's risk transfer program, they face two major barriers to fulfilling this requirement:

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MANAGING CONTRACTORS ENVIRONMENTAL LIABILITY
Risk Financing Considerations

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Risk identification can be defined as the process of identifying, analyzing and measuring a particular loss exposure. Loss prevention can then be defined as methods to prevent a loss from occurring. Loss control addresses the need to contain and minimize the adverse affects of a loss once it has been incurred. Finally, loss financing addresses the funding of losses while maintaining the entity's long term financial solvency. This paper will devote most of its discussion to the financing of losses from past, present and future activities.

III. Past Environmental Liability

Environmental cleanup legislation is a source of liability for contractors who find themselves in the position of Potentially Responsible Parties (PRPs) at Superfund sites due to past waste disposal activities. PRPs can include contractors working in any area of construction who have disposed of waste at sites which are now listed as Superfund sites under the Environmental Protection Agency's (EPA's) program. Retroactive liability is a principle which holds PRP's responsible for the cleanup costs at a site where disposal occurred in the past despite the PRP's compliance with all laws and regulations at the time they contributed to the waste site. PRPs are also subject to strict, joint and several liability standards which could result in disproportionate responsibility for a site cleanup.

In addition to Superfund liabilities, contractors may incur other environmental liabilities from their past activities on their owned property. Identification of risks in past operations is an important part of the risk management program. Managers should attempt to identify all the skeletons in the closet and address exposures before a regulatory body, citizens action committee or class action suit does it for them. Consulting firms that specialize in environmental risk assessments can be particularly helpful in identifying loss exposures from prior activities.

If a particular problem can be identified and corrected, the risk manager may have the opportunity to actually prevent all or part of a loss from occurring. For example, if the barrels of hazardous waste in the parking lot can be removed before they lead to a third party bodily injury claim for the contamination of ground water, the risk manager has prevented the bodily injury claim. This scenario could also be considered a method of loss control, preventing a small loss from turning into a larger loss.

For past activities, risk managers have a significant amount of latitude in the loss control area. For example, establishing control of the cleanup process at a Superfund waste disposal site may reduce or eliminate third party bodily injury and property damage claims which may arise out of the cleanup. PRPs can improve their loss control by requiring specific pollution insurance coverages for the remedial action contractors working on the cleanup. Without specifically addressing the need for contractors pollution liability in the bid specifications, most site owners have allowed cleanup operations to be conducted by engineers and contractors who have virtually no insurance coverage for the primary loss exposure of the work. Site owners and responsible parties should require appropriate limits of contractors pollution liability and pollution professional liability insurance from their remedial action contractors if they are going to require liability insurance at all. Also, site owners must be willing to reimburse the engineer or contractor for the costs of that insurance.

To finance the environmental cleanup and potential bodily injury and property damage claims from prior activities, risk managers have few available options. A responsible party at a superfund cleanup cannot prevent that loss from being incurred, and it is not possible to purchase new insurance coverage for the incurred loss. Trying to obtain liability insurance to pay for the actual cleanup of a superfund site is

Contractors should be aware of the indemnification sources and insurance products that are being developed to meet the dynamic environmental exposures that they face. Contractual indemnification clauses can shift liability from the contractor to site owners, government enforcement bodies, subcontractors and others involved in site management or cleanup. Environmental contractors should pay particular attention to the indemnification and insurance provisions contained in federal cleanup contracts when designing their risk financing program.

VI. Loss Financing Under Federal Environmental Cleanup Contracts

In the mid 1980s, tailor made pollution liability insurance was not available to environmental cleanup contractors (called "remedial action contractors" or "RACs") who were becoming involved in EPA Superfund cleanup activities. This was a substantial deterrent for contractors considering this type of work. The imposition of strict, joint and several liability on responsible parties under the Superfund program increased the perceived risk to contractors. In order to attract RACs to the Superfund program, the EPA agreed to provide indemnification for liability claims that arose from the RACs' remediation activities.

In 1986 the Superfund Amendments and Reauthorization Act (SARA) formalized the EPA's authority to indemnify contractors and placed specific limits on that authority. Section 119 of SARA exempted RACs from strict liability under all federal laws for pollution liability *unless the RAC was negligent, grossly negligent, or guilty of intentional misconduct*. EPA indemnification agreements only cover RAC liability that results from the release of a hazardous substance, pollutant or contaminant if such release arises out of the RAC's activities carried out under written agreement between RACs and all parties who may hire RACs for response action at Superfund sites.

The EPA bases its decision to provide indemnification in part on the ability or inability of the PRP to indemnify the RAC. Additionally, no claims will be paid by EPA on behalf of the RAC until all possible claims against the PRPs have been exhausted and the RAC's full deductible is paid.

Another interesting characteristic of the EPA indemnification provisions is the ability for prime contractors to flow down their EPA indemnification to subcontractors who are in compliance with Section 119(c)(4) eligibility provisions. This arrangement may cause the prime contractor difficulty in receiving indemnification if their subcontractors are not in compliance.

To be eligible for EPA indemnification for pollution liability a RAC must first meet the following requirements:

1. The RAC must show that the liability covered by the indemnification agreement exceeds or is not covered by insurance available at a fair and reasonable price.

2. The RAC must make diligent efforts to obtain pollution liability insurance coverage from non-federal sources.

3. The RAC must continue to make those diligent efforts each time the RAC begins work at a new facility.

Based on these criteria all contractors must make an effort to acquire insurance in order to qualify for

For example, an insurance program written for a firm providing design/build or single-source environmental contracting, including asbestos abatement services, could include as many as eight basic insurance coverage parts. All of the coverages must be interfaced with each other to put the pieces of the insurance protection wall together.

What follows is an outline of the individual coverages necessary to build an insurance program for environmental contracting firms. The insurance coverages described here are available in the marketplace today. The insurance market is expanding at an increasing rate, making it difficult to compose a picture reflecting current conditions that will be totally accurate weeks or months later. The areas which are most susceptible to change include the available limits of liability and underwriting guidelines of the various markets. The basic coverages, however, will remain unchanged for a longer period of time.

It is also important to note that some of these policies are duplications of each other, except that exclusions in one or the other make the purchase of both necessary. Particular attention must be paid to the rating basis on all policies to avoid duplicating premiums, although not necessarily coverage, between policies. The premium cost for some of these coverages may exceed the normal operating margins of a contracting firm; consequently, failure to coordinate rates and revenue streams could potentially bankrupt a firm following a premium audit at the end of the policy period.

Commercial General Liability Insurance: The Commercial General Liability (CGL) insurance policy is the third-party litigation insurance coverage relied on by most businesses. This policy provides coverage for claims arising out of the insured's operations, premises, completed operations and products for bodily injury and property damage, plus the defense of those claims.

Faced with increasing pollution liability losses under insurance policies issued in prior years, the insurance industry rewrote the CGL policy in 1986. As part of that revision, the pollution exclusion was completely modified. The new standard exclusion reads:

1988 ISO POLLUTION EXCLUSION

f.(1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants:

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured;

(b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;

(c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for any insured or any person or organization for whom you may be legally responsible; or

(d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations:

(i) if the pollutants are brought on or to the premises, site or location in connection with

for bodily injury, property damage, and environmental cleanup costs for the contractor's described operations. Coverage can be purchased on either a blanket/reported-sites or project-specific basis.

CPL coverage has its roots in Environmental Impairment Liability insurance. In spite of the shared similarities, buyers should be aware that a standard EIL policy provides little or no insurance protection for contracting activities. A CPL policy, on the other hand, modifies the coverage to more closely reflect the exposures of a contracting firm.

Architects and Engineers Errors and Omissions Insurance: For design professionals, the purchase of Errors and Omissions coverage has historically been necessitated by a special exclusion typically added by endorsement to CGL policies written for such risks excluding coverage for claims of injury of damage arising out of design error. To fill this gap in coverage, the purchase of a professional E&O policy is necessary. The typical insuring clause of these policies agrees to pay on behalf of the insured for negligent acts, errors and omissions arising out of the rendering of a described professional service.

The majority of E&O policies on the market today contain an exclusion for claims arising out of a pollution incident. It is now possible, however, to purchase E&O coverage from specialty markets that provide coverage for pollution claims as part of the traditional Errors and Omissions coverage.

Environmental Consultants E&O Insurance: A number of new custom-tailored Errors and Omissions policy forms have been introduced to accommodate firms that provide environmental remediation services. These policies usually take the form of a traditional Errors and Omissions policy, extending professional liability coverage to claims arising out of a pollution incident by amendment or elimination of the pollution exclusion. It is interesting to note that the new policy forms are often no more expensive than the traditional forms with the pollution exclusion.

Asbestos Abatement Liability: Asbestos Abatement Liability insurance policies typically track the CGL policy form. Most provide coverage for asbestos abatement operations by amendment of the pollution exclusion in the standard CGL policy. Both the CGL and Asbestos Abatement Liability policy use payroll and receipts as the rating basis to determine premium. Since these coverages are redundant for premium computation purposes, each of the carriers should be aware of the existence of the other policy, and should issue endorsements that enable the insured to avoid paying double the necessary premium. Policy forms and insurer integrity vary a great deal within the Asbestos Abatement Liability insurance market. The advice of an expert broker is highly recommended on this line of coverage.

Asbestos Consultants E&O Insurance: Coverage for asbestos consultants is usually written under a conventional professional E&O liability insurance policy, with the pollution exclusion eliminated or amended to the extent necessary to provide coverage for professional errors, acts or omissions arising out of the design of asbestos projects. Asbestos Consultants E&O coverage may be redundant for some risks, however. Such specific insurance would be unnecessary if the insured has an Environmental Consultants Professional Pollution Liability policy or some other form of Errors and Omissions coverage with sufficiently broad wording so as not to exclude the asbestos hazard.

Combined Policy Forms: Some underwriters are introducing specialty policy forms combining pollution coverage with either professional liability or general liability insurance. The principal advantage of these forms is cost. Since all the coverages share one limit of liability, the underwriter has lower total exposed limits, and can charge a lower premium. Another advantage for the buyer is that a single policy covering

the nuclear exposure, risk managers should differentiate between three broad types of work and clients:

1. Low-level nuclear work, private clients;
2. Firms in the nuclear fuel cycle, private clients;
3. Department of Defense and Department of Energy projects.

Low-level nuclear hazards can be addressed within the context of the Contractors Pollution and Engineers Professional Liability policies. Although each policy has an exclusion dealing with nuclear materials, specific-site and scope-of-work endorsements can be added to the policies to override the exclusion. Firms engaged in the nuclear fuel cycle have access to the nuclear insurance pools. The pools provide bodily injury and property damage liability coverage, including defense costs, for claims stemming from occurrences arising out of nuclear materials.

Underwriting guidelines restrict the availability of coverage to firms that fall within the fuel cycle, beginning with fabricators and extending from reactors and by-products to burial or disposal. Industrial and medical facilities are precluded from obtaining coverage in the pools and must rely on the traditional insurance market for coverage.

The nuclear pools actually insure the "facility" with a definition of the named insured sufficiently broad to cover contractors working on the facility. Contractors working on these facilities do not purchase their own insurance to cover the nuclear hazard. Effective July 1, 1989, the pool provides $200 million of primary limits. Higher limits are provided under the Price-Anderson Act: Each reactor can be assessed $63 million for a nuclear damage claim, building total capacity to $7 billion under the program. Contractors working on government facilities have access to indemnification for nuclear hazards through Section 170, as amended by the Price-Anderson Act. The indemnification applies at the facility, during transportation, and to the materials handled. The current indemnification limit is $500 million.

Since contractors working on nuclear facilities must provide their own traditional insurance programs for General Liability and Workers Compensation, firms moving into the nuclear cleanup field for the first time should consider what impact a "material change in the risk" will have on the applicability of their overall insurance programs.

IX. Structuring the Program:

Piecing together the coverages necessary to address the risks of environmental contracting firms has developed into something of an art form. Proper structuring of the mechanics of the insurance program assures insurance protection without gaps or overlaps in coverage and avoids stacking of premiums for redundant coverages. As engineering and contracting businesses throughout the country see the flow of money toward environmental cleanup, many of these firms are exploring the ramifications of entering this field. As mentioned earlier, the astute among them recognize liability and insurance as one of the more significant barriers to entry.

Subsidiary Versus Master Plan Approach: To deal with that barrier, the creation of an environmental contracting subsidiary produces a vehicle that can be used to structure an insurance program for the environmental contracting work. If done properly, this approach allows the firm to develop completely separate insurance programs for the non-environmental work and for the environmental work.

Liability and Asbestos Consultants Errors and Omissions coverages should also be purchased.

The wrap-up approach produces the following advantages:

- the insurance premiums are reimbursable as a line item for most government work;
- subcontractors who would otherwise need to obtain a environmental contracting insurance program on their own are spared the expense of having to satisfy minimum premium requirements;
- reduced remediation costs may be realized because of the opportunity to choose from an expanded universe of subcontractors qualified to bid on work;
- contractors involved with many sites can benefit from the high aggregate limits of liability usually developed under a wrap-up;
- total insurance costs on a particular project are usually minimized under a wrap-up program.

Despite the advantages of the wrap-up approach, it is generally economically feasible only for those firms on jobs exceeding $1 million in annually receipts. All of the necessary coverages mentioned above carry minimum premiums of at least $25,000 each; consequently, annual receipts associated with the job must be sufficient to absorb the overall minimum premium charge.

Determining Coverage Requirements: The scope of operations and services provided by a firm determines which insurance coverages are necessary. For example, specialty contractors providing only engineering services may need to purchase only Contractors Pollution Liability, Professional Pollution Errors and Omissions, Automobile Liability, and Workers Compensation coverages.

At the other end of the spectrum, a firm providing design/build environmental contracting services, including asbestos abatement, should purchase General Liability, Contractors Pollution Liability, Professional Errors and Omissions with Pollution and Asbestos Liability, Asbestos Abatement Liability, Asbestos Consultants Errors and Omissions, Automobile Liability and Workers Compensation coverages.

If an environmental contracting firm is a subsidiary covered under its parent corporation's insurance program, that program should include, in addition to the specific coverages for the environmental contacting operations, General Liability, Professional Liability, Automobile Liability, Workers Compensation, and probably Umbrella Liability insurance policies.

X. Conclusion

Management of the environmental liability risks that contractors face requires a comprehensive approach. Contractors must first identify all sources of environmental liability which may arise out of their past, present and future activities. Under current environmental laws, contractors face past liabilities from their disposal activities and future liability from their involvement in environmental remediation work. Strategies for loss prevention and loss reduction may be used to control the identified loss exposure. Finally, the financing techniques available to contractors for their losses include retention and transfer. Losses can be transferred by contractors to other parties through the use of contractual indemnity agreements and through insurance.

Indemnification agreements vary by contract and should be a primary consideration of contractors entering this area of work. Insurance for contractors' pollution liability exposures is generally available

WC 31 Jan 93 Hr

ENVIRONMENTAL PROTECTION AGENCY

INDEMNIFICATION

FOR

RESPONSE ACTION CONTRACTORS

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provide indemnification to response action contractors performing work at NPL or removal sites. Section 119 was added to CERCLA by Congress as part of the 1986 amendments in response to an outcry from the RAC community for pollution liability protection. This outcry arose due to the unavailability of pollution liability insurance from private sector sources.

In defending their lack of participation in this segment of the market, the insurance underwriters cited a number of reasons for their unwillingness to provide pollution liability coverage. The major reason was the risk of large claims for "catastrophic" failures resulting in extensive damage to human health and the environment. Their fear was that these types of failures could easily result in claims surpassing $100 million per incident. When this fact was coupled with the litigious nature of the environmental field, many underwriters declined to issue pollution policies.

A second and equally formidable reason cited by the insurance industry was the imposition of strict liability standards by the courts. Under strict liability, any entity involved in "ultrahazardous" activities at the site of a release may be held liable for all costs associated with the release without a judgement of negligence against them. Damages associated with the release may have occurred on or off the site. The insurance companies feared that in the future strict liability judgements could render them the only viable "deep pocket" for legal actions stemming from the site.

Finally, many underwriters expressed the fact that reinsurers had withdrawn from the market due to record losses posted by the industry in the early 1980s. This resulted in a down turn in the industry with firms declining to underwrite relatively small high risk portions of the insurance market such as hazardous waste remediation.

In addition to the lack of pollution liability insurance, RACs also cited several other reasons for indemnification. The first was the technical risks the RACs accept when they work at a Superfund site. These include:

1) Work with hazardous and toxic compound and mixtures of these compounds,

2) The uncertainty of innovative or untried technologies,

3) The inherent uncertainty associated with underground work, and

4) Political pressures from outside sources.

price,

2) The RAC must have made diligent efforts to obtain pollution lability insurance, and

3) If the RAC is working at more than one facility, it must perform diligent efforts each time it begins work at a new facility.

The final requirement of Section 119 was that the President (EPA) would promulgate regulations under the section. Prior to promulgation of the regulations, the President (EPA) would develop guidelines for the implementation of the requirements of the section.

INTERIM GUIDELINES

OVERVIEW

On October 6, 1987, EPA's Office of Solid Waste and Emergency Response (OSWER) issued OSWER Directive 9835.5 "EPA Interim Guidance on Indemnification of Superfund Response Action Contractors under Section 119 of SARA" to establish temporary procedures to provide indemnification to RACs under the authority of Section 119. The guidelines, issued under the authority of Executive Order 12580 (52 FR 5923, January 29, 1987 which delegated authority to indemnify RACs from the President to EPA, were distributed as interim to allow EPA to provide indemnification under Section 119 while proceeding in a deliberate manner to establish final guidance.

The interim guidelines were developed around four key points:

1) The combination of protection from Federal strict liability and RAC indemnification would provide adequate incentive for contractors to work for the Superfund program,

2) The indemnification would be an adequate substitute for insurance,

3) Indemnification would be an interim measure until the private insurance market rebounded, and

4) The indemnification did not create a disincentive to the private insurance market.

These points were to also form the basis for the formulation of the final guidelines.

Federal Register for public comment Proposed Final Indemnification Guidance (54 FR 46012, October 31, 1989). When compared to the liberal provisions of the interim guidance, the proposed final guidance severely restricted the indemnification available to RACs. The proposed guidance limited the maximum coverage per contract, imposed substantially higher deductibles, and limited the term of coverage to ten years. The guidance called for a minimum amount of insurance to be purchased by contractors each year and that this amount increase by 25% each year with the anticipated result of the private sector eventually providing all pollution lability coverage allowing EPA to cease offering indemnification. One final provision was that all existing post-SARA indemnification agreements must be retroactively brought into compliance with the terms of the final guidance.

Some of the specific points of the proposed guidance are as follows:

1) RACs were covered if found negligent; however, if a mixed judgement (a finding of both negligence and strict liability) were handed down, the RAC would not be covered,

2) Maximum coverage for cost reimbursement contracts was set at $50,000,000 per contract,

3) Deductibles for cost reimbursement contracts were set at $1,000,000 per occurrence or claim with no aggregate limit,

4) Coverage for fixed price contracts was set on a sliding scale which was to be factored into the bid evaluation, and

5) A ten year post-completion term was established for all agreements.

Needless-to-say, the response to the proposed guidelines was overwhelming with over two hundred comments, requiring over 40 pages to document, received. Unfortunately, the comments were virtually all negative. They stated that the limits were too low, the deductibles too high, the term too short, and the fixed price proposal unworkable. Based upon this negative feedback, EPA decided to delay finalizing the proposal and to reconsider some of the elements.

CONSULTATIVE PROCESS

After completing a thorough analysis of the comments and

EPA Indemnification for
Remedial Action Contractors

1) The final guidelines will contain well defined limits to the amount of indemnification available to RACs on a per contract basis,

2) The deductibles will be on a sliding scale with higher deductibles for higher contract limits,

3) A definite term of coverage (tail) will be set,

4) The incorporation of indemnification requests in bid evaluations for fixed price contracts has been dropped, and

5) All post-SARA contracts must be modified to include the provisions of the new guidelines.

POTENTIAL PROBLEMS

The final guidelines could have substantial impacts upon both EPA and the RAC community. First the potential RAC problems:

1) It is likely that the availability and the limits of EPA indemnification will be greatly reduced from the uncapped limits currently provided. This reduction will require RACs to rethink their current operating procedures and their future plans,

2) All RACs with current indemnification agreements must enter into negotiations with EPA to incorporate the new guidelines into their existing contracts. This will require time and effort by the RACs and may cause them to rethink their willingness to continue to work for EPA, and

3) RACs must develop a strategy to deal with any subcontractors that have been extended indemnification through the RAC's contract since the new limits will include any pass-through indemnification.

Potential problems for EPA are:

1) The time and resources to negotiate the new guidelines into all existing contracts (this includes contracts let by the US Army Corps of Engineer, the US Bureau of Reclamation, and any other Federal Agency acting in behalf of EPA),

2) The impact on the Superfund program if some of the RACs refuse to accept the new guidelines and their contracts

defaulting contractor.

REVISED US ARMY CORPS OF ENGINEERS APPROVAL PROCEDURES

When potential contractors prepare proposals and bids in response to solicitations for work, they invest considerable time and money. Additionally, each proposal or bid must be accompanied by a bid bond which signifies the contractors good faith to perform the specified work and provides the government with funds to resolicit if the contractor refuses to accept the contract. One problem with this typical scenario is that for Superfund work RACs face one final hurdle they cannot control. This hurdle is approval by EPA to extend indemnification to the contractor. In many cases without EPA indemnification, contractors are unwilling to risk their corporate assets. If the contractor is the successful proposer or bidder and EPA refuses to extend indemnification, the contractor is forced to forfeit its bid bond if it refuses the contract due to potential liability.

Since the decision to extend or not to extend indemnification is out of the contractors control, EPA and the US Army Corps of Engineers have agreed to test a modification to the normal indemnification approval process to allow a contractor, providing it has met all other requirements of the solicitation, to refuse a contract if indemnification is not approved and not forfeit its bid bond. This process is being tested for one solicitation. Based upon the results of this test and the final indemnification guidance, the process will be continued, modified, or discontinued.

Under current procedures, a contract is awarded and then the contractor performs diligent efforts and indemnification is granted based upon the results of the diligent efforts. For the test procedures, potential contractors will be asked to perform diligent efforts prior to contract award. EPA will evaluate the contractors efforts and determine if indemnification will be offered prior to award of the contract. If the contractor has met all other requirements of the solicitation and EPA declines to approve indemnification for the contractor, the contractor will be allowed to withdraw from the solicitation and not forfeit the bid bond. If indemnification is approved, the contractor will be issued a letter granting indemnification immediately after the contract is signed.

DILIGENT EFFORTS

EPA has initiated two efforts to improve the diligent efforts process while awaiting the final indemnification

EPA Indemnification for
Remedial Action Contractors

CONCLUSION

While the final picture of EPA's indemnification process is still unclear, it is certain that the new guidelines will drastically alter the assignment of risk from pollution liability suits. Until the new guidelines are finally promulgated along with their accompanying administrative guidance, the final impacts on the RAC community and the Superfund program can not be determined.

Rec'd OASD(E)
2-3-93

NATIONAL CONSTRUCTORS ASSOCIATION

1730 M Street NW, Suite 900, Washington, DC 20036-4571 (202) 466-8880

Robert P. McCormick
President

February 3, 1993

Mr. Patrick Meehan
Principal Deputy to the Deputy Assistant
Secretary (Environment)
Department of Defense
400 Army-Navy Drive, Suite 206
Arlington, Virginia 22202

ATTN: Dr. Shun Ling

Dear Mr. Meehan:

In response to your request for information, the National Constructors Association (NCA) is providing the attached information regarding the indemnification of contractors performing environmental restoration work. We hope you will feel free to contact us for additional information or to participate in any discussions with industry representatives which may take place on this issue.

The National Constructors Association (NCA) is made up of some of the nation's foremost firms engaged in the design and construction of major industrial, commercial and process facilities worldwide. NCA's members are also some of the most qualified and experienced environmental restorations firms, with the site management and technological expertise necessary to remediate the nation's worst toxic and nuclear waste sites. Three of the five largest U.S. contractors from Engineering News-Record's (ENR) top 400 contractors are NCA members as are 12 of the 29 contractors that grossed in excess of $1 billion in 1991. NCA member companies collectively grossed in excess of $90 billion in 1991, employing more than 120,000 skilled craftsmen and expending more than 130 million man-hours of labor in 1991 alone.

Resolving the liability concerns of contractors undertaking federal hazardous waste remediation contracts is one of the priority issues of the association. As in the past, we will continue to devote considerable effort and resources to its resolution. NCA's member companies have outstanding national and international reputations based upon their quality of work, their management experience and the technological expertise they bring to

NATIONAL CONSTRUCTORS ASSOCIATION

Response To DOD Questions

QUESTION ONE

The extent to which contractors performing environmental restoration work at Federal, state and private sites have actually been exposed to, or involved in, litigation, claims and liability related to this work since 1980.

RESPONSE

For many years the National Constructors Association and others in the contractor community have raised concerns about the potential for litigation against those engaged in environmental restoration activities. During the lengthy hearings and debate leading up to the 1986 Superfund Amendments and Reauthorization Act (SARA), NCA testified as to its concerns regarding the potential liability of contractors engaged in this work. NCA cited both state and federal statutory as well as common law strict liability schemes as factors which led our members to predict costly litigation against federal environmental restoration contractors.

In addition, the following factors which make this work unique create unacceptable risks:

- the use of unproven technology;
- the uncertain nature of the materials which may be encountered on site, even after site investigations have been completed;
- the unavailability and/or inadequacy of pollution liability insurance for the contractor;
- long liability "tails" for hidden defects in the manner in which the work was done and the potential for personal injury and property damage suits brought decades after contract completion and acceptance;
- the potential for the application of strict liability to the contractor, particularly as to third party claims; and
- high costs associated with litigation, even where the contractor prevails.

Despite their acknowledgement of these risk factors, federal regulators, congressional policymakers and others involved in

other similar sites has resulted in such concern among certain NCA contractors that they routinely avoid bidding on cleanups at these "high profile" facilities.

QUESTION TWO

The type and extent of indemnification currently provided by Federal or state agencies, or private entities for environmental work.

RESPONSE

In response to hearings held in 1992 by panels of the Senate & House Armed Services committees, NCA polled its membership regarding the nature of indemnity obtained by companies carrying out hazardous waste remediation contracts for private entities. Attached are samples of the responses received. They have been redacted to remove any references to the specific contracting parties. These examples are also an appendix to NCA's testimony before the Senate Armed Services Committee, Subcommittee on Readiness, Sustainability & Support, May 12, 1992. A copy of that testimony is attached.

As you are now aware, liability protection offered by other federal agencies and departments varies widely. Although section 119 of CERCLA authorizes the Environmental Protection Agency (EPA) to provide indemnification to its contractors with certain limitations, EPA's guidelines document released January 15, 1993 dictates that it will only offer that indemnity after first putting its contracts out to bid with no liability protection offered. Consequently, indemnity for EPA Superfund cleanup is likely to be very limited in scope and infrequently offered. Until January 15, 1993, EPA contractors were generally offered indemnity unlimited in amount and in period of time covered. Now the coverage, when offered, will only continue for 10 years, will include deductibles, and will not exceed $75 million, regardless of the nature of the work or risk factors in the project.

NCA's response to that new guidelines document is still being prepared, but will be forwarded to you under separate cover. We believe it is important that you understand NCA's concerns regarding the section 119 indemnity guidelines because the issues underlying the guidelines are the fundamental questions which must be addressed to establish a reasonable risk sharing policy for contractors.

As you are probably aware, the Department of Energy (DOE) has taken a somewhat different approach to its environmental restoration contracts through the use of Environmental Restoration and Management Contractors (ERMCs). These contractors are protected through a program of risk sharing which holds them accountable for harm caused by their activities but

companies' needs. Furthermore, the association believes the absence of a viable insurance market for these services underscores the need for a reasonable risk sharing program.

In 1986, when the Superfund Amendments and Reauthorization Act (SARA) was passed, and in the years since then, as EPA pondered the development of guidelines for its own indemnity program, certain officials maintained the belief that a viable insurance market for remediation contractors would emerge. Despite certain aggressive insurors' marketing assertions to the contrary, the insurance products available today simply do not address the risks which most greatly trouble the members of NCA and the rest of the contracting community -- the risk of third-party toxic tort litigation brought many years after contract completion. Until such coverage is available, both contractors and their clients must develop alternative mechanisms for addressing that risk.

Furthermore, the limited coverage available today may be jeopardized by the emergence of litigation against environmental restoration contractors. The absence of these cases may have encouraged the development of the limited coverage currently available. Once claims are actually presented against this coverage, even that very limited availability may disappear.

An additional factor which should be considered in any examination of insurance for federal environmental restoration work is the availability of surety bonds for these projects. Since 1989, NCA has been at the forefront of efforts to address this issue and has worked closely with relevant congressional committees over the past three years to improve the availability of surety bonds necessary to bid fixed-price remediation contracts.

Although statutory language currently in place provides sureties with certain liability protections, that language, in the absence of protection for contractors, is insufficient to encourage sureties to provide bonds for even the most reputable and financially sound contractor. Even with the existing statutory protections in place (42 USC § 9619(g) and 10 USC 2701), many smaller companies have had difficulty obtaining bonds. Although surety underwriting considerations cannot accurately be predicted, it is unlikely that bonds will be available for any projects for which the contractor does not receive liability protection.

This is particularly important if federal agencies plan to continue to utilize "fixed-price" contracts as part of their procurement strategy for this work. The cost-conscious climate on Capitol Hill coupled with recent criticisms of contracting practices at EPA may eventually mandate the use of "fixed-price" contracts for certain aspects of this work. Surety bonds will be a necessary element of any "fixed-price" procurement strategy.

ATTACHMENT A

PRIVATE PARTY CONTRACT LANGUAGE

4.0 Whether due to delay, breach of contract or warranty, tort (including negligence and strict liability) or otherwise, neither nor its contractors or suppliers of any tier shall be liable for any other direct, special, indirect, incidental or consequential damages of any nature, including, without limitation, Client's loss of actual or anticipated profits or revenues, loss by reason of shutdown, non-operation, or increased expense of manufacturing or operation, loss of use, cost of capital, damage to or loss of property or equipment of Client, or claims of customers of Client.

5.0 The remedies stated in the Agreement are exclusive and in no event shall the liability of or its contractors or suppliers of any tier to Client whether in contract, warranty, tort (including negligence or strict liability) or otherwise for the performance or breach of the contract or anything done in connection therewith exceed the sum of

SAMPLE THREE
PRIVATE PARTY AGREEMENT

Indemnity

A. Contractor agrees to protect, indemnify and hold Owner harmless from any and all loss, damage, liability, claims, demands, costs, or suits of any nature whatsoever asserted by employees of Contractor or by any third persons for property damage (other than property for which risk of loss is assumed by Owner hereunder), personal injury or death or claim for indemnity by Federal or State agencies arising out of or resulting from Contractor's breach of warranty or negligent performance of the Work hereunder. Contractor's indemnification obligation shall not apply to the extent of any liabilities which arise out of or result from the negligent acts or omissions of Owner, its employees, officers, or servants or other independent contractors or agents for which Owner indemnifies Contractor. This indemnity shall include the cost, expenses, and attorney's fees occasioned by said loss, damage, liability, claims, demands, or suits as well as the full amount of any judgment rendered or compromise settlement made (provided Contractor has participated in the defense and agrees to any compromise); except that Contractor's liability for damage to Owner's real property or adjacent real properties other than damage resulting from or due to the pre-existing environmental conditions of the site of the Work shall in no event exceed One Million Dollars ($1,000,000.00), and damage to Owner's real property or adjacent real properties resulting from or due to the pre-existing environmental conditions of the site of the Work shall in no event exceed Two Million Dollars ($2,000,000.00) unless either such damage is caused by the gross negligence or willful misconduct of Contractor, its employees, representatives, or agents. Notwithstanding anything else stated herein, Contractor shall not be responsible for, and assumes no liability for, bodily injury, sickness, disease and/or death, where the same results from or is due to the pre-existing environmental conditions of the site of the Work, unless and to the extent that such bodily injury, sickness, disease and/or death is caused by the negligence at the site, including, without limitation, failure at the site to fully comply with all provisions of the site specific Health and Safety Plan, or other misconduct of the Contractor, its employees, representatives, or agents at the site.

B. Contractor shall also indemnify Owner for any actually incurred governmentally imposed monetary penalties resulting directly and solely as a result of Contractor's failure to perform in accordance with the standards set forth above.

SAMPLE FOUR
PRIVATE PARTY AGREEMENT

A. Contractor agrees to protect, indemnify, and hold Owner harmless from any and all loss, damage liability, claims, demands, costs, or suits of any nature whatsoever (collectively referred to as "Claims") asserted by employees of Contractor or by any third persons for property damage (other than property for which risk of loss is assumed by Owner hereunder), personal injury or death to the extent such Claims arise out of or result from Contractor's willful misconduct, breach of warranty, or negligent acts or omissions.

B. Contractor's indemnification obligation shall not extend to any liabilities arising directly out or resulting directly from the acts or omissions of Owner, its employees, officers, or servants or other independent contractors or agents.

C. Owner agrees to protect, indemnify, and hold Contractor harmless from Claims asserted by employees of Owner or by third persons for property damage, personal injury, or death, to the extent such Claims arise directly out of or result directly from (i) the acts or omissions of Owner or (ii) Contractor's status as a response action contractor as defined in Section 119 of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§9601 et seq.). Such status as a response action contractor shall apply with respect to all federal, state and local laws, rules and regulations.

D. This indemnity shall include the cost, expenses, and attorneys' fees occasioned by said loss, damage, liability, claims, demands, or suits as well as the full amount of any judgment rendered or compromise settlement made (provided both parties have participated in the defense and have consented to any compromise, which consent shall not unreasonably be withheld).

SAMPLE SIX
CONTRACTOR'S STANDARD INDEMNITY

Pre-Existing Contamination

Anything herein to the contrary notwithstanding, title to, ownership of, and legal responsibility and liability for any and all pre-existing contamination shall at all times remain with Client. "Pre-existing contamination" is any hazardous or toxic substance present at the site or sites concerned which was not brought onto such site or sites by Consultant. Client agrees to release, defend, indemnify and hold Consultant harmless from and against any and all liability which may in any manner arise in any way directly or indirectly caused by such pre-existing contamination except if such liability arises from Consultant's gross negligence or willful misconduct.

Client shall, at Client's sole expense and risk, arrange for handling, storage, transportation, treatment and delivery for disposal of pre-existing contamination. Client shall be solely responsible for obtaining a disposal site for such material. Client shall look to the disposal facility and/or transporter for any responsibility or liability arising from improper disposal or transportation of such waste. Consultant shall not have or exert any control over Client in Client's obligations or responsibilities as a generator in the storage, transportation, treatment or disposal of any pre-existing contamination. Client shall complete and execute any governmentally required forms relating to regulated activities including, but not limited to generation, storage, handling, treatment, transportation, or disposal of pre-existing contamination. In the event that Consultant executes or completes any governmentally required forms relating to regulated activities including but not limited to storage, generation, treatment, transportation, handling or disposal of hazardous or toxic materials, Consultant shall be and be deemed to have acted as Client's agent.

For Consultant's Services requiring drilling, boring, excavation or soils sampling, Client shall approve selection of the contractors to perform such services, all site locations, and provide Consultant with all necessary information regarding the presence of underground hazards, utilities, structures and conditions at the site.

Indemnification

Bodily Injury and Property Damage Liability

Consultant shall indemnify, defend and hold Client harmless from any and all claims, liabilities, and causes of action for injury to or death of any person, or for damage to or destruction of property (excluding, however, the items referred to in Section 15.2 and Article 12) resulting from any and all negligent acts or omissions of Consultant in the performance of the Services.

ATTACHMENT B

Insurance Info

basis with limits from $25 million to $50 million available to contractors through the markets listed above. Availability would be dependent upon the type of project or projects undertaken by the contractor as well as the underwriters' willingness to layer above other underwriters. The maximum that is available through any one underwriter is $25 million, although it is very rare that the full $25 million is extended.

As stated above, no coverage is available on either a project specific basis or for multiple worksites if the site or sites are state or federal Superfund sites.

3. Standard Deductibles for EIL Policies.

a. Response: There is no standard deductible. For non-Superfund work, the deductible is dependent upon the size, type and value of the particular project and the underwriter.

4. Does the Standard policy provide coverage for strict liability or negligence or both?

a. Response: Generally, the standard for non-Superfund work is negligence. It may be possible to negotiate coverages for strict liability, but such coverages would be very expensive.

5. For claims made policies, what kind of "tail coverage" is available?

a. Response: Because the "tail coverage" is an add-on to a basic policy, there is no coverage for any of the Superfund sites. The contamination now being addressed was originated 10, 40 and sometimes as much as 100 years ago. Similar time periods will be applicable to contractor work performed today, thus there is no coverage for such work. The standard "tail coverage" available is one year. At significant additional cost it might be possible to negotiate a longer term. However, it is very unusual to find a "tail" over three years and the extremely rare exception to find a "tail" of five years.

6. Typical Premium rates and rate basis for EIL coverage.

a. Response: Rates and rate bases are tailored to the requirements of each job or site, thus it is not feasible to present a statement of typical premium amounts.

Appendix 6
Information from Hazardous Waste Action Coalition (HWAC)*

Contents

* These documents were not cited in the accompanying report.

HWAC
an association of engineering and science firms practicing in hazardous waste management

1015 Fifteenth Street, N.W., Washington, D.C. 20005 202-347-7474 FAX 202-898-0068

Rec'd OOASD(E)
1 Feb '93

February 1, 1993

Patrick Meehan, Principal
Deputy to the Deputy Assistant
Secretary (Environment)
Department of Defense
400 Army-Navy Drive
Suite 206
Arlington, Virginia 22202

Attn: Dr. Shun Ling

Re: Indemnification of DOD
Environmental Restoration Contractors

Dear Mr. Meehan:

The Hazardous Waste Action Coalition (HWAC) is pleased to respond to Thomas E. Baca's letter of December 22, 1992 requesting information on DOD indemnification of environmental restoration contractors. Under the umbrella of the American Consulting Engineers Council, HWAC is a coalition of more than 110 leading engineering and science firms engaged in the investigation and clean-up of hazardous waste sites for the Department of Defense, as well as other federal agencies, states, and private parties.

HWAC and its members are deeply concerned with recent signs of an acceleration in the risks associated with the restoration of our nation's most hazardous environmental waste sites. At a time when the nation and DOD are engaged in an unprecedented effort to repair the environmental damage caused by decades of hazardous waste releases, restoration firms find themselves unable to obtain any reasonable protection from liabilities associated with that effort. Stringent federal and state environmental laws often expose restoration firms to the same liabilities as polluters, yet fail to recognize the vital role of these firm in the restoration -- not contamination -- of our environment. These liabilities, together with the unavailability of any form or realistic insurance coverage, essentially require restoration firms to "bet the company" every time they

participate in the restoration of a hazardous waste site, unless risk sharing is provided.

HWAC believes that a reasonable risk sharing program between DOD and its environmental restoration firms is critical to the satisfactory completion of DOD's mission to restore its own hazardous waste sites. HWAC testified to this effect at the March 10, 1992 and the April 24, 1991 hearings of the Environmental Restoration Panel of the House Armed Services Committee. Copies of that testimony are attached at Tab 1, along with HWAC's answers to questions for the record for the March 10, 1992 hearing. HWAC is also involved in a large coalition activity seeking to promote risk sharing in DOD environmental restoration contracts.[1] The primary recommendations of the coalition are as follows:

1. DOD should provide an indemnity for strict, joint and several liability arising under both federal and state laws. Current federal and state laws potentially hold the contractor responsible regardless of the degree of fault.

2. Cleanup contractors should be liable to the extent of their negligence up to some level above which the government would assume responsibility for claims. The amount for which the contractor is responsible should be related to the size of the contract.

3. DOD should provide contract language that establishes a time limit after completion of the work for the contractor's responsibility. This would eliminate "long tail" claims that can occur long after the work has been performed.

4. Changes to liability terms should be implemented as a matter of overall DOD policy. Implementation by the Services or Commands should be established and made known well in advance of any procurement to the contractor community.

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[1] The white paper identifying the principal beliefs of the coalition and its members is attached at Tab 2.

5. In addition to adequate risk sharing mechanisms, DOD should provide special incentives such as reduced liability limits to encourage contractors to use innovative technologies.

Studies of risk sharing between DOD and its environmental restoration contractors have been ongoing for several years. HWAC has been active in the dialogue since its inception. The following is a brief description of the activities that took place since 1990 to review the liabilities facing environmental restoration firms:

- DOD Authorization Act for Fiscal Year 1991 (dated October 23, 1990): Conference Report Language directing DOD to study the problem of contractor liability for environmental restoration activities.
- January 1991, April 1991: The Society of American Military Engineers (SAME) held an environmental contracts forum on January 30 and January 31, 1991. The SAME report on the forum was issued in April of 1991.
- February 14, 1991: Letter from Senators Nunn, Warner, Lott and Dixon providing guidance on the substance of the report mandated in the DOD Authorization Act for Fiscal Year 1991.
- April 24, 1991: Hearing of the Environmental Restoration Panel of the House Armed Services Committee on the liabilities facing environmental restoration firms.
- July 1991: DOD release of its four-page report on the liabilities facing environmental restoration firms, entitled, "Response Action Contractors' Liability Issues Regarding the Defense Environmental Restoration Program: Conclusions and Recommendations."
- National Defense Authorization Act of 1992 and 1993 (dated July 8, 1991): The Senate Armed Services Committee expressed its concern that DOD's environmental restoration activities may suffer without liability protection for its contractors.

Two SAME mtg
Oct 91
Mar 92
discuss environment

- August 2, 1991: Colloquy between Senator Warner and Senator Dixon on DOD lack of recognition of environmental restoration contractor liability.

- October 1991: SAME held its second environmental contracts forum.

- March 10, 1992: Hearing of the Environmental Restoration Panel of the House Armed Services Committee on the liabilities facing environmental restoration firms.

- National Defense Authorization Act of 1993: Conference report language directing DOD to once again study the liabilities facing environmental restoration firms, and the need for risk sharing in environmental restoration contracts.

The information presented in this package is intended to assist DOD in preparing the study mandated in the National Defense Authorization Act of 1993. As stated above, this issue is not new to Congress, and has received significant deliberation to date.

HWAC remains concerned that DOD may, through the absence of risk sharing with its environmental restoration contractors, be attempting to pass off liability for its own waste to the firms hired to clean up the waste. Such a practice leaves the public exposed to claims for damages from exposure to wastes from DOD facilities which cannot be compensated by the environmental restoration firms. HWAC is also concerned that claims arising long after the work was performed may be judged by hazardous waste standards and practices that do not yet exist. Finally, risk sharing is needed to ensure development of much-needed innovative technologies to permanently solve DOD's complex waste problems.

The bases for HWAC's concerns are presented below in a format that addresses the three areas raised in your December 22, 1992 letter. HWAC would like to meet with you to discuss these and other concerns associated with the cleanup of operating and closing DOD facilities -- in particular the impact of EPA's recently released final guidance for CERCLA Section 119 indemnification on DOD cleanups.

1. Recent Cases Illustrating The Liability Problem

HWAC has long predicted that third-party damage suits against environmental restoration firms at Government-controlled sites would be an inevitable consequence of hazardous waste site cleanups. However, we predicted that such claims might not arise for many years after the work was performed, because many injuries alleged in such claims, like cancer and other biological harm, may not manifest themselves for decades (the so-called "long-tail" problem). Unfortunately, these suits are already starting to appear, substantially sooner than anticipated. The following are a few illustrations.[1]

- In connection with the Superfund program, two environmental restoration firms have been sued recently in Montana for work they performed for EPA, and at EPA's direction starting in 1985. The allegations are that the firms' efforts helped spread the contamination from the Superfund site, and the theories of recovery include both strict liability under federal and state law, and negligence.[2]

- In Texas, an environmental restoration firm involved in a state Superfund site cleanup has been sued by the residents and landowners adjacent to the site. They claim the firm's actions further contaminated their properties, despite the fact that those actions were approved in advance by the Texas authorities. The theories of recovery include trespass, nuisance, negligence and strict liability.[3]

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[1] For a more thorough discussion of this topic, see Tab 3, which contains an advance copy of Trends in Contractor Liability for Hazardous Waste Cleanups, being published by HWAC and the law firm of Morgan, Lewis & Bockius.

[2] Atlantic Richfield Co. v. Oaas, Civil Action No. CV-90-75-BU-PGH (U.S. Dist. Ct., Dist. of Montana, Butte Div.). The complaint in this case is attached at Tab 4.

[3] Dumes v. Houston Lighting & Power Co., Case No. C-90-330 (U.S. Dist. Ct., S. Dist. of Texas). The complaint in this case is attached at Tab 5.

- The residents in the area surrounding DOE's Fernald, Ohio plant sued DOE's management and operating (M&O) contractor for allowing the spread of wastes onto their properties, and obtained a settlement of $78 million.[1]

- A similar case against two DOE M&O contractors was filed in December 1991 by residents in the area of DOE's Mound plant near Dayton, Ohio.[2]

- The United States Court of Appeals for the Ninth Circuit has held that a site excavation and grading contractor who unknowingly disturbed hazardous wastes while grading for a planned housing subdivision was both an "operator" and a "transporter" under CERCLA.[3]

- The United States District Court for the Middle District of Georgia has held that the so-called Government Contractor defense does not extend to environmental restoration contractors.[4] In addition, in considering whether the contractor was an agent of the government of purposes of a slightly different defense (the Government Agency defense), the court found Section 119 of CERCLA to be persuasive evidence that a RAC is <u>not</u> an agent of the government. The court reasoned that Section 119 contemplates that a RAC be independently liable for its negligence and other tortious behavior, since the government at its option <u>may</u> indemnify the RAC, whereas in a principal/agent relationship the government would <u>automatically</u> be liable for the actions of its agent. Thus, the court

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[1] <u>Crawford v. Nat'l Lead Co.</u>, Case No. C-1-85-0149, 1989 WL 266347 (U.S. Dist. Ct., S. Dist. of Ohio).

[2] <u>Stepp v. Monsanto Research Corp.</u>, Case No. C-3-91-468 (U.S. Dist. Ct., S. Dist. of Ohio).

[3] <u>Kaiser Aluminum & Chemical Corp. v. Catellus Development Corp.</u>, 976 F.2d 1338 (9th Cir. 1992). The decision in this case is attached at Tab 6.

[4] <u>Amtreco, Inc. v. O.H. Materials, Inc.</u>, 802 F. Supp. 443 (M.D. Ga. 1992).

found the Government Agency defence to also be inapplicable.

The above cases offer a glimpse into the liability exposure confronting environmental restoration firms today. Lawsuits are, of course, only beginning to emerge, and it will take decades to understand fully the degree of exposure ultimately facing restoration firms. It is almost beyond doubt, however, that as time begins to test the technologies utilized today and to present improved technologies for tomorrow, restoration firms will be held to a standard of care and liability exceeding those that are presently contemplated.[1] HWAC's September 15, 1992 testimony on innovative technology development, which discusses the need for scientific and technical factors to drive technology development rather than liability factors, is attached at Tab 8.

2. Indemnification Provisions

The following are examples of the bases and types of indemnification (risk sharing) that have been offered in the past.

(a) Public Law 85-804

Both DOD and DOE have offered indemnification for restoration contractors under the authority of Public Law 85-804. That law, along with its accompanying Executive Order 10789, authorizes designated agencies (including DOE and DOD) to indemnify contractors from liabilities associated with activities that (a) are unusually hazardous or nuclear in nature and (b) facilitate the national defense. DOD's hazardous waste sites are the product of decades of disposing of hazardous byproducts of our nation's defense arsenal. The restoration of those sites is an integral part of DOD's mission in furtherance of the national defense and falls squarely within the intended application of Public Law 85-804.

Specific examples of the use of P.L. 85-804 indemnification in environmental restoration contracts are not readily available

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[1] For a more thorough discussion of the mutable standards of care confronting restoration firms, see Tab 7, The Risks of Ambiguous Standards of Negligence for DOD Environmental Restoration Firms.

to the public. Obviously, with respect to specific contracts, DOD is in the best position to survey its own used of P.L. 85-804 for the indemnification of environmental restoration contractors. There have been, however, a number of reported examples of the use of P.L. 85-804 to indemnify contractors engaged in activities involved in the restoration of contaminated DOD sites. For example:

- The Army Contract Adjustment Board has endorsed the use of P. L. 85-804 for the payment of non-nuclear environmental restoration costs by National Defense Corp. (NDC) at that company's Eau Claire, Wisconsin munitions facility. The Contract Adjustment Board recognized that the site, together with the production facilities and Government-owned equipment, had played a critical mobilization role in the U.S. defense establishment.[10]

- The United States Army routinely indemnifies contractors engaged in the incineration of outmoded chemical weapons at such locations as Johnston Atoll.[11] These indemnifications are granted despite the National Academy of Science's endorsement of incineration as the best method of destroying chemical agents,[12] and the wide-spread recognition of Johnston Atoll as a model facility for such activities.[13]

10/ P.L. 85-804 Application of National Defense Corporation, ACAB No. 1231 (Mar. 25, 1988).

11/ See R & C Firms Gain in Nerve Gas Treaty, Chemical Week, June 13, 1990, at 30 (quoting Marilyn Tischbin, Dep't of Defense, Chemical Demilitarization Center: "Indemnification could be turned down, but it never has been").

12/ See Army Formally Backs On-Site Incineration to Destroy Lethal Chemical Weapons Stockpile, 18 Env. Rep. 2229 (1988).

13/ Id.; R & C Firms Gain in Nerve Gas Treaty, supra note 29. For a more detailed discussion of the use of P.L. 85-804 in this context, see Tab 9, Department of Energy Authority to Indemnify Environmental Remediation Contractors at Nuclear Weapons Production Sites.

In addition, DOD frequently uses its authority under P.L. 85-804 to carry out activities that are more tangential to the national defense than the restoration of sites that have been polluted through armament production. See, e.g., Remington Arms Co., ACAB No. 1238, May 8, 1991, 4 ECR ¶ 59 (granting $75 million for health and life insurance costs of retirees who had worked for past operator of DOD ammunition plant); LDH Instandsetzungswerke & REM Ryder System-EWK GmbH, ACAB Nos 1236, 1237, Jan. 17, 1991, 4 ECR ¶ 58 (granting bid and proposal costs to bidders on DOD solicitation that had mislead bidders by overstating anticipated contract requirements).

(b) Title 10 U.S.C. § 2354: Research and Development Firms Exposed to Unusually Hazardous Risks

Title 10 U.S.C. section 234 authorizes DOD to indemnify research and development firms that are exposed to unusually hazardous risks. In light of the emerging technology and scientific understanding of hazardous waste contamination and control, this authority applies to many facets of environmental restoration.

(c) Price-Anderson

The Price-Anderson Amendments Act of 1988 requires DOE to indemnify any DOE contractor (or subcontractor) whose contract involves the risk of public liability arising out of or resulting from a nuclear incident.[14] This authority to indemnify DOE's Environmental Restoration Management Contractors (ERMC) from risks associated with the handling of nuclear material or byproducts.

(d) CERCLA Section 119

CERCLA section 119[15] waives strict liability for cleanup firms under Federal (but not state) law, and imposes negligence as the standard of liability under Federal law. Section 119 also authorizes EPA to provide indemnification to Superfund cleanup firms for negligence.

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[14] 42 U.S.C.A. § 2210(d)(1)(A) (West Supp. 1990); see id., § 2014(w).

[15] 42 U.S.C. § 9619.

Of course, as noted above, Section 119 is not the only source of authority for indemnification of contractors at DOD sites. Although some concerns have been raised in the past over whether Section 119 supersedes DOD's indemnification authority under Public Law 85-804, there is no indication that Congress intended such a result. Absent some expression of an intent to repeal DOD's P.L. 85-804 indemnification authority, that authority remains unless it cannot be reconciled with Section 119. Because Section 119 is a general indemnification authority, applicable to all Superfund restoration contractors, it is easily reconcilable with the more specific P.L. 85-804, which applies only to contractors of select agencies whose activities are unusually hazardous and deemed to facilitate the National Defense.[16/]

Until very recently, EPA has utilized its authority under Section 119 to provide indemnification for its Superfund contractors. NPL Superfund sites where the remedial action is managed by the Army Corps of Engineers on EPA's behalf have also been included in EPA's indemnification program. Regrettably, EPA's Section 119 indemnification has been limited in a number of respects:

- It covers only negligence liability, to the exclusion of strict liability under State law or liability under other State law theories.

- It only extends to Superfund sites (i.e., sites listed on the National Priority List). Many DOD hazardous waste sites are not included on that list, and therefore are not subject to the indemnification authority of Section 119.

Finally, on January 25, 1993 EPA published guidelines suspending use of CERCLA § 119 indemnification for all new Superfund contracts. In addition, EPA will limit retroactively the indemnification contained in Superfund contracts issued since 1986. Specifically, for existing contracts that will be renegotiated, the guidance:

16/ For a more detailed discussion of this topic, see Tab 9, Department of Energy Authority to Indemnify Environmental Remediation Contractors at Nuclear Weapons Production Sites.

- Provides coverage for third party claims for negligence only, yet does not provide coverage for strict liability claims. Therefore, the contractor is protected when he is at fault, but the contractor is not protected when he is not at fault.

- Does not provide a source of funds to the other federal agencies should the other agencies, such as DOD, use Section 119 as the basis for indemnifying its environmental restoration contractors. Therefore, although claims under Section 119, if used by the other federal agencies, would be paid from Agency appropriations, each Agency would be limited to the terms contained in EPA's indemnification guidelines rather than being authorized to develop terms that reflect the specific sites, wastes, risks, and concerns of each Agency.

- Provides no incentives for use of innovative technologies in hazardous waste cleanups due to the potentially unlimited liability of firms that recommend or implement such innovations. This will stifle efforts to develop the technologies needed to solve DOD's complex waste problems.

- Removes any incentives for surety firms to issue bonds for hazardous waste cleanup construction activities, thereby bringing to a halt Superfund construction activities at the time when many of DOD's sites are moving into the Remedial Action (RA) phase of site cleanup. The sureties, rather than obtaining indemnification protection, merely obtain the indemnification protection remaining available to the defaulting contractor. Therefore, if the defaulting contractor either had no indemnification or had claims that used all of the available indemnification, the surety is left with no indemnification coverage. This, in effect, allows an EPA guideline to override the intention of Congress, most recently expressed in the National Defense Authorization Act of 1993, to provide indemnification protection under Section 119 to sureties.

- Imposes maximum indemnification of $75 million, with punitive $2 million deductibles for each claim, on environmental restoration firms.

- Provides no incentive for flow-down of indemnification to team subcontractors, in particular specialty subcontractors and small and minority businesses, which are much-needed in DOD environmental restoration cleanups.

- Instead of establishing a period of years in which the contractor will be held liable, after which the government will remain liable for claims, the final guidelines cut off the government's liability after ten years, leaving the environmental restoration firms exposed to long tail, catastrophic claims for activities performed to clean up the government's waste problems.

A fact sheet on the provisions contained in EPA's Final Section 119 Response Action Contractor Indemnification Guidance is attached at Tab 10. HWAC has requested that EPA withdraw the final guidelines, or suspend guideline implementation, until further consideration of the impact of the guidelines on the implementation of the Superfund program can be performed. In particular, HWAC has highlighted the potential of the final guidelines to halt Superfund cleanups, in particular construction activities, and to inhibit use of innovative technologies in Superfund cleanups.

(e) DOE Cost Accountability Rule

DOE has adopted a "cost accountability" rule for its M&O contracts that incorporates both risk-sharing and a standard of liability based on negligence.[17] This rule reflects DOE's recognition that it cannot disclaim liability for its own waste. Under the rule, the contractor is responsible for the first layer of financial exposure from claims -- similar to a deductible under an insurance policy. The "deductible" is determined based on the fee or profit earned by the contractor during the award fee evaluation period in which the liability arose. The rule

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[17] See 56 Fed. Reg. 28,099-28,110 (June 19, 1991); 48 C.F.R. § 970.5204-55.

also provides protection for the contractor based on a negligence standard rather than strict liability, and expressly excludes reimbursement to the contractor for actions that are grossly negligent or the result of intentional misconduct. The rule also provides for mandatory flow-down of the indemnification to subcontractors, thereby ensuring equitable treatment of all firms involved in the cleanup process.[11]

(f) FAR clause 52.228-7, Insurance - Liability To Third Persons

FAR clause 52.228-7 "Insurance - Liability To Third Persons," typically incorporated into cost-reimbursable contracts, provides for reimbursement of certain third-party claims. This provision is used by DOD and other agencies when appropriate.[12] Reimbursement, however, is subject to contract appropriations. Liabilities exceeding those appropriations must be born by the contractor.

(g) Private Sector Indemnification

Private parties contracting for environmental restoration services typically are legally and financially responsible themselves for the contaminated site involved because they meet the Superfund law's definitions of "owner" and "operator." Prudent cleanup firms take care to work with clients that are likely to be able to meet those financial commitments in the future, rather than going out of business and leaving the cleanup firm as a prime target defendant for future third-party claims. In many if not most cases, however, the cleanup firm also obtains an agreement by the client to be responsible for all third-party liabilities above a certain amount (including all strict liability).

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[11] A fact sheet on the rule is attached at Tab 11.

[12] See, e.g., Solicitation No. DAAA15-89-R-0129, issued by CDR, US Army AMCCOM, Procurement Directorate, Edgewood, at 74 (Oct. 1989) (for engineering, testing, and evaluation services for conducting environmental programs at U.S. Army installations).

In particular, environmental restoration firms generally seek to obtain the following provisions in their contracts for private sector activities:

- A clause establishing negligence as the standard of care. For example, the negligence standard is generally defined in private sector contracts as follows: "in accordance with generally accepted professional engineering or scientific practice at the time and place where the services are rendered."
- A cap, or ceiling, on the firm's total liability for negligence or other related claims.
- Full indemnification for claims based on strict liability.
- A requirement that the RAC will be provided with all known information and documents relating to the existence, quantity, type, and location of known or suspected hazardous materials at the site.

These clauses are based on the theory that the site owner/operator, and not the environmental restoration firm, is responsible for the existence of waste at the site. Therefore, the environmental restoration firm should not be primarily liable for claims resulting from site cleanup activities. Limitation of liability claims have been upheld as valid and enforceable, and in accordance with public policy, by the courts. See Marlborough California, Inc. v. Superior Court, 227 Cal. App. 3d 705, 277 Cal. Rptr. 919 (Cal. App. 1991). More detailed information about the practices of private firms in performing hazardous waste cleanups can be obtained by reviewing the testimony of individual firms provided at the March 10, 1992 hearing of the Environmental Restoration Panel of the House Armed Services Committee on the liabilities facing firms involved in environmental restoration of DOD bases and facilities.

HWAC has issued a document entitled, "Standard Terms and Conditions for Hazardous Waste Contracts." This document (included at Tab 12) contains many of the above-referenced provisions, as well as an explanation of these provisions.

3. Availability of Insurance

Ideally, the risk of potential liabilities associated with environmental remediation projects would be handled the same way other such liability risks are: by purchasing appropriate amounts of liability insurance. In environmental restoration, however, the uncertainty of the risks involved, the high potential liabilities, and the strong potential for claims far into the future have combined to make available pollution liability insurance wholly unsatisfactory. While some limited insurance coverage is currently available, it remains very expensive, subject to high deductibles, and limited in maximum amount. Most importantly, pollution liability insurance is (and probably always will be) available only on a "claims made" basis, as opposed to an "occurrence" basis. This effectively means that there is no coverage available for the "long tail" claims made years after the work is completed.

The lack of available insurance not only exposes restoration firms to inordinate risks but, by restricting their ability to obtain required performance and payment bonds, it affects their ability to participate in DOD restoration projects at all. By statute (the Miller Act), DOD is required to obtain performance and payment bonds from qualified sureties for construction work performed as part of DOD's environmental restoration programs. Because sureties view themselves as potentially liable to the same extent as their principles, they have been reluctant to provide such bonds to date.[20/]

The U.S. General Accounting Office, in a February 5, 1991 report entitled "Hazardous Waste -- Pollution Claims Experience of Property/Casualty Insurers," presented the results of a study of the potential liability of twenty insurers for costs of cleaning up hazardous waste sites. The nine firms responding to the survey indicated that they paid $106 million in claims in 1989 alone. The report concludes that "the large number of open

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20/ Subcontractors under DOD restoration projects are also typically exposed to liabilities similar to those of prime contractors. Many DOD restoration contracts contemplate a large percentage of the restoration work actually being accomplished through subcontractors. Any risk sharing provisions incorporated into DOD restoration contracts should flow down to subcontractors.

claims (about 50,000) and pending law suits over insurance coverage for pollution liability (about 2,000) indicates that insurers may have more at stake than their past pollution claim experience would otherwise suggest." HWAC agrees with this report, particularly in light of the recent acceleration of claims against cleanup firms, and believes that what little insurance is now available to restoration firms may dry up altogether in the future.[21/]

Insurance may never be available to provide complete coverage for environmental restoration firms, but a properly structured DOD risk-sharing program could serve to stimulate development of reasonably-priced insurance covering a portion of the risk. HWAC believes that the key is to assure insurers that the risk they assume in issuing a pollution liability policy is limited both in maximum amount and in time. In other words, reasonable fixed limits on contractor liability both in amount and in duration after the work is performed, above and beyond which DOD becomes responsible for claims, would provide the certainty that insurers need to offer reasonably priced policies covering liabilities below those established limits.

Conclusion

As we have observed in the past,[22/] it is ironic that environmental restoration firms -- in no way responsible themselves for the existing contaminated sites -- should assume liability for damages arising from the extremely hazardous task of restoring waste disposal sites to their original condition. Restoration firms arrive after the damage is done, and their efforts improve, rather than threaten, public health and safety.

The recent acceleration of DOD hazardous waste site cleanups mandates a speedy resolution of the liability dilemma facing environmental restoration firms. No good can come of a policy requiring contractors to bet the entire assets of their firm every time they agree to participate in the restoration of a DOD

21/ A copy of the GAO report is attached at Tab 13. A published HWAC survey of insurance coverage available to environmental restoration firms is also attached at Tab 14.

22/ See Need for Risk Sharing in DOD Environmental Restoration Contracts, attached at Tab 15.

hazardous waste site. Not only does such a policy reduce the number of qualified firms willing to participate in these restoration programs, but it increases costs to DOD (through the factoring of risk into contract price) and ultimately leaves the general public exposed to claims for which there may be no adequate compensation.[2/]

DOD hazardous waste sites are the product of decades of DOD efforts to further this nation's defense. The nation as a whole assumed the risk -- as well as the benefits -- of those efforts, and it is now incumbent on the nation to bear the responsibility for restoring these sites to a safe condition. HWAC and its members are pleased to have a role in this enormous task. That role, however, does not justify our complete assumption of the risks associated with these extremely hazardous sites.

We value the opportunity to provide the information sought in Mr. Baca's December 22, 1992 letter, and we hope this response will prove useful to you and your associates. If we can be of any additional assistance, please do not hesitate to call on us.

Sincerely,

Peter W. Tunnicliffe

Peter Tunnicliffe
President, Hazardous Waste
Action Coalition

[2/] Although often employing large numbers of trained, experienced personnel, many restoration firms have very limited physical assets that could be liquidated to satisfy large damage claims.

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TAB 1 of HWAC

HWAC

an association of engineering and science firms practicing in hazardous waste management

Testimony of

James R. Janis
Executive Vice President
ICF International, Inc.

and

Chairman of HWAC's Federal Action Committee

Before the

Environmental Restoration Panel

of the

House Armed Services Committee

March 10, 1992

Statement of James R. Janis,
Chairman of HWAC's Federal Action Committee,
Before the Environmental Restoration Panel
of the House Armed Services Committee

March 10, 1992

Good morning. My name is Jim Janis, and I am Executive Vice President of ICF International, Inc. I am appearing today in my capacity as Chairman of HWAC's Federal Action Committee. HWAC is an association of over 120 engineering and science firms that provide hazardous waste assessment, cleanup and other related services to public and private sector clients. Examples of the types of services provided by HWAC members to the Department of Defense (DOD) and other clients include release detection and monitoring, preliminary assessments and site investigations (PA/SI), remedial investigations and feasibility studies (RI/FS), remedial designs and remedial actions (RD/RA), cleanup construction and construction management, and implementation of other federal and state environmental laws and regulations. HWAC member firms employ over 75,000 of the nation's most highly trained and experienced hazardous waste professionals, including engineers, hydrogeologists, chemists and other scientists. HWAC operates under the umbrella of the 5,000 member American Consulting Engineers Council, which represents engineers practicing in all engineering technical disciplines.

My testimony today will discuss the liability issues faced by firms performing environmental restoration work for DOD, how this adversely affects their willingness to participate in DOD environmental restoration contracts, and why taxpayers are placed at risk if nothing is done. I will also discuss why the timing is critical to address this issue now, and compare DOD's contracting practices with those of the other Federal agencies with large current cleanup programs, as well as with the private sector. Finally, I will talk about the methods available to DOD to accomplish reasonable risk sharing for environmental liabilities, and the key principles that HWAC believes any risk sharing program should be based upon.

Before getting into these issues, however, I would like to commend you, Mr. Chairman, and the other members of this Panel for your efforts in addressing the liability issues that will determine whether there is a sufficient pool of quality hazardous waste professionals and other contractors to achieve the rate of cleanups at DOD facilities to which Secretary Cheney has committed. This issue is critical both to achieving prompt cleanups of existing facilities, as well as to meeting public expectations for rapid cleanup of those bases to be closed pursuant to recent base closure decisions. Accordingly, by focusing on the liability issues, we strongly believe that this Panel is addressing its efforts in the right direction to enable

this effort to proceed at the required pace to meet the goals that have been established. We urge you to continue this focus until these liability issues have been properly addressed, and we appreciate your inviting us to participate in these important hearings.

1. Liability Issues and Their Impact on the DOD Environmental Restoration Program

The Liability Issues

DOD, as the owner (and often operator) of its sites, is the entity primarily responsible for their current contaminated state. DOD generated the wastes as a by-product of its basic mission of national defense. Environmental engineering and cleanup firms, by contrast, have not participated at all in causing the problem, but are only being hired to help find solutions to the problems. However, there are high technical risks associated with DOD site cleanups, due to the uncertainties involved in defining and characterizing the various chemicals and hazardous substances that may be present at a particular site, the often very high cost of treating or removing them, and the still-developing nature of most cleanup technologies. This gives rise to the possibility of toxic tort suits and other claims for damages from third parties, alleging injury due to exposure to the contamination at a site.

The restoration firm is exposed to these potential liabilities under a variety of state and federal laws imposing liability (often joint and several liability) "without fault," and the common law theory that hazardous waste work is "ultrahazardous," for which liability should be imputed without regard to the degree of care used in performing the work. Moreover, the primary responsible party, DOD, may be exempt from third-party liability in such instances by reason of sovereign immunity. This immunity makes the restoration firm the "prime target" defendant, and also may mean that if the restoration firm cannot pay the liability, the victims may go uncompensated for their injuries.

Recent Cases Illustrating The Liability Problem

HWAC has long predicted that third-party damage suits against environmental restoration firms at Government-controlled sites would be an inevitable consequence of hazardous waste site cleanups. However, we predicted that such claims might not arise for many years after the work was performed, because many injuries alleged in such claims, like cancer and other biological harm, may not manifest themselves for decades (this is referred to as the "long-tail" problem). Unfortunately, as four recent cases indicate, these suits are already starting to appear, substantially sooner than anticipated.

In connection with the Superfund program, two environmental restoration firms have been sued recently in Montana for work they performed for EPA starting in 1985. The allegations here are that the firms' efforts helped spread the contamination from the Superfund site, and the theories of recovery include both strict liability under federal and state law, and negligence.[1] In Texas, an environmental restoration firm involved in a state Superfund site cleanup has been sued by the residents and landowners adjacent to the site. They claim the firm's actions further contaminated their properties, despite the fact that those actions were approved in advance by the Texas authorities. The theories of recovery include trespass, nuisance, negligence and strict liability.[2]

As to DOE sites, the residents in the area surrounding the Fernald, Ohio plant sued DOE's management and operating (M&O) contractor for allowing the spread of wastes onto their properties, and obtained a settlement of $78 million.[3] A similar case against two DOE M&O contractors was filed in December 1991 by residents in the area of DOE's Mound plant near Dayton, Ohio.[4]

Adverse Impact on DOD Environmental Restoration

As these recent cases make clear, the threat of substantial third-party liabilities for cleanup firms is very real. Moreover, these liability risks are essentially unmanageable, especially since liability insurance in reasonable amounts and for reasonable prices is unavailable. By and large, environmental cleanup firms are not huge corporations that can afford to carry the enormous long-term potential liabilities that are associated with cleanup contracts. As professional service firms, our assets largely consist of our highly skilled employees. Any major claims would be sufficient to put the great majority out of business, possibly leaving innocent victims uncompensated. Moreover, even the cost of defending against an unmeritorious claim is a very substantial burden for these firms.

Without a reliable system in place to share third-party liability risks equitably with the Government, entering into a DOD cleanup contract thus becomes a virtual "bet the company" situation. Increasingly, many HWAC member firms are reluctant to make that bet to obtain any one contract. Ironically, it is the firms with the largest assets or net worth-- those that arguably DOD should be most eager to have participate in its environmental restoration programs -- that are the most likely to avoid the DOD market because more favorable contract terms are available in the private sector, from other Federal agencies, and in the international market. Accordingly, we expect that as DOD's cleanup program develops, DOD will find it is attracting as bidders the lowest net worth firms, or those large firms whose assets have been pledged so many times over that they do not have

the financial capacity to get the necessary bonding. This inevitably will slow down the pace of cleanups.

Some firms are participating in the DOD cleanup market through shell subsidiaries with limited assets, thereby placing the public at an even greater risk of uncompensated losses. If and when the claims come, the shell subsidiary can declare bankruptcy, and the parent can (it is hoped) escape liability and remain in business. If this scheme works as planned, however, any innocent victims may be left with no source of compensation for their injuries -- unless some legal theory is available for suing DOD directly.

Finally, some firms are responding to DOD cleanup solicitations in the hope that, before signing a contract, they will be able to negotiate some sort of risk-limiting or sharing mechanism, though none is specified in the solicitation. Others submit proposals for contracts that will involve multiple task orders, in the expectation that they will be able to limit their risk by avoiding any tasks they deem "high risk."

In this record, it cannot be assumed that merely because consulting firms submit proposals in response to a DOD solicitation, that all of those firms would actually be willing to sign the contract or accept high-risk task orders without changes in the area of risk sharing. We believe that without changes by DOD, fewer and fewer firms will be willing to do so, as the liability risks become more and more apparent through the appearance of claims and litigation regarding past projects.

2. <u>The Need For Prompt Action On Risk-Sharing</u>

The DOD environmental restoration effort is entering into a critical period. Most of the effort to date has been in the "study" phase -- preliminary assessments (PA), remedial investigations and feasibility studies (RI/FS) -- but more and more in the next few years the emphasis will shift to actual cleanup implementation (Remedial Design/Remedial Action or RD/RA). The RD/RA phases inherently have greater liability risks than study efforts, and the number of contracts and dollars expended will be much greater as well. In addition, the high priority base closure cleanup efforts will soon be moving into high gear as well.

Overall, the forecast is for substantially increased demand for highly qualified environmental restoration contracting capacity. We believe that without changes in DOD risk allocation policies, that capacity will not be available to support DOD's needs as the various DOD cleanup programs develop and move into the RD/RA phases.

In addition, what DOD requires to perform its environmental restoration mission cost effectively is not just a minimum level of available contracting capacity, but a healthy degree of competition by all of the most highly qualified contractors. Innovative technical solutions to cleanup problems offer the hope of significantly reduced cleanup costs as new technologies become available and enter the marketplace. But making each cleanup contract a potential "bet the company" situation can only encourage contractors to steer away from the innovative and new, and stick with the most "tried and true," and less cost-effective, technical solutions to cleanup problems. The result will certainly be significantly higher costs to DOD over the duration of its cleanup programs.

Similarly, a healthy degree of competition keeps prices at reasonable levels. A small pool of bidders that minimally satisfies the definition of "adequate competition" (usually two) will not have the same effect. Having the highest net worth and all of the most qualified firms participate in the DOD marketplace will similarly encourage innovative technical solutions, more efficient ways of accomplishing the work involved, and ultimately result in DOD obtaining a higher quality end product.

Overall, we urge you to think in terms of stimulating a substantial degree of competition and participation by the largest possible number of qualified firms in the DOD cleanup market, as this will in the long run result in the best value for the Government.

3. Comparison of DOD With Other Agencies

In comparison with other major market opportunities for cleanup work that are available to qualified environmental restoration firms, DOD to date has left the restoration firms most vulnerable to potential third-party liabilities. Every DOD cleanup contractor "bets the company" every day on the job.

Department of Energy

DOE has an environmental program significantly larger than that of DOD (even with base closure included), and has addressed the liability issues in the majority of its restoration contracts.

Specifically, DOE has adopted a "cost accountability" rule for its M&O contracts that incorporates two principles that we believe to be critical: risk-sharing and a standard of liability based on negligence. Under the rule, the contractor is responsible for the first layer of financial exposure from claims -- similar to a deductible under an insurance policy. The "deductible" is determined based on the fee or profit earned by

the contractor during the period in which the liability arose. The DOE rule also provides protection for the contractor based on a negligence standard rather than strict liability, and expressly excludes reimbursement to the contractor for actions that are grossly negligent or the result of intentional misconduct. The DOE rule is also flowed down by its terms to M&O subcontractors. Financial accountability provisions modeled on the rule are also contained in DOE's prototype "Environmental Restoration Management Contract" (ERMC) now being let at its Fernald facility.

DOE also has utilized the authority contained in Public Law 85-804, which protects the contractor from liability for unusually hazardous or nuclear risks, at the DOE Rocky Flats facility, where it was used in conjunction with the accountability rule. Such "layering" of Public Law 85-804 protection provides an appropriate "umbrella" covering "long tail" hazardous waste liabilities that can arise many years after contract completion and closeout. DOE also uses its authority under the Price-Anderson Act for protection from liabilities associated with nuclear risks in appropriate cases.

Environmental Protection Agency

Since the inception of its Superfund program, EPA has shared part of the liability risk with its Superfund cleanup contractors in some manner. Initially, EPA used FAR clause 52.228-7 "Insurance - Liability To Third Persons" in its cost-reimbursable contracts to provide for reimbursement of third-party claims, subject to contract appropriations. The 1986 SARA revisions to Superfund included Superfund Section 119, which specifically waives strict liability for cleanup firms under Federal (but not state) law, and imposes negligence as the standard of liability under Federal law.

Section 119 also authorized EPA to provide indemnification to cleanup firms for negligence, which EPA has done since 1986 under its interim guidance document. EPA's proposed final indemnification guidance, released for public comment in October 1989, has not been finalized. Accordingly, while the indemnification situation at EPA is far from clear, and the proposed final guidance may or may not include an appropriate degree of risk-sharing, EPA to date has more or less addressed the liability issues and offered a degree of protection to the public and its contractors not available at DOD.

Private Sector

In the private sector, risk-sharing arrangements often depend on the particular circumstances. Private clients contracting for environmental restoration services typically are legally and financially responsible themselves for the

contaminated site involved. Prudent cleanup firms take care to work with clients that are likely to be able to meet those financial commitments in the future, rather than going out of business and leaving the cleanup firm as a prime target defendant for future third-party claims. In many if not most cases, however, the cleanup firm also obtains an agreement by the client to be responsible for all third-party liabilities above a certain amount (including all strict liability).

In sum, DOD lags significantly behind other major segments of the hazardous waste market in acknowledging and dealing in a positive manner with the liability issues inherent in environmental restoration work. This inherently makes DOD work less attractive for the most qualified firms in the marketplace.

4. Methods for Accomplishing Appropriate DOD Risk-Sharing

Insurance

Ideally, the risk of potential liabilities associated with environmental remediation projects would be handled the same way other such liability risks are: by purchasing appropriate amounts of liability insurance. In environmental restoration, however, the uncertainty of the risks involved, the high potential liabilities, and the strong potential for claims far into the future have combined to make available pollution liability insurance wholly unsatisfactory. While some limited insurance coverage is currently available, it remains very expensive, subject to high deductibles, and limited in maximum amount. Most importantly, pollution liability insurance is (and probably always will be) available only on a "claims made" basis, as opposed to an "occurrence" basis. This effectively means that there is no coverage available for the "long tail" claims made years after the work is completed.

Insurance coverage may never be available to provide complete coverage for environmental restoration firms, but a properly structured DOD risk-sharing program could serve to stimulate development of reasonably-priced insurance covering a portion of the risk. HWAC believes that the key is to assure insurers that the risk they assume in issuing a pollution liability policy is limited both in maximum amount and in time. In other words, reasonable fixed limits on contractor liability both in amount and in duration after the work is performed, above and beyond which DOD becomes responsible for claims, would provide the certainty that insurers need to offer reasonably priced policies covering liabilities below those established limits.

SARA Section 119

HWAC believes that SARA Section 119, as currently drafted and interpreted, may not in itself provide an appropriate foundation for DOD risk-sharing. By its terms, Section 119's protection for cleanup firms applies to Superfund sites listed on the National Priority List (NPL). The overwhelming majority of DOD sites are not on the NPL, and are not likely to be added to the NPL.

Moreover, Section 119 does not provide coverage for claims based on the numerous state statutes in existence, or for other state law strict liability theories, such as those applicable to "ultrahazardous" activities. Section 119 coverage similarly does not extend to negligence claims premised on "threatened" releases of hazardous materials, as opposed to actual releases. Section 119 indemnification must also be limited in amount, and EPA's proposed final guidance published in 1989 indicated an intention to subject such indemnification to an unreasonably low maximum amount as well as to a relatively short time limitation.

Accordingly, as currently drafted and interpreted, Section 119 may not be a suitable vehicle in itself on which to base DOD's risk-sharing program.

Public Law 85-804

Public Law 85-804, as implemented by Executive Order 10789 (as amended) authorizes DOD to indemnify contractors against unusually hazardous or nuclear risks, without regard to other laws limiting agency commitments to available funds, whenever such action is found to facilitate the national defense. As such, Public Law 85-804 offers the flexibility for DOD to fashion appropriate risk-sharing mechanisms for cleanup contracts at Defense facilities. However, DOD has used this authority only very sparingly to date for environmental restoration contracts, although it has been used in the chemical weapons destruction program.

Public Law 85-804 is, however, a relatively cumbersome tool to utilize in practice for the number of contracts involved in DOD's environmental restoration programs. It expressly requires Secretary-level approval for use in each instance. There are no mechanisms in place to our knowledge for considering its possible use in the procurement planning process, nor is there even a clearly established method for a prospective bidder to request its use. Presumably many of these obstacles could be overcome by changes in DOD procedures. Public Law 85-804, particularly because of its ability to extend coverage beyond contract appropriations to cover "long-tail" liabilities, should be viewed as a useful part of any DOD risk-sharing program, perhaps on an interim basis, but may not be a complete answer.

Federal Acquisition Regulation Clause 52.228-7

Clause 52.228-7, entitled "Insurance - Liability to Third Parties" of the Federal Acquisition Regulation (FAR), provides a some degree of risk-sharing for third-party liabilities, but as currently drafted is of very limited benefit in environmental restoration contracts.

FAR 52.288-7 provides for reimbursement by the Government for liabilities to third-parties incurred by the contractor that: 1) arise out of contract performance; 2) are not compensated by insurance or otherwise; and 3) are represented by final judgments or settlements approved by the Government. However, FAR 52.228-7 can only be used in cost-reimbursable contracts, so has no application to the extent DOD cleanups are performed pursuant to fixed-price contracts. Moreover, FAR 52.228-7 cannot be used in either construction contracts or contracts for architect/engineer services. This is a very significant limitation to its use in DOD's environmental restoration program, since much if not most of the work can be characterized as either construction or engineering services.

The most important limitation on the usefulness of FAR 52.228-7, however, is that reimbursement for third-party claims is expressly limited by the availability of appropriated funds. Funds appropriated to the contract will likely be used or transferred elsewhere within a short period after performance is completed. FAR 52.228-7 accordingly offers little assurance of reimbursement for claims arising after the work is completed, when most claims are likely to arise.

5. Recommendations For DOD Risk-Sharing

Whatever means are ultimately utilized for addressing the liability issues in DOD cleanup contracts, there are several basic principles that HWAC believes should be a part of any DOD risk-sharing program. These are as follows:

1. DOD should indemnify or otherwise relieve cleanup firms from liability independent of fault under both state and Federal law. Joint and several "strict liability" standards are more appropriate for the waste generators than for cleanup firms who did not contribute to the problem, and have only limited control over the remedy ultimately selected by DOD.

2. Cleanup firms should remain liable for their negligence, but only up to a pre-determined level, beyond which the Government would become responsible for claims. The value for the upper level of contractor responsibility should be related to the size

of the contract (or task order, as appropriate) and available insurance coverage.

3. The cleanup firms' potential liability should be subject to a time limit after completion of the work, similar to the "statutes of repose" in effect in over 40 states for building design and construction claims. This limitation is needed to avoid unmanageable and uninsurable "long tail" claims arising many years after the work is completed.

4. Changes to liability terms in restoration contracts should be implemented as a matter of overall DOD policy and included in solicitations, in order to attract the maximum number of competitors for cleanup contracts and provide them equal knowledge of the available risk-sharing terms.

5. In addition to overall policy changes, DOD should where appropriate use specific provisions in individual contracts, based on a specific assessment of the particular risks involved. An example would be a provision expressly relieving the contractor from responsibility for pre-existing conditions at a particular site.

6. DOD's risk-sharing mechanisms should be developed so as to encourage the use of innovative technologies in its environmental restoration projects. Further, DOD's mechanisms should be shaped so as to encourage the availability of reasonably priced pollution liability insurance. HWAC believes that the combination of a negligence standard, and a fixed limit on contractor liability both in time and amount (as outlined above), will best accomplish these goals.

Thank you for your consideration of these comments. I will remain available to respond to any questions that you might have.

NOTES:

1. Atlantic Richfield Co. v. Oaas, et al., Civil Action No. CV-90-75-BU-PGH (U.S. District Ct., Dist. of Montana, Butte Div.).

2. Dumes v. Houston Lighting & Power Co., et al., Case No. C-90-330 (U.S. District Ct., Southern Dist. of Texas).

3. Crawford v. National Lead Co., et al., Case No. C-1-85-0149, 1989 WL 266347 (U.S. District Ct., Southern Dist. of Ohio).

4. Stepp v. Monsanto Research Corp., et al., Case No. C-3-91-468 (U.S. District Ct., Southern Dist. of Ohio).

HWAC Member Firms and Locations

3D ENVIRONMENTAL SERVICES CORP.
Lexington, KY

ABB ENVIRONMENTAL
Wakefield, MA

AECOM TECHNOLOGY CORP.
Washington, DC

ALLEN & HOSHALL, INC.
Memphis, TN

ALLIANCE TECHNOLOGIES CORPORATION
Lowell, MA

AWD TECHNOLOGIES, INC.
Rockville, MD

AYRES ASSOCIATES
Eau Claire, WI

ARTHUR D. LITTLE, INC.
Cambridge, MA

BCM ENGINEERS, INC.
Plymouth Meeting, PA

B & V WASTE SCIENCE AND TECHNOLOGY
Overland Park, KS

BABCOCK & WILCOX
Lynchburg, VA

BADGER ENGINEERS, INC.
Cambridge, MA

BAKER ENVIRONMENTAL, INC.
Coraopolis, PA

BECHTEL ENVIRONMENTAL, INC.
San Francisco, CA

BNFL, Inc.
Washington, DC

BRAUN-INTERTEC ENVIRONMENTAL
Minneapolis, MN

BROWN AND CALDWELL
Walnut Creek, CA

BURNS & MCDONNELL ENGINEERING COMPANY
Kansas City, MO

CDM FEDERAL PROGRAMS CORPORATION
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**These firms have more than 500 branch offices located throughout the United States and abroad.

TAB 1 of HWAC

HAZARDOUS WASTE ACTION COALITION

ANSWERS TO QUESTIONS FOR THE RECORD

ENVIRONMENTAL RESTORATION PANEL HEARING ON DOD REMEDIAL ACTION CONTRACTOR LIABILITY AND INDEMNIFICATION
March 10, 1992

1. Maximum Bonding Capacity. What is the maximum bonding capacity available for hazardous waste work?

HWAC members report that bonding capacity remains very limited for hazardous waste contracts, with even major corporations having difficulties in obtaining bonds. Premiums are significantly higher than for regular construction bonds, sureties reportedly require a substantially higher corporate net worth before issuing such bonds, and the associated terms and conditions are unusually onerous. The maximum bond amount available varies depending on both the surety and contractor involved, and upon the financial strength of the contractor.

Please reference the testimony of IT Corporation, Ebasco and Bechtel for further details regarding the current limitations on bonding capacity.

2. Liability Suits. Is there any evidence that suits have arisen because of liabilities for hazardous waste work?

Several recent suits against cleanup firms and firms with cleanup responsibilities assert that those firms are liable under a variety of theories for their hazardous waste remediation efforts. These suits include:

Atlantic Richfield Co. v. Oaas, et al., Civil Action No. CV-90-75-BU-PGH (USDC D. Mont., Butte Div.). ARCO, a PRP at a Superfund site in Montana, has sued two firms that performed cleanup services at the site in 1985 under EPA contracts. The suit seeks contribution for environmental restoration costs and natural resource damages, as well as recovery based on negligence and/or gross negligence, based on the allegation that the work performed at the site allegedly spread site contamination. The suit also alleges that the project constructed at the site constitutes a CERCLA "facility," and that the firms are the "operators" of the facility, and thereby are strictly liable under CERCLA.

Dumes v. Houston Lighting & Power Co., et al., Case No. C-90-330 (USDC S.D. Texas). Residents adjoining a Superfund site in Corpus Christi, Texas have sued an environmental engineering firm and others. The suit alleges that the environmental firm's

development and implementation of a state-approved closure plan resulted in the migration of waste onto off-site property. The suit seeks recovery from the environmental firm for personal injury, property damage, and cleanup costs based on the theories of negligence, nuisance, and trespass, as well as strict liability under CERCLA for allegedly "arranging for transport" of the waste onto off-site property.

Crawford v. National Lead Co., et al., Case No. C-1-85-0149, 1989 WL 266347 (USDC S.D. Ohio). The residents in the area surrounding DOE's Fernald, Ohio plant sued DOE's management and operating (M&O) contractor for allowing the spread of wastes onto their properties. A settlement of $78 million was obtained by the plaintiffs in this case, after the Court ruled that operation of the plant was an "abnormally dangerous" activity subjecting the M&O to strict liability, and that the M&O could not avail itself of the Government contractor defense.

Stepp v. Monsanto Research Corp., et al., Case No. C-3-91-468 (USDC, S.D. Ohio). In a lawsuit very similar to the Crawford case (above), residents in the area surrounding DOE's Mound plant near Dayton, Ohio have sued the facility's two DOE M&O contractors.

All of these cases except Crawford are still pending at this writing. Because of the long lead time for adverse consequences of a completed cleanup to become apparent, and the relatively small number of completed cleanups to date, these cases are likely just the beginning of a wave of similar litigation. An HWAC Alert regarding the first two cases, and copies of the Complaints in those cases, are attached for reference.

3. Bonding Limitations. Are your member companies prevented from bidding DOD remedial action work because of bonding limitation, and will they be limited in the future?

During testimony, one of the largest remediation contractors specifically indicated that it is precluded from bidding due to bonding limitations. HWAC believes that numerous smaller firms are currently precluded from participating in the remediation market due to lack of bond availability. This situation is unlikely to improve unless and until the potential liability exposures of remediation firms are sufficiently clarified or limited to enable the surety companies to assess and price their risk.

4. Decline DOD Remedial Action Contracts. Have any of your member companies indicated that they would not sign a DOD remedial action contract because of liability issues?

Yes, HWAC members testified at the hearing that they would not participate, or at most participate only on an extremely selective basis, in the DOD remediation market because of the current liability situation. Numerous other HWAC members are believed to be following similar business strategies of limited or no DOD market participation due to liability concerns. The reason for this is a fundamental unwillingness to "bet the company" each time they sign a contract with DOD for an environmental restoration project.

5. Minimum Needed To Assure Participation of Qualified Contractors. What do you think would be the minimum risk sharing package that DOD would need to assure the participation of your members, and is there an industry consensus on this?

There is indeed an industry consensus on the minimum risk sharing package needed to assure full participation in the DOD remediation market, and HWAC fully supports the industry consensus position. The attached "Endorsed Industry Position on Environmental Restoration Contractor Liability" sets forth the consensus position. As set forth in more detail in the Endorsed Industry Position, the industry believes that the minimum requirements include:

- indemnity for strict, joint and several liability under federal and state law.

- contractor liability for negligence up to a deductible amount, beyond which the Government is responsible.

- phase-out of the deductible amount a reasonable period after completion of the contract.

- inclusion of the risk-sharing provisions in the Request For Proposals so that all offerors are aware of the liability terms being offered when submitting proposals.

6. Minimum Compared to Private Party Work. How does this minimum risk sharing package compare to the kinds of arrangements you use for private party cleanup work? Are you asking DOD for more protection than you are from private parties for similar cleanup work?

The Endorsed Industry Position reflects terms highly similar to those most often obtained in private party cleanup work, with the cleanup firm retaining some portion of potential liability up to a cap amount that does not threaten the cleanup firm's financial viability, and the purchaser assuming liability beyond this amount. However, in a significant number of cases the

cleanup firm is able to obtain more favorable terms in private party arrangements, where all third-party liability is assumed by the purchaser and none retained by the cleanup firm.

Accordingly, the Endorsed Industry Position asks for no more, and possibly less, than what is generally available in private party arrangements.

7. Negotiations With DOD. Unfortunately, DOD still does not believe there is a problem that needs to be fixed. Why do you think that you have not been able to convince DOD on this issue?

The reasons why DOD has not been receptive to acknowledging the existence of a problem are undoubtedly many and complex. Chief among them, however, is the fact that since much of the problem is still somewhat "over the horizon," in that only a small minority of the significant cleanup contracts have as yet been let, the lack of responsible participants in the DOD market is not yet obvious. In addition, DOD does not appear to appreciate the need for and benefits to be derived from an equitable allocation of risk in this area, although that premise is certainly the basis for many other DOD and FAR contract clauses from which DOD benefits by obtaining lower prices and increased competition. Finally, DOD is naturally reluctant to be viewed as "giving away" something to contractors unnecessarily, even though DOD is both the "generator" and "owner" of the hazardous wastes involved, and thus should continue to bear the risks associated with them.

8. Need For A Timely Solution To Contractor Concerns. How much longer do you think DOD can continue to avoid addressing contractor concerns about risk sharing before the shortage of qualified contractors begins to adversely affect the DOD cleanup program?

The DOD environmental restoration programs are reportedly entering a rapid "ramp-up" phase, with numerous significant contracts to be let over the coming 18 months. There is substantial pressure on DOD to complete cleanups rapidly, particularly in the case of military bases scheduled for realignment or closure. If the recession is truly ending, this will also expand the private market for cleanup services, where more favorable liability protection is generally available. The more favorable DOE and international markets are similarly expanding. These other markets will all draw qualified contractors away from DOD work where inadequate liability terms are offered, just at a time DOD's needs are also expanding.

In short, HWAC believes that DOD's cleanup program will be adversely affected by the current liability situation sooner rather than later, although the precise timing is dependent upon the interaction of a number of factors, as outlined here.

From another standpoint, DOD's restoration programs may already be adversely affected by the reluctance of contractors to stray from "tried and true" technologies and to propose innovative technological solutions for DOD sites in the absence of better protection from potential liabilities. This adverse effect will undoubtedly follow from DOD's present policies, but the effect is inherently difficult to measure. DOD will simply never see the innovative proposals it might otherwise have received.

9. More Cost-Effective DOD Cleanups. How would a more equitable DOD policy on contracting liability translate into high quality and more cost-effective cleanups and is there any data to back this up?

An equitable DOD risk sharing policy would promote high quality by encouraging the more sophisticated and high net worth companies to fully participate in the DOD cleanup market. Currently, such firms are staying largely on the sidelines. In addition, the high risks associated with DOD cleanup contracts tend to give a competitive advantage to those contractors who are willing to plunge into bidding on a DOD contract without a careful risk assessment or adequately factoring that risk into their bid price. Over the long run, HWAC believes that contractors who understand the risks involved in hazardous waste work (and are thus in a position to closely manage these risks) will perform more responsibly than those that either do not appreciate the risks or choose to ignore them.

Cost effectiveness will be promoted by increased competition for DOD cleanup contracts as a result of the increased number of participants in the DOD market, and the consequent increased competition for contracts. In addition, by allowing cleanup firms to propose greater use of innovative technologies in cleaning up sites, DOD will benefit from the potentially very significant cost savings to be realized from such advanced technologies.

10. Is Industry A Hostage To DOD Work? To what extent is the environmental cleanup contract industry hostage to the DOD workload? To put it another way, can the most qualified contractors afford to pass up these cleanups, even without a more equitable risk sharing arrangement?

No, industry can largely afford to bypass (or be extremely selective regarding) DOD restoration work, since: a) the DOE market is and is projected to remain much larger than the DOD market; b) the EPA Superfund market is and will remain substantial in relation to the DOD market; c) the private party market is also larger than the DOD market; and d) the international market, while currently small, is expected to expand rapidly in years to come, and may well substantially exceed the DOD market in size within a few years.

In sum, industry has several other large and expanding markets to turn to other than DOD, and all offer better liability protections than DOD does. Accordingly, the industry is not hostage to DOD.

11. Section 119 Indemnification Authority. What are the problems with Section 119 [of SARA] and how would it have to be modified to address DOD remedial action contractor concerns?

HWAC believes that Section 119 of SARA is unsuitable for use as the basis for a DOD risk sharing program because of numerous shortcomings with that Section, including the following:

a) Section 119 does not apply by its terms to response action contracts for remedial work at sites not on EPA's National Priorities List (NPL). Most DOD sites requiring cleanup are not NPL sites, and so Section 119 simply does not apply.

b) Section 119 offers indemnification only from negligence liability. In reality, cleanup firms are exposed to liability on a number of theories other than negligence, including state common law strict liability for "ultrahazardous" activities, nuisance, trespass, and state statutory liability (e.g., state Superfund laws).

c) Section 119 indemnification is available only for damages caused by a "release," whereas substantial liability could also be premised on a "threatened release" that would not be covered by Section 119 indemnification.

d) As the source of funds for paying covered claims under Section 119 is the hazardous waste Superfund, using Section 119 for DOD contracts would potentially take funds away from cleanup of Superfund sites by EPA.

e) EPA's Proposed Final Guidance implementing Section 119 (as published in November 1989) proposes wholly inadequate liability limits and time restrictions on indemnification, as well as punitive deductibles and other onerous terms. The numerous shortcomings of EPA's Proposed Final Guidance

are set forth in detail in HWAC's comments to EPA on the Proposed Final Guidance, a copy of which is attached.

In sum, to utilize Section 119 for DOD contracts would require a wholesale revision of Section 119 as presently written.

12. Small Business' Stake. What is small business' stake in the outcome of DOD efforts to address the liability concerns of remedial action contractors? How will an equitable DOD risk sharing arrangement help small business?

Small business has a large stake in DOD's implementation of an equitable risk-sharing program to deal with response action contractor liability concerns. First, small businesses are most vulnerable to the lack of bonding availability that characterizes the present liability situation. Moreover, small businesses are also the least able to self-insure against even relatively smaller liabilities. While entering into a DOD remediation contract today is a "bet the company" proposition for even the large firms, the odds on that bet are far worse for a small business, since the small business will be put out of business by a liability that a larger firm could survive. Finally, responsible and risk-sensitive small businesses are most vulnerable to finding themselves "priced out of the market" for DOD contracts by other, less responsible small businesses that feel they have little to lose by ignoring their potential liabilities under DOD restoration contracts.

In sum, implementation of an equitable risk sharing program by DOD will greatly enhance the ability of small businesses to participate in the DOD cleanup market.

13. "Prime Target" Defendant. On page 2 of your prepared statement, you say that the cleanup contractors involved in DOD work could end up as the "prime target" defendant in subsequent third party liability suits. Why is that and how does this relate to the need for a more equitable risk sharing arrangement with DOD?

The doctrine of "joint and several liability" applies to most of the legal theories under which a cleanup firm may be found liable for their actions in connection with DOD cleanups. Under this doctrine, one financially viable defendant is responsible for paying all of the assessed damages, even if other defendants are also responsible in part (even for the most part) for causing the damage. Accordingly, the most financially viable defendants are the most at risk, and the risk is increased if other defendants are either without substantial assets or otherwise immune from suit.

The doctrine of joint and several liability, combined with DOD's likely sovereign immunity, are what combine to make the cleanup firm at a DOD site the likely "prime target" defendant for third party claimants. At a DOD site, the operator and owner of the site who generated the waste problem in the first place is typically DOD. This contrasts sharply with the situation at private sites, where numerous firms are potentially responsible parties as waste generators, operators or owners. If sued in connection with a release or potential release from the site, DOD would presumably assert sovereign immunity as a defense, and avail itself of the "discretionary function" exemption from the Federal Tort Claims Act (which waives the Government's sovereign immunity to a limited extent).

Accordingly, even if DOD were ultimately judged to be 90% liable and the cleanup firm only 10% liable, the cleanup firm would, under the principles of joint and several liability, have to pay the entire judgment. Moreover, DOD would continue to be protected by sovereign immunity from any effort by the cleanup firm to recover the 90% of the damages actually caused by DOD, but paid by the cleanup firm. It is also likely in many instances, in view of the lack of insurance, that the judgment would be sufficient to bankrupt the cleanup firm. In that instance, injured victims with meritorious claims might go uncompensated unless the Government were waive its sovereign immunity (see the discussion of "indemnification by default" below).

In sum, the combination of joint and several liability and DOD's sovereign immunity greatly heightens the risk faced by cleanup firms at DOD sites, and further emphasizes the need for an equitable risk sharing policy.

14. Indemnification By Default. You seem to argue that if DOD is not able to attract the most qualified and financially sound remedial action contractors, that the taxpayers are likely to end up facing large scale indemnification by default. Am I correct and, if so, how will a better risk sharing arrangement minimize this likelihood?

If the present liability situation is not corrected, and DOD's restoration program remains skewed in favor of those contractors who either fail to appreciate or ignore the liability risks presently associated with DOD cleanup contracts, HWAC believes the likelihood of significant valid claims being asserted will only increase. The cleanup firms found liable will not be able to pay those claims, especially with the high net worth companies largely remaining on the sidelines. The victims will then have no source of compensation for their injuries.

In such a situation, DOD reliance on sovereign immunity to avoid paying claims may no longer be viable, and DOD would end up compensating the injured victims with public funds, which is what is meant by "indemnification by default." The ultimate cost to DOD under this scenario, however, would be far higher than instituting an equitable risk sharing program that allows the most financially sound and responsible firms to perform the work in the first place.

15. Availability of Insurance. Along with a number of your colleagues, you indicate that satisfactory insurance coverage is not available to remedial action contractors contemplating DOD cleanup work. How do you think that an equitable risk sharing arrangement with DOD would improve that situation and can you point to any cases where this has occurred in other areas of the public or private sector?

An equitable risk sharing mechanism for DOD remediation contracts similar to the Endorsed Industry Position would encourage the development of reasonably-priced insurance coverage by providing a fixed ceiling amount on the cleanup firm's liability, beyond which the Government would bear the risk. This fixed ceiling then allows the insurance companies to assess their risks with much greater certainty, since the insurance company can be assured that in the event of a catastrophic loss, the courts will not look to the insurance company as the only "deep pocket." In recent years, insurance companies have become all too sensitive to the successful use of imaginative legal theories effectively expanding their liability far beyond stated policy limits. This has effectively happened in those cases that have found pollution releases occurring over a period of years to trigger "occurrence-based" liability coverage under policies issued as long as 30 years ago. The certainty that the insurance company will not be found to be the "insurer of last resort" should lead to more reasonably priced coverage.

TAB 1 of HWAC

HWAC

an association of engineering and science firms practicing in hazardous waste management

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April 24, 1991 Testimony of

George L. Gleason, Chairman of HWAC's Federal Action Committee

Before the Environmental Restoration Panel

of the House Armed Services Committee

Good afternoon. My name is George Gleason, and I am Senior Vice President and General Counsel of NUS Corporation. I am appearing today in my capacity as Chairman of HWAC's Federal Action Committee. The purpose of my testimony today is to comment on the Department of Defense (DOD) study of the risks and liabilities facing firms providing environmental restoration services to the Department. My testimony will (1) describe our organization and our interest in the DOD study, (2) identify the liabilities facing HWAC member firms, and (3) provide recommendations for Congressional implementation of DOD's study results.

First, I would like to commend this Panel as well as the full Committee for it's efforts during the last Congress to recognize the important role played by experienced environmental engineering and science firms at DOD facilities, and to require the study of the liabilities facing these firms before enacting any additional legislation; the legislation proposed during last year's Congress would have severely and negatively impacted DOD's ability to fulfill Secretary Cheney's commitment to prompt cleanup of all DOD facilities.

I would also like to commend the Department for its vigorous efforts to study the liabilities facing our community, and its recognition that DOD is the party that is ultimately responsible for the liabilities associated with the wastes generated in furtherance of the national defense.

HWAC and the Environmental Cleanup Industry

HWAC is an association of over 120 engineering and science firms practicing in hazardous waste management. HWAC's members comprise 80% of the hazardous waste revenues reflected in the Engineering News Record's summary of the top 500 engineering firms. Our members investigate as well as develop and implement remedies to clean up the environmental damage created by others, yet we may be held to the same standards of liability as potentially responsible parties (i.e., owners and operators of hazardous waste sites, as well as generators and transporters of hazardous waste). Examples of the types of services provide by HWAC member firms include release detection and monitoring, remedial investigations and feasibility studies (RI/FS), remedial designs and remedial actions (RD/RA), cleanup construction and construction management, and implementation of other federal and state environmental laws and regulations. HWAC member firms' greatest assets are their employees, which consist of the majority of the country's highly-trained and experienced engineers, hydrogeologists, chemists, and other scientists skilled in providing hazardous waste services to clients. HWAC operates under the umbrella of the 5,000 member American Consulting Engineers Council, which represents engineers practicing in all engineering technical disciplines.

Liabilities Facing HWAC Member Firms

The standards of liability under the federal Superfund and RCRA laws include joint and several, as well as strict, liability. In addition, numerous and differing state laws impose additional and differing liability standards on firms performing cleanup services for clients. These "liability without regard to fault" theories are being interpreted to impose liability for any association with a hazardous waste site, including the theory that hazardous waste work constitutes an "ultrahazardous activity" for which liability is imputed without regard to proof of causation.

The risks are high in the environmental cleanup industry due to the enormous cost of cleaning up hazardous waste sites, the developing nature of cleanup technologies, and the potential for third

party liabilities associated with toxic torts and other claims for damages that could arise many years in the future. These risks are negatively impacting the availability of firms to continue to provide services to the federal government, as well as the willingness of firms to develop, test, and implement the new and innovative technologies mandated under the Superfund amendments of 1986 (known as SARA).

Recommendations for Congress

DOD recognizes the need to utilize the technical capabilities possessed by private firms with experience in environmental cleanup activities. HWAC understands that the DOD study will address the fact that the unmanageable risks faced by these firms may impede DOD's ability to protect the public and the environment through prompt cleanup of DOD facilities. Therefore, a federal scheme of indemnification and risk sharing for firms providing environmental restoration services to DOD is necessary to speed cleanup at DOD sites and to ensure full protection of human health and the environment.

1. Superfund Section 119 is Not a Complete Answer

Section 119 of the Superfund law authorizes the federal government to indemnify environmental cleanup firms to the extent that insurance is not available at a fair and reasonable price. It is HWAC's belief that Section 119 does not provide a solution for DOD's problems. Section 119's coverage is interpreted to be limited to Superfund sites. Because the overwhelming majority of DOD facilities are not listed on the National Priorities List (NPL), the services provided by HWAC members at most DOD facilities do not qualify for Section 119 indemnification. Further, Section 119 does not provide coverage for state law claims. Therefore, additional protection for firms providing environmental restoration services to DOD is necessary.

2. Public Law 85-804 is Useful, but Currently Not a Complete Solution

Public Law 85-804 authorizes the Department to indemnify contractors up to the limits of available appropriations in the case of "unusually hazardous or nuclear risks" when such actions would facilitate the national defense. The required national defense classification has been utilized sparingly by DOD to date for environmental restoration contracts, and it is currently being examined for possible use by other federal agencies. The express requirement of Secretary level approval for use of Public Law 85-804 for such hazardous activities, and the limit on Public Law 85-804's coverage to available appropriations, limits its appropriateness for use in time-sensitive environmental restoration activities.

3. Insurance and Surety Bonds Insufficient

Adequate insurance covering hazardous waste cleanup is almost nonexistent because of the uncertainties associated with the long-term liabilities of hazardous waste cleanup activities. The insurance market has decreased from four companies offering some coverage two years ago to two companies presently offering some limited coverage. The limited coverage that is available is offered on a "claims made" basis and does not cover long tail claims. In addition, surety bonds covering work at hazardous waste sites remain scarce because of the possibility that courts will look to surety bonds as the "deep pocket" substitute for insurance. The lack of bonds remains despite last year's Congressional amendment to Section 119 to address surety bond issues.

HWAC's overall position on insurance and surety bonds which was adopted by the HWAC Board of Directors is attached to this testimony for your reference.

4. Recommendations

Indemnification and other risk transfer policies specific to DOD facilities are necessary due to the unique risks posed by DOD facilities. Specifically, DOD is the owner and operator of the

facilities where activities are performed by cleanup firms in accordance with Defense Environmental Restoration Program and other federal and state requirements. Under the federal Superfund law, primary responsibility for the sites rests with DOD as the owner and/or operator of the facilities; however, substantial contractor risks and liabilities exist because of the joint and several, as well as strict, liability provisions of the federal Superfund law and the various state laws.

HWAC believes that the DOD environmental restoration program will be expedited and improved by the enactment of a federal standard of liability for all DOD environmental restoration activities. Further, the federal standard of liability and risk sharing program should be consistent with the following principles:

1. Federal law should specify that firms providing environmental cleanup and restoration services to DOD are subject to a uniform, and national, federal standard of liability in lieu of the varying state statutes.

2. The uniform federal standard of liability should be one of comparative negligence. Concepts such as joint and several, and strict, liability properly belong only with the parties who own or operate the sites, and who are otherwise liable as responsible parties under applicable statutes.

3. Federal indemnification with reasonable deductible provisions should be provided for the hazardous waste liabilities incurred by environmental restoration firms to the extent that such liabilities are not compensated by insurance. Such indemnification will spur the development of a meaningful insurance market because it will add an element of certainty to which insurance underwriting criteria can be applied. DOD should be required to reimburse firms for the cost of reasonable commercial insurance in accordance with commonly accepted principles.

4. The potential liabilities of environmental cleanup firms should be subject to a federal statute of repose. The statute of repose should specify that the firms' legal exposure would be for a specific period of years from the date the work at the site is completed and accepted by DOD. This would be consistent with state statutes of repose for design professionals and recognizes that, after a certain time period has elapsed, it is not reasonable to hold the firm responsible for future events.

5. DOD should limit the overall liability of environmental cleanup firms to a specific, and reasonably calculable, dollar amount for all DOD environmental restoration activities. Action along these lines was recently taken by DOE in its interim final Management and Operating (M&O) contractor accountability rule (56 FR 5064) which limits liabilities to the fee or profit earned by a firm during the applicable six month evaluation period.

Other Issues

HWAC is aware of efforts to require certain contractors, specifically disposal firms, to indemnify the government for hazardous waste activities. The argument advanced by proponents of this legislation is that client indemnification is the standard practice in the industry. HWAC's experience has been that the firm providing these services requests indemnification from its clients, rather than vice versa. Further, HWAC has repeatedly suggested that before enacting legislation Congress should receive proof of the assertion that disposal and other firms indemnify the person and/or organization that is the source of the waste. To the best of our knowledge, no proof has been provided. HWAC cautions Congress that, despite the apparent appeal of being indemnified for hazardous waste releases, there is no such thing as a cost free liability. The costs of waste disposal to the government will increase due to the need for the firm providing this indemnification to internalize the costs of potential future liabilities, and the number of firms willing to provide services to the government will decrease significantly. Further, the total of the liabilities facing firms that indemnify their clients would leave the firm open to massive liabilitie

beyond just their liabilities to the federal government. Therefore, the long-term viability of these indemnifications are questionable because, in the end, the government will remain responsible as the waste generator when the disposal firm is no longer in existence.

Conclusion

In summary, the liabilities facing firms providing environmental restoration services to the federal government are immense; insurance and surety bonds are insufficient to protect these firms from their risks and potential liabilities; Superfund Section 119 and Public Law 865-804, while appropriate in specific circumstances, are insufficient to protect cleanup firms in all situations; and a federal standard of comparative negligence that preempts state law combined with other risk transfer mechanisms is necessary to ensure protection of human health and the environment from the wastes at DOD facilities.

Thank you for your consideration of these comments. I will remain available to respond to any questions that you may have.

STATEMENT OF PRINCIPLES ON HAZARDOUS WASTE SITE REMEDIATION: POLLUTION INSURANCE, SURETY BONDS AND INDEMNITY PROBLEMS

Successive studies by the General Accounting Office have determined that insurance remains generally unavailable and is unlikely for the near future to provide adequate coverage for firms engaged in hazardous waste remediation. These firms are generally known as "Response Action Contractors," or "RACs." The most recent GAO report in September of 1989 concluded:

> Pollution insurance for RAC risks continues to be scarce and limited in coverage... Most representatives of the commercial insurance industry see little or no likelihood of expansion in the availability of pollution insurance for response risks in the foreseeable future.[1]

Pollution liability insurance has remained scarce, according to the GAO, despite resurrection of the coverage for other high risk activities following the insurance industry's recovery from the recent hard market cycle.[2]

The limited amount of pollution insurance for RACs now on the market is expensive, with premiums averaging 3% to 6% of the cost of cleanup. The available coverage, which is limited to either $5 million per occurrence and in the aggregate, or $3 million per occurrence and $6 million in the aggregate, falls far short of covering contractors from potential third party liability. These insurance policies also may contain various exclusions or limitations that make them next to worthless, such as site limitations, short duration of coverage and exclusion of significant risks. In addition to lack of insurance, Superfund contractors are increasingly unable to obtain the performance and payment bonds required for remedial construction under the Miller Act and various state laws, due to the surety bondholders' concern regarding their potential exposure to pollution liabilities.

Why Pollution Insurance and Surety Bonds are Unavailable

The General Accounting Office identified three factors inhibiting the development of pollution liability insurance for the Superfund program. First, RACs are viewed as particularly high risks, even within the pollution control industry:

> Because of the unknown nature of the risks found at Superfund sites, RACs are regarded as a high-risk segment of the market by the insurance industry. As such, insurance options and policy terms are likely to be more limited than those available to less risky segments of the pollution industry, such as waste transporters.[3]

Second, insurers allege that recent court decisions have expanded policy terms beyond their intended meaning, to make the insurer responsible for judgements the insured could not otherwise afford. Insurers argue that this unanticipated expansion of liability has made it difficult to offer even small amounts of coverage, since insurers cannot be certain that courts will adhere to expressed policy limits. Finally, since hazardous waste cleanup is a relatively new undertaking, any liabilities derived from such work may not be manifest until long after it is substantially completed. As a result, the insurance industry lacks the kind of claims history it needs to project the probability and frequency of losses, and to adjust policy limits and premiums to either avoid certain losses or generate enough premium income to cover them.[4]

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[1] U.S. General Accounting Office, Superfund: Contractors are Being too Liberally Indemnified by the Government. GAO/RCED - 89-160 (1989), (hereinafter cited as 1989 GAO Report at 20.)

[2] Id. at 31.

[3] 1989 GAO Report, supra note 23, at 20.

[4] Id; 1987 GAO Report, supra note 18, at 74.

The surety bond problem has root causes similar to the insurers' concerns. An acute shortage is being experienced by RACs in securing performance and payment bonds. Since such surety bonds are required by law for hazardous waste site remediations, their unavailability can adversely affect the federal remediation programs. The problem essentially is the surety underwriters' concerns that the bonds would be called on to provide coverage for third party liability claims. In the absence of adequate insurance or government indemnity, there is a good possibility that the RAC would become insolvent and that the surety bond underwriter would represent the only assets available to pay the claim. While such liabilities may technically exceed the obligations of the surety bond, under the "deep pockets" theory of liability often followed by courts in environmental pollution liability cases, there is real concern that the bond would be called on to pay the claim.[5]

Adequate Indemnification Encourages Development of the Insurance and Surety Bond Markets

It is essential that adequate indemnity be provided for hazardous waste remediation work performed by RACs. Indemnification under CERCLA Section 119 was designed by Congress to provide maximum incentives for private firms to develop pollution liability insurance tailored to the requirements of RACs. Indemnity also encourages development of the surety bond markets. HWAC believes indemnity should be provided pursuant to Section 119 where the work is performed on Superfund sites, or such other authority which an agency may have for non-Superfund remediation work.

It is clear that insurers are concerned that courts may stretch policy limits in order to pay large claims, and that performance bonds for construction firms may be jeopardized by surety bondholder anxieties about exposure to pollution liabilities. By providing a sure source for payment for large claims, indemnification assures firms interested in offering modest amounts of insurance coverage that policy limits will not be stretched by courts in search of a "deep pocket." For the same reasons, the Surety Bondholders Association has testified that protecting construction contractors from third-party liability would do much to alleviate the shortage of performance bonds.[6]

In contrast, the unavailability of indemnity or unreasonably low limits would signal to insurers the government's own lack of confidence in the insurability of RACs. EPA has already determined that RACs have an excellent loss history under the Superfund program, and are subject to loss control practices "far more stringent" than would be required by commercial insurance companies.[7] In addition, by exempting Section 119 from the Anti-Deficiency Act and authorizing unlimited appropriations to pay for future claims, Congress has placed the full faith and credit of the U.S. Government behind the indemnification program. If the Government is unwilling to offer adequate indemnification despite those advantages, it can hardly expect private insurers that lack EPA's experience and funding to fill the gap.

For non-superfund site remediation work, where Section 119 indemnity is not available, there are other established mechanisms for reimbursing contractor's liability costs. These include, for example, Public law 85-804; FAR Section 52-228-7, which provides for reimbursement of certain third party liability costs; and in the case of radioactive-included damages, the provisions of the Price-Anderson Nuclear Indemnity Act. These coverages are not inconsistent with Section 119, and indeed, should be used to supplement Section 119 in appropriate circumstances.

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[5] The concerns of the sureties in this regard are set out in a letter to the EPA from the American Insurance Association and the Surety Association of America, dated May 19, 1989.

[6] Letter Re: Draft Federal Register Notice on Section 119, from Lynn Schubert to Tom Gillis, Economist, Office of Waste Programs Enforcement, U.S. EPA, December 5, 1988.

[7] Proposed Section 119 Guidelines: Federal Register Notice (Draft), U.S. EPA Office of Solid Waste and Emergency Response (July, 1988).

Adequate Indemnity is Cost Effective

While the provision of indemnity is sometimes perceived to represent an additional cost to the Government, the opposite is, in fact, true. Indemnity saves the Government money up front in the remediation programs by increasing the number and quality of bidders, and thus reduces costs. The cost effectiveness of indemnity has been demonstrated by the experience of New Jersey and the Corps of Engineers.

HWAC recently evaluated fixed price bids for remedial action projects let by the Corps of Engineers (Corps) and by the New Jersey Department of Environmental Protection (NJDEP). The Corps and NJDEP differ significantly in their handling of indemnification, with the Corps providing uncapped, Section 119 indemnifications and NJDEP penalizing bidders who request indemnification. This evaluation shows that:

- The net result of New Jersey's policy has been to provide no indemnification to remedial action contractors and to drive out those contractors requiring it;
- New Jersey is receiving one-half the number of bids per project from one-third to one-fourth the number of companies bidding Corps work;
- New Jersey is paying a premium of more than 20% of the project cost for its policy, compared to projects bid by the Corps.
- Even the ranks of the decreasing number of bidders qualified to bid the larger Corps projects are being depleted by the unavailability of bonds; applying the New Jersey policies would only aggravate the situation.

Findings and Recommendations

It is clear that there is inadequate liability insurance available to RACs engaged in hazardous waste remediation activities. There is also an acute and growing problem with respect to the availability of the performance and payment surety bonds required by federal and state laws for remedial construction activities. Both of these problems are beginning to adversely affect the federal remediation programs by decreasing the number of firms available and willing to provide these services, with resulting increases in costs to the government. Provision of adequate indemnity or other liability cost reimbursement mechanisms will improve both the pollution liability and surety bond situations.

Congress has recognized the special liabilities that may be incurred by RACs, and the inadequacy of available insurance to cover such risks, in enacting Section 119, which provides federal indemnity for remediation work at Superfund sites. Consistent with the intent of Congress, all federal departments and agencies should provide Section 119 coverage for work at such sites.

Where Section 119 may not be available, other established mechanisms are available to reimburse RAC's liability costs, including Public Law 85-804, FAR 52-228-7, and the Price Anderson Nuclear Indemnity Act. It should be the uniform policy of all federal departments and agencies to provide such of these coverages as may be available and appropriate with respect to each remediation task.

- Approved by the Board of Directors -
- April 18, 1990 -

TAB 2 of HWAC

ENDORSED INDUSTRY POSITION ON ENVIRONMENTAL RESTORATION CONTRACTOR LIABILITY

DOD is anticipating a major expansion of its environmental restoration activities due to the need to clean up both existing facilities and bases targeted for closure. This effort is anticipated to cost several billion dollars, and involves activities to protect human health and the environment from the impacts of hazardous waste releases and/or potential releases. DOD, as the owner of facilities, bears the responsibility for protecting human health and the environment, and also bears direct liability for the existence of waste at these facilities.

Because of the liability associated with cleanup of DOD facilities, many experienced environmental restoration and management firms are either not bidding or proposing DOD environmental restoration work or are bidding or proposing only limited tasks to minimize liability exposure. Given the planned expansion in DOD's cleanup program, a change in DOD's contract terms is needed to expand the contractor resource base available to DOD and to improve competition.

Principles

Changes to DOD's contracting policy should be based on the following principles.

First, DOD generated the waste as a by-product of its basic mission. Therefore, DOD bears the ultimate responsibility for the waste including responsibility for protecting the public. This principle is consistent with the CERCLA concept of liability which holds the generator responsible for hazardous waste pollution. DOD's responsibility cannot be contracted away.

Second, liabilities incurred by cleanup and management contractors should be based on a negligence standard rather than a standard based on strict, joint and several liability. The strict, joint and several liability standards are more appropriate for the waste generator not the cleanup contractor who did not generate the waste, has limited control over the final remedy selected, and who may be unaware of pre-existing site conditions and/or the extent of environmental contamination at the site.

Third, innovative technologies will be needed to solve many of DOD's environmental contamination problems. The uncertainties concerning the ultimate effects resulting from the application of innovative technologies result in additional risks. Contractors should be encouraged, not discouraged, to use innovative technologies.

Fourth, the risks associated with environmental restoration should be allocated between the government and the cleanup contractor on the basis of their respective roles.

Framework for a Solution

DOD's contracting policies should be changed to provide the following provisions.

1. DOD should provide an indemnity for strict, joint and several liability arising under both federal and state laws. Current federal and state laws potentially hold the contractor responsible regardless of the degree of fault.

2. Cleanup contractors should be liable to the extent of their negligence up to some level above which the government would assume responsibility for claims. The amount for which the contractor is responsible should be related to the size of the contract.

3. DOD should provide contract language that establishes a time limit after completion of the work for the contractor's responsibility. This would eliminate "long tail" claims that can occur long after the work has been performed.

4. Changes to liability terms should be implemented as a matter of overall DOD policy. Implementation by the Services or Commands should be established and made known well in advance of any procurement to the contractor community.

5. In addition to adequate risk sharing mechanisms, DOD should provide special incentives such as reduced liability limits to encourage contractors to use innovative technologies.

Implementation

1. DOD can accomplish a significant improvement by fully using existing authorities, such as Public Law 85-804 and FAR Clause 52.228-7 to fulfill government responsibilities. Appropriate Secretary approval and FAR modifications should be obtained to facilitate the use and ensure the applicability of these mechanisms.

2. In addition, the Congress could provide substantial assistance to this effort by incorporating these principles into law.

POSITION ENDORSERS
(as of August 26, 1992)

ORGANIZATIONS:

American Defense Preparedness Association
Associated General Contractors of America
Hazardous Waste Action Coalition
National Constructors Association
National Security Industrial Association

American Congress on Surveying and Mapping
American Council of Independent Laboratories
ASFE/The Association of Engineering Firms Practicing in the Geosciences
Contract Services Association of America
Electronic Industries Association
National Society of Professional Engineers
Remedial Contractors Institute

American Consulting Engineers Council
American Society of Civil Engineers
Associated Builders and Contractors

Design Professionals Coalition
National Association of Minority Contractors
Professional Services Council
The Environmental Business Association

INDIVIDUAL FIRMS:

ABB Environmental Services, Inc.
AECOM Technology Corp.
Ayers Associates
Battelle
Bechtel Group Inc.
Burns & McDonnell Waste Consultants, Inc.
CH2M Hill
Conser Townsend & Associates
Dames & Moore
Ebasco Environmental
Fluor Daniel, Inc.
Garnett Fleming, Inc.
GeoEngineers, Inc.
GZA GeoEnvironmental, Inc.
HALLIBURTON NUS Environmental Corp.
Harding Lawson Associates
HMM Associates, Inc.
International Technology Corp.
James M. Montgomery
Kleinfelder, Inc.
Lockwood, Andrews & Newnam, Inc.
Malcolm Pirnie, Inc.
McDermott/Babcock & Wilcox
Michael Brandman Associates
Ogden Environmental & Energy Services
Parsons Brinckerhoff Quade & Douglas, Inc.
Raytheon Company
Rizzo Associates
Roy F. Weston, Inc.
SEA Consultants, Inc.
SSM/Spotts, Stevens & McCoy, Inc.
Stone & Webster Engineering Corp.
TAMS Consultants, Inc.
The Earth Technology Co.
Versar, Inc.

Alliance Technologies
AWD Technologies, Inc.
Baker Environmental, Inc.
BDM Engineers, Inc.
Brown and Caldwell
CDM Federal Programs Corporation
Chester Environmental Group
(Gail) Corrigan Consulting, Inc.
David Evans and Associates, Inc.
Engineering-Science, Inc.
Fuller, Mossbarger, Scott & May
GEI Consultants, Inc.
Geotechnology, Inc.
Haley & Aldrich, Inc.
Hanson Engineers, Inc.
Hatcher-Sayre, Inc.
ICF Kaiser Engineers
J.A. Jones Construction Services Co.
KCI Technologies, Inc.
Lockheed Corporation
Lowney, Associates
McCrone, Inc.
Metcalf & Eddy/Air & Water Tech.
Morrison Knudsen Environmental Services
P.W. Grosser Consulting
Paul C. Rizzo Associates, Inc.
Raba-Kistner Consultants, Inc.
RMT Inc.
Science Applications International Corp.
SEC Donohue, Inc.
Stanley Consultants Environmental, Inc.
Strand Associates, Inc.
Terracon Consultants, Inc.
TRW, Inc.
Waste Management Environmental Services, Inc.

TAB A HWAC

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District of Montana
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Attorneys for Plaintiff

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
BUTTE DIVISION

ATLANTIC RICHFIELD COMPANY, Plaintiff, v. TORGER L. OAAS; T.ERIK OAAS; MARTHA OAAS; MONTANA POLE AND TREATING PLANT; BANK OF MONTANA BUTTE; RIEDEL ENVIRONMENTAL SERVICES, INC.; ROY F. WESTON, INC.; BURLINGTON NORTHERN RAILROAD COMPANY Defendants.	Civil Action No. CV-90-75-BU-PGH

SECOND AMENDED COMPLAINT

Atlantic Richfield Company ("ARCO"), for its Second Amended Complaint against Defendants, alleges:

PARTIES, JURISDICTION AND VENUE

1. This is an action, under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601 et seq, as amended, and the Montana Comprehensive Environmental Cleanup and Responsibility Act ("CECRA"), Mont. Code Ann. §§ 75-10-701 et seq., for recovery of and contribution for response costs incurred and to be incurred by ARCO in connection with the release or threatened release of hazardous substances at and from facilities within the Montana Pole and Treating Plant Superfund Site (the "Site") located in Silver Bow County, Montana. This action also asserts a claim for negligence against Riedel Environmental Services, Inc. and Roy F. Weston, Inc., contractors who performed certain actions at the Site, and seeks related declaratory and further relief under CERCLA, 42 U.S.C. § 9613(g)(2), 28 U.S.C. §§ 2201-2202, and Mont. Code Ann. § 27-8-201 et seq. The action also asserts claims under CERCLA and CECRA for recovery of and contribution for costs of natural resource damages associated with releases from and at the Site.

2. Jurisdiction for the CERCLA claims is exclusive in the United States District Courts under CERCLA, 42 U.S.C. § 9613(b). This Court has federal question jurisdiction under 28 U.S.C. § 1331 for this civil action arising under the laws of the

United States. The CECRA and negligence claims are so related to the claims within the original jurisdiction of this Court that they form part of the same case or controversy under Article III of the United States Constitution. This Court has supplemental jurisdiction over the CECRA and negligence claims pursuant to 28 U.S.C. § 1367 and the doctrine of pendent jurisdiction. ARCO has incurred response costs consistent with the National Contingency Plan ("NCP") pursuant to CERCLA and will incur further response costs consistant with the NCP pursuant to CERCLA in the future. The State of Montana has brought an action against ARCO for damages for injury to, destruction of, or loss of natural resources resulting from releases of hazardous substances at and from facilities at the Site.

3. Plaintiff Atlantic Richfield Company ("ARCO") is a Delaware corporation and has its principal place of business in the State of California.

4. Defendants Torger L. Oaas, T. Erik Oaas and Martha Oaas (sometimes referred to collectively herein as "the Oaas'") are individuals. Torger Oaas and his wife, Martha Oaas, are citizens and residents of Butte, Montana. Their son, T. Erik Oaas, is a citizen and resident of Boise, Idaho.

5. Defendant Montana Pole and Treating Plant ("MPTP") was a Montana corporation whose principal place of business was in Silver Bow County, Montana. MPTP was dissolved through involuntary liquidation on December 2, 1985. MPTP was owned,

controlled and managed by the Oaas', who were its directors, officers, majority shareholders and principal managers and executives.

6. Defendant Bank of Montana Butte, the successor in interest to Miners Bank of Montana, ("Bank") is a Montana state-chartered bank with its principal place of business in Butte, Montana.

7. Defendant Riedel Environmental Services, Inc. ("Riedel") is an Oregon corporation authorized to do business in Montana with its principal place of business in the State of Oregon.

8. Defendant Roy F. Weston, Inc. ("Weston") is a Pennsylvania corporation authorized to do business in Montana with its principal place of business in the State of Pennsylvania.

9. Defendant Burlington Northern Railroad Company ("Burlington Northern"), successor-in-interest to Northern Pacific Railway Company ("Northern Pacific"), is a Delaware corporation authorized to do business in Montana.

10. The United States, at the request of the Administrator of the U.S. Environmental Protection Agency ("EPA"), has brought an action in this Court under CERCLA seeking reimbursement of its response costs at the Site and for declaratory judgment for future response costs against Torger Oaas, MPTP, ARCO and Burlington Northern. United States v. Montana Pole and

Treating Plant, et al. (United States District Court for the District of Montana, Butte Division, Case No. CV 91-82-BU-PGH).

11. Venue is proper in this district under CERCLA, 42 U.S.C. § 9613(b), and 28 U.S.C. § 1391(b), and venue is proper in this division pursuant to Rule 105-3(a) of the Rules of the United States District Court for the District of Montana.

GENERAL ALLEGATIONS

12. In or about 1946, Torger Oaas founded MPTP, a wood treatment plant which utilized pentachlorophenol ("PCP") and other hazardous substances in its operation ("Pole Plant"), on real property located at the Site.

13. The Site has been designated a Superfund Site on the CERCLA National Priorities List.

14. The Site, the Pole Plant and associated real and personal property, the Burlington Northern right-of-way and railroad spur running through the Site, an oil/PCP intercept and infiltration system, and other equipment placed on the Site by Riedel and Weston during a CERCLA response action initiated in 1985, all constitute facilities under CERCLA, 42 U.S.C. § 9601(9), and CECRA, Mont. Code Ann. § 75-10-701(4) ("Facilities").

15. Torger Oaas leased the property on which he located the Pole Plant from ARCO's predecessors, the Anaconda Company and the Anaconda Copper Mining Company (collectively "Anaconda"), from 1946 until in or about 1955. A small parcel of

property at the Site was subject to a lease from Anaconda to Torger Oaas through approximately 1960.

16. Torger Oaas purchased the property on which he located the Pole Plant from Anaconda in or about 1955. Torger Oaas conveyed most of this parcel to MPTP, reserving a tract of land on which his home was and is located. MPTP purchased additional property at the Site from Anaconda in or about 1958.

17. The Oaas' and MPTP owned and operated the Pole Plant from its inception in 1946 until its closure in or about 1984. During most of this period, the Oaas' and MPTP owned the real property on which the Pole Plant was located.

18. Each of the Oaas' exercised control, managerial authority and responsibility over operation of the Pole Plant and associated waste handling practices.

19. Each of the Oaas' was an officer, director and/or majority shareholder of MPTP.

20. The Oaas' and MPTP have not acknowledged responsibility for nor cooperated with the government in efforts relating to investigation and remediation of contamination at the Site.

21. During the ownership and operation of the Pole Plant by the Oaas' and MPTP, there have been and continue to be releases, threatened releases and disposals at or from the Facilities of hazardous substances associated with operation of the Pole Plant. Such releases include, without limitation,

release of hazardous substances during a fire at the Pole Plant in or about 1969.

22. Beginning in the 1960's, the Bank made loans to MPTP which were secured by MPTP's and the Oaas' real and personal property, including without limitation the Pole Plant, and by the Oaas' personal guarantees. By 1984, MPTP and the Oaas' failed to repay their debts to the Bank.

23. In satisfaction of these debts, the Bank accepted from MPTP on or about May 17, 1984, a grant deed for most of MPTP's real property at the Site, thereby acquiring title to and ownership of that property and the Pole Plant. The Bank also took possession, control and ownership of personal property, equipment and hazardous substances associated with the Pole Plant. MPTP retained a small parcel of property at the Site.

24. At the time the Bank accepted the grant deed, it had and/or should have had knowledge of the contaminated nature of the real and personal property at the Site and of the CERCLA and other environmental liabilities associated with ownership of the real and personal property which it acquired from MPTP.

25. The Bank acted in a manner which influenced the management of hazardous substances at and from the Facilities.

26. On or about June 19, 1984, the Bank held a public auction at the Site at which it sold contaminated equipment from the Pole Plant. The Bank did not sell the real property.

27. In or about September, 1984, the Bank unilaterally attempted to return the grant deed to MPTP, which did not accept its return. This action was ineffectual to divest the Bank of its ownership interest in the Pole Plant and associated real and personal property.

28. The Bank has neither acknowledged responsibility for nor cooperated with the government in efforts relating to investigation and remediation of contamination at the Site.

29. During the ownership, operation and control of the Pole Plant and associated real and personal property by the Bank, there have been and continue to be releases, threatened releases and disposals of hazardous substances at or from the Facilities.

30. In July 1985, EPA, Riedel, and Weston initiated what EPA characterized as a CERCLA Immediate Removal Action at the Site to deal with seeps of an oil/PCP mixture into Silver Bow Creek and PCP contamination of soil, groundwater, and other facilities at the Site ("Removal Action").

31. Various activities were undertaken in the course of the Removal Action including installation of a system designed to intercept and collect the oil/PCP layer floating on the groundwater, run it through an oil/water separator, and infiltrate the untreated separator effluent back into the groundwater ("oil/PCP intercept and infiltration system"). Removal

Action activities also included excavation, bagging and on-Site storage of PCP contaminated soil.

32. The oil/PCP intercept and infiltration system has discharged and continues to discharge into the groundwater at the Site effluent which is highly contaminated with hazardous substances, including PCP. The oil/PCP intercept and infiltration system and other actions exacerbated and continue to exacerbate contamination at the Site, and have spread contamination to previously uncontaminated areas.

33. The oil/PCP intercept and infiltration system is in itself a facility under CERCLA and CECRA within the larger facilities described in Paragraph 14 above.

34. EPA employed Riedel as its Emergency Response Cleanup Service ("ERCS") contractor, and Weston as its Technical Assistance Team ("TAT") contractor for the Removal Action. Riedel and Weston are both response action contractors under CERCLA, 42 U.S.C. § 9619(e), and remedial action contractors under CECRA, Mont. Code Ann. § 75-10-701(14). As response action contractors and remedial action contractors at the Site, Riedel and Weston owed duties to the potentially responsible parties at the Site, including but not limited to ARCO, to perform in a non-negligent manner.

35. Riedel and Weston are operators under CERCLA, 42 U.S.C. § 9607(a) and CECRA, Mont. Code Ann. § 75-10-715, with respect to Removal Action activities, and in particular with

respect to the oil/PCP intercept and infiltration system. Riedel and Weston were on Site and actively participating in day-to-day management of the Removal Action from its inception in July 1985. Riedel and Weston advised the government on what actions to take in the course of the Removal Action, and planned and carried out those actions. Their involvement included, among other activities, the design, installation, and day-to-day operation and supervision of the oil/PCP intercept and infiltration system. Riedel and Weston also devised and performed the excavation, bagging and storage of contaminated soil, and demolition of tanks and equipment at the Site. Riedel and Weston designed and implemented modifications to the oil/PCP intercept and infiltration system.

36. Throughout the period when Riedel and Weston operated the oil/PCP intercept and infiltration system, there have been and continue to be releases, threatened releases and disposals of hazardous substances at and from that facility.

37. Riedel and Weston acted with negligence or with gross negligence in planning and performing various activities in the course of the Removal Action, in failing to design and carry out an effective method of responding to contamination at and from the Site, and in increasing contamination at and from the Site.

38. In particular, and without limitation, Riedel and Weston acted with negligence or with gross negligence in designing, installing and operating the oil/PCP intercept and

infiltration system which has exacerbated and continues to exacerbate and spread contamination at and from the Site. They acted with negligence or gross negligence by failing to adequately consider the effects and consequences of this system; they acted with negligence or gross negligence by failing to adequately or properly investigate and evaluate conditions at the Site before undertaking activities at the Site; they acted with negligence or gross negligence by failing to adequately monitor the effects of the system; and upon becoming aware of its negative effects, they acted with negli-gence or gross negligence by failing to modify the system to rectify these consequences. Furthermore, Riedel and Weston acted with negligence or gross negligence by failing to conduct their activities at the Site in a manner which was consistent with the NCP.

39. As a result of their negligent or grossly negligent conduct, Riedel and Weston are liable persons under CERCLA, 42 U.S.C. §§ 9619(a)(2) and § 9607(a), and under CECRA, Mont. Code Ann. §§ 75-10-718 and 75-10-715.

40. A railroad right-of-way and a railroad spur located on that right-of-way (collectively "Burlington Northern Spur") crosses the Site in a north-south direction, running through the heart of the area on which Pole Plant operations and the CERCLA Removal Action were conducted.

41. Burlington Northern is the current owner of the Burlington Northern Spur. Moreover, Burlington Northern, along with and through its predecessor-in-interest Northern Pacific, owned and operated the Burlington Northern Spur throughout the period of operation of the Pole Plant and during the CERCLA Removal Action.

42. Burlington Northern and its predecessor serviced the Pole Plant throughout its operation, transporting supplies used in Pole Plant operations, including PCP and diesel oil, and shipping wood products treated at the Pole Plant. These items were transported in and out of the Pole Plant on the Burlington Northern Spur in railroad cars provided by Burlington Northern and its predecessor.

43. The Burlington Northern Spur runs through an area where wood poles were treated in open vats which contained a mixture of PCP and oil, which was released directly onto the Spur during Pole Plant operations.

44. MPTP paid Burlington Northern and its predecessor for lease of portions of its right-of-way for location of tankage which contained oil and PCP, for location of an overhead hoist used to dip poles in open vats of oil and PCP, for use of air space over the Burlington Northern Spur, which was used during Pole Plant operations to transport poles by cable between Pole Plant storage and treatment areas, and for location of portions

of the cable system. Burlington Northern continues to invoice MPTP for these uses.

45. In the course of the Removal Action at the Site, and with BN's consent and oversight, EPA removed railroad tracks and contaminated soil from the Burlington Northern Spur. Parts of the oil/PCP intercept and infiltration system were construc-ted by Riedel and Weston on the Burlington Northern Spur.

46. The Burlington Northern Spur is in itself a facility under CERCLA and CECRA, located within the larger Facilities as defined in Paragraph 14 above.

47. Throughout the period of ownership and operation of the Burlington Northern Spur, there have been and continue to be releases, threatened releases and disposals of hazardous substances at and from the Facilities, and in particular at and from the Burlington Northern Spur.

48. PCP and other substances of which there have been releases and threatened releases at or from the Facilities are hazardous substances under CERCLA, 42 U.S.C.S. § 9601(14), and hazardous or deleterious substances under CECRA, Mont. Code Ann. § 75-10-701(6).

49. PCP contamination from the Site has migrated into Silver Bow Creek and downstream of the Site.

50. Each of the defendants is a current owner and/or operator of part or all of the Facilities, a former owner and/or operator of part or all of the Facilities at the time of

disposal of hazardous substances, or an otherwise liable person as defined by CERCLA, 42 U.S.C. § 9607(a) and CECRA, Mont. Code Ann. § 75-10-715.

51. The State of Montana, in conjunction with the United States, has brought administrative action under CERCLA and CECRA against ARCO for cleanup of the Facilities. Pursuant to that administrative action, ARCO is subject to a Remedial Investigation/Feasibility Study (RI/FS) Administrative Order on Consent, Department of Health and Environmental Sciences of the State of Montana Docket No. SF-90-00001 (the "Consent Order").

52. ARCO has cooperated with federal and state governments in efforts related to investigation and remediation of contamination at the Facilities. In so doing, ARCO has incurred and will incur necessary response and remedial action costs, consistent with the NCP, for testing, investigation, remediation and other response activities with respect to releases or threatened releases of hazardous substances at or from the Facilities.

53. ARCO contends that response costs and other costs it has incurred and will incur in the future are properly and equitably allocable to the defendants in this action. ARCO contends that it is entitled to recovery of and contribution for such costs from defendants and is entitled to a declaration of its right to recover such costs in the future. The defend-ants contend that they are not required to reimburse ARCO for such

costs. Accordingly, a real and present controversy exists between the parties concerning their respective responsibilities and liabilities with respect to CERCLA and CECRA liability associated with the Facilities.

FIRST CLAIM FOR RELIEF
AGAINST ALL DEFENDANTS

(CERCLA Cost Recovery)

54. ARCO incorporates the averments of Paragraphs 1-53 as if set out verbatim.

55. ARCO is entitled to recover from defendants, pursuant to 42 U.S.C. § 9607(a), response and remedial action costs incurred or to be incurred by ARCO under CERCLA or CECRA in connection with the Facilities, based on the application of equitable considerations which include, without limitation, the following facts:

a. In contrast to the defendants, who owned, operated and managed the Facilities, had authority and control over waste handling and disposal prac-tices for the Facilities, and generated contamina-tion at and from the Facilities, ARCO was not involved in the operation of any aspect of the Facilities or the generation, treatment, storage, disposal, transportation or handling of hazardous substances at or from the Facilities;

b. ARCO or its predecessors have not owned property on which wood treatment processing plant operations were conducted at the Pole Plant since Anaconda's sales to Torger Oaas and MPTP in the mid-1950's.

c. ARCO, in contrast to other defendants, has cooperated with government efforts regarding investigation and clean up of the Facilities and has been conducting the RI/FS pursuant to the Consent Order referred to in Paragraph 51 above;

d. If ARCO bears response and remedial action costs, those who currently own property at the Site will enjoy an economic windfall at ARCO's expense;

e. Defendants MPTP and the Oaas' owned and operated the Pole Plant and generated contamination at the Site for approximately 40 years. They will gain a windfall if ARCO bears the cost of cleaning up the contamination for which they are directly responsible;

f. Defendant Bank, despite its knowledge that the Site is contaminated, has refused for seven years to acknowledge its ownership of property at the Site and to cooperate with government remedia-tion efforts. The Bank, as current owner of this property, will be unfairly benefitted if ARCO bears the cost of cleanup.

g. Defendants Riedel and Weston have acted with negligence or with gross negligence in their activities at the Site since 1985, and continued to so act despite their awareness since 1986 that the activities they were performing were increasing and spreading the contamination at and from the Site.

h. Defendant Burlington Northern and its predecessor in interest provided rail services and a lease of its right-of-way to MPTP from the beginning of Pole Plant operations, and continued that involvement until MPTP ceased operations in 1984 despite the fact that they were aware or should have been aware that their property was being directly contaminated by those operations.

56. ARCO is entitled, pursuant to CERCLA, 42 U.S.C. § 9613(g)(2) and 28 U.S.C. §§ 2201-2202, to a declaratory judgment as to defendants' liability for response and remedial action costs and other liabilities in connection with the Facilities, along with related relief as is requested herein.

WHEREFORE, ARCO prays for the following relief under the First Claim for Relief:

A. Recovery from defendants of response and remedial action costs incurred or to be incurred by ARCO under CERCLA or CECRA in connection with the Facilities;

B. Declaratory judgment establishing the liability of defendants and the allocation of response and remedial action costs and other liabilities with respect to the Facilities;

C. Interest on such costs and liabilities incurred by ARCO as allowed by law;

D. Such further relief as may be appropriate, including an award to ARCO of its costs and attorneys fees to the extent allowed by law, and of its costs incurred to implement the declaratory judgment to be entered.

SECOND CLAIM FOR RELIEF
AGAINST ALL DEFENDANTS

(CERCLA Contribution)

57. ARCO incorporates the averments of Paragraphs 1-56 as if set out verbatim.

58. Pursuant to CERCLA, 42 U.S.C. § 9613(f), ARCO is entitled to seek contribution from defendants, as persons liable or potentially liable under CERCLA, 42 U.S.C. §§ 9606 or 9607(a), for any response and remedial action costs and other liability ARCO has incurred or may incur under CERCLA or CECRA in connection with the Facilities.

59. ARCO is entitled to contribution for all such response and remedial action costs and other liability on the basis of equitable factors, including but not limited to those set forth in Paragraph 55, above.

60. ARCO is entitled, pursuant to CERCLA, 42 U.S.C. § 9613(g)(2) and 28 U.S.C. §§ 2201-2202, to a declaratory judgment as to defendants' liability for response and remedial action costs and other liabilities in connection with the Facilities, along with such further related relief as is proper.

WHEREFORE, ARCO prays for the following relief under the Second Claim for Relief:

A. Contribution from defendants for response and remedial action costs and other liability which ARCO has incurred or may incur under CERCLA or CECRA in connection with the Facilities;

B. Declaratory judgment establishing the liability of defendants and the allocation of response and remedial action costs and other liabilities with respect to the Facilities;

C. Interest on such costs and liabilities incurred by ARCO as allowed by law;

D. Such further relief as may be appropriate, including an award to ARCO of its costs and attorneys fees to the extent allowed by law, and of its costs incurred to implement the declaratory judgment to be entered.

THIRD CLAIM FOR RELIEF
AGAINST ALL DEFENDANTS

(CECRA Contribution)

61. ARCO incorporates the averments of Paragraphs 1-60 as if set out verbatim.

62. Pursuant to CECRA, Mont. Code Ann. § 75-10-724, ARCO is entitled to seek contribution from defendants, as persons liable or potentially liable under CECRA, Mont. Code Ann. § 75-10-715, for any liability and remedial action costs ARCO has incurred or may incur under CECRA in connection with the Facilities.

63. ARCO is entitled to contribution under this cause of action on the basis of equitable factors, including but not limited to those set forth in Paragraph 55 above and in CECRA, Mont. Code Ann. § 75-10-724(1).

64. If for any reason contribution from one or more of the defendants cannot be obtained, ARCO is entitled to receive from each of the other defendants a proportional share of the noncontributing defendants' unpaid portion pursuant to CECRA, Mont. Code Ann. § 75-10-724(2).

65. ARCO is entitled, pursuant to 28 U.S.C. §§ 2201-2202, Rule 57 of the Federal Rules of Civil Procedure, and Mont. Code Ann. § 27-8-201, et seq., to a declaratory judgment as to defendants' liability for remedial action costs and other

liabilities in connection with the Facilities, along with such further relief as is proper.

WHEREFORE, ARCO prays for the following relief under the Third Claim for Relief:

A. Contribution from defendants for any remedial action costs and other liabilities which ARCO has incurred or may incur in connection with the Facilities;

B. Declaratory judgment establishing the liability of defendants and the allocation of remedial action costs and other liabilities with respect to the Facilities;

C. Interest on such costs and liabilities incurred by ARCO as allowed by law;

D. Such further relief as may be appropriate, including an award to ARCO of its costs and attorneys fees to the extent allowed by law, and of its costs incurred to implement the declaratory judgment to be entered.

FOURTH CLAIM FOR RELIEF
AGAINST ALL DEFENDANTS

(CERCLA and CECRA Contribution for Natural Resource Damages)

66. ARCO incorporates the averments of Paragraphs 1-65 as if set out verbatim.

67. The State of Montana has filed a lawsuit against ARCO, captioned Montana v. Atlantic Richfield Company (United States District Court for the District of Montana, Helena Division, Case No. CV-83-317-HLN-CCL), in which Montana seeks to recover

damages for alleged injury to, destruction of, or loss of natural resources of which Montana allegedly is trustee. Montana v. Atlantic Richfield Company purports to apply to natural resources allegedly injured or destroyed by releases of hazardous substances from various facilities in Montana, including the Facilities at the Site.

68. The United States, with respect to natural resources for which it is trustee, may also seek to recover from ARCO damages for alleged injury to, destruction of, or loss of natural resources, which have allegedly been injured or destroyed by releases of hazardous substances from Facilities at or from the Pole Plant Site.

69. ARCO has obligated itself in the Consent Order to provide $100,000 for a natural resource damage assessment at the Pole Plant Site, and has incurred costs with respect to the Consent Order. ARCO has incurred and will incur additional costs and damages with respect to the claims asserted against it in Montana v. Atlantic Richfield Company.

70. To the extent it is established by final order that releases of hazardous substances from the Facilities have caused natural resource damages, all defendants are liable for such natural resource damages pursuant to CERCLA, 42 U.S.C. § 9607(a) and CECRA, Mont. Code Ann. § 75-10-715.

WHEREFORE, ARCO prays for the following relief under the Fourth Claim for Relief:

A. Declaratory judgment that all defendants are jointly and severally liable for natural resource damages caused by releases of hazardous substances from Facilities at or from the Pole Plant Site;

B. An Order that equitable apportionment of natural resource damages shall be reserved and preserved for assertion in or subsequent to adjudication of Montana v. Atlantic Richfield Company;

C. Interest on costs incurred by ARCO and natural resource damages incurred by ARCO as allowed by law;

D. Such further relief as may be appropriate, including an award to ARCO of its costs and attorneys fees to the extent allowed by law, and of its costs incurred to implement the declaratory judgment to be entered.

FIFTH CLAIM FOR RELIEF
AGAINST RIEDEL AND WESTON

(Negligence)

71. ARCO incorporates the averments of Paragraphs 1-70 as if set out verbatim.

72. The actions and omissions of defendants Riedel and Weston in connection with the Site were negligent or grossly negligent.

73. The negligent or grossly negligent actions and omissions of Riedel and Weston have caused damage to ARCO.

WHEREFORE, ARCO prays for the following relief under the Fifth Claim for Relief:

A. For Judgment against Riedel and Weston, jointly and severally, for damages in an amount to be determined at trial caused by the negligent or grossly negligent conduct of Riedel and Weston.

B. For prejudgment interest on the damages incurred by ARCO.

C. Such further relief as may be appropriate including judgment for the costs incurred by ARCO in bringing this action.

Dated this 25th day of October, 1991.

Respectfully submitted,

Donald A. Garrity
1313 Eleventh Avenue
Helena, Montana 59601
(406) 442-8711

PARCEL, MAURO, HULTIN & SPAANSTRA, P.C.

By: Paul F. Hultin

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Janet F. Kabili
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Denver, Colorado 80202
(303) 293-7550

Attorneys for Plaintiff
ATLANTIC RICHFIELD COMPANY

AO 440 (Rev. 5/85) Summons in a Civil Action

TAB 5 HWAC

United States District Court

SOUTHERN DISTRICT OF TEXAS

Rose Marie and John Orel Dunes, et al.

V.

Houston Lighting & Power Company, et al.

SUMMONS IN A CIVIL ACTION

CASE NUMBER: C-90-330

TO: (Name and address of Defendant)
Central Power & Light Company
c/o C. Wayne Stice
539 N. Carancanua
Corpus Christi, Texas 78403-2121

YOU ARE HEREBY SUMMONED and required to file with the Clerk of this Court and serve upo

PLAINTIFF'S ATTORNEY (name and address)
Eugene B. Wilshire, Jr.
Thomas E. Bilek
Wilshire, Scott & Dyer
4450 First City Tower
Houston, Texas 77002
(713) 651-1221

an answer to the complaint which is herewith served upon you, within 20 days after se this summons upon you, exclusive of the day of service. If you fail to do so, judgment by default will b against you for the relief demanded in the complaint.

Jesse E. Clark, Clerk
CLERK

DEC 2 2 1990
DATE

M. Bailey
(BY) DEPUTY CLERK

DUPLICATE

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

ROSE MARIE and JOHN OREL DUMES, INDIVIDUALLY and AS NEXT FRIEND FOR DENNIS D. DUMES, A MINOR, JOHN R. DUMES, BARRY DUMES, SHIRLEY O. and RICHARD G. AYALA, INDIVIDUALLY and AS NEXT FRIEND FOR SHERRIAN AYALA, SHARAE MARIE AYALA, MINORS, NANETTE AYALA, RICHARD AYALA, JR., HECTOR and GLORIA ALMA GALLARDO, INDIVIDUALLY and AS NEXT FRIEND FOR HECTOR GALLARDO, ALMA LYNDA GALLARDO, RICHARDO JAVIER GALLARDO, MINORS, JUAN GONZALES, DEBBIE and GERALD LARRIVEE, INDIVIDUALLY and AS NEXT FRIEND FOR JEREMIAH LARRIVEE, A MINOR, VELMA RIGGINS PATTON, ARGELIA and FERNANDO POMPA, INDIVIDUALLY and AS NEXT FRIEND FOR YULIANA POMPA, FERNANDO POMPA, JR. and JORGE ARMANDO POMPA, MINORS, FREDDIE and HAZEL L. POWELL, INDIVIDUALLY and AS NEXT FRIEND FOR DEANDRE POWELL and BRANDON POWELL, MINORS, JAMES D. and MARY LOUIS RIDDLE, RANDALL SCOTT RIDDLE, PHILBERT P. and BEATRICE J. RODRIGUEZ, INDIVIDUALLY and AS NEXT OF FRIEND FOR JON PETER RODRIGUEZ and DEMETRIUS LARUE RODRIGUEZ, MINORS, OLIVIA A. RODRIGUEZ, RAUL SANCHEZ, JR., MARIA GUADALUPE SANCHEZ, RICKY LEROY SANCHEZ, PAUL JAMES SANCHEZ, MARIA ESTHER VALDERRAMA, INDIVIDUALLY and AS NEXT OF FRIEND FOR JOANA VALDERRAMA, JIMMY ANTHONY PADILA, JR., MINORS, ROLAND DELEON, LORI JEAN DELEON, LYMAN J. and JOYCE COLLINS, LYMAN COLLINS, JR. and CHRISTOPHER COLLINS

Plaintiffs,

VS.

HOUSTON LIGHTING & POWER

United States District Court
Southern District of Texas
FILED

DEC 21 1990

Jesse E. Clark, Clerk

CIVIL ACTION NO. C-90-331

PLAINTIFFS DEMAND TRIAL BY JURY

COMPANY, CENTRAL POWER & LIGHT COMPANY, GULF METALS INDUSTRIES, INC., COMMERCIAL METALS COMPANY, E.I. DU PONT DE NEMOURS AND COMPANY, INDUSTRIAL SALVAGE COMPANY, TEXAS MEXICAN RAILWAY CO., MARTIN J. HAVEL CO., HOUSTON JUNK COMPANY, INC., ALTER, INC., HOECHST CELANESE CHEMICAL GROUP, INC., RODGERS SALVAGE COMPANY, AT&T TECHNOLOGIES, INC., formerly WESTERN ELECTRIC COMPANY, INC., COMAL IRON & METAL, LESLIE SIMON, JR., HELEEN SIMON MANGZ, SIMON PROPERTIES, INC., BEXER METALS, MADEWELL & MADEWELL, CITY OF SAN ANTONIO, FORT WORTH OIL & GAS, INC., M. LIPSITZ & CO., INC., BROWNWOOD IRON & METAL, NATIONAL STEEL COMPRESSING CO., INC., TYLER IRON & METALS, INC., NEWELL RECYCLING CO., INC., MONTERREY IRON & METAL, ATLAS IRON & METAL, INC., THE UNITED STATES OF AMERICA and ENSR CORPORATION §

Defendants. §

PLAINTIFFS' COMPLAINT AND REQUEST FOR DECLARATORY JUDGMENT

TO THE HONORABLE UNITED STATES DISTRICT JUDGE:

COME NOW, ROSE MARIE and JOHN OREL DUMES, INDIVIDUALLY and AS NEXT FRIEND FOR DENNIS D. DUMES, A MINOR, JOHN R. DUMES, BARRY DUMES, SHIRLEY O. and RICHARD G. AYALA, INDIVIDUALLY and AS NEXT FRIEND FOR SHERRIAN AYALA, SHARAE MARIE AYALA, MINORS, NANETTE AYALA, RICHARD AYALA, JR., HECTOR and GLORIA ALMA GALLARDO, INDIVIDUALLY and AS NEXT FRIEND FOR HECTOR GALLARDO, ALMA LYNDA GALLARDO, RICHARDO JAVIER GALLARDO, MINORS, JUAN GONZALES, DEBBIE and GERALD LARRIVEE, INDIVIDUALLY and AS NEXT FRIEND FOR JEREMIAH LARRIVEE, A MINOR, VELMA RIGGINS PATTON, ARGELIA and FERNANDO

POMPA, INDIVIDUALLY and AS NEXT FRIEND FOR YULIANA POMPA, FERNANDO POMPA, JR. and JORGE ARMANDO POMPA, MINORS, FREDDIE and HAZEL L. POWELL, INDIVIDUALLY and AS NEXT FRIEND FOR DEANDRE POWELL and BRANDON POWELL, MINORS, JAMES D. and MARY LOUIS RIDDLE, RANDALL SCOTT RIDDLE, PHILBERT P. AND BEATRICE J. RODRIGUEZ, INDIVIDUALLY and AS NEXT OF FRIEND FOR JON PETER RODRIGUEZ and DEMETRIUS LARUE RODRIGUEZ, MINORS, OLIVIA A. RODRIGUEZ, RAUL SANCHEZ, JR., MARIA GUADALUPE SANCHEZ, RICKY LEROY SANCHEZ, PAUL JAMES SANCHEZ MARIA ESTHER VALDERRAMA, INDIVIDUALLY and AS NEXT OF FRIEND FOR JOANA VALDERRAMA, JIMMY ANTHONY PADIA, JR., MINORS, ROLAND DELEON, LORI JEAN DELEON, LYMAN J. and JOYCE COLLINS, LYMAN COLLINS, JR. and CHRISTOPHER COLLINS Plaintiffs, complaining of HOUSTON LIGHTING & POWER COMPANY, CENTRAL POWER & LIGHT COMPANY, GULF METALS INDUSTRIES, INC., (hereinafter collectively referred to as the "PCB Defendants") COMMERCIAL METALS COMPANY, E.I. DU PONT DE NEMOURS AND COMPANY, INDUSTRIAL SALVAGE COMPANY, TEXAS MEXICAN RAILWAY CO., MARTIN J. HAVEL CO., HOUSTON JUNK COMPANY, INC., ALTER, INC., HOECHST CELANESE CHEMICAL GROUP, INC., RODGERS SALVAGE COMPANY, AT&T TECHNOLOGIES, INC., formerly WESTERN ELECTRIC COMPANY, INC., COMAL IRON & METAL, LESLIE SIMON, JR., HELEN SIMON MANGE, SIMON PROPERTIES, INC., BEXER METALS & MADEWELL & MADEWELL, CITY OF SAN ANTONIO, FORT WORTH OIL & GAS, INC., M. LIPSITZ & CO., INC., BROWNWOOD IRON & METAL, NATIONAL STEEL COMPRESSING CO., INC., TYLER IRON & METALS, INC., NEWELL RECYCLING CO., INC., MONTERREY IRON & METAL, ATLAS IRON & METAL, INC., UNITED STATES OF AMERICA, (hereinafter collectively referred to as the "Lead Defendants") and

ENSR CORPORATION, Defendants, and for cause of action would show as follows:

THE PARTIES

1. ROSE MARIE and JOHN OREL DUMES are Individuals residing at 250 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

2. JOHN R. DUMES is an Individual residing at 250 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

3. BARRY DUMES is an Individual residing at 250 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

4. SHIRLEY O. and RICHARD C. AYALA, are Individuals residing at 247 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

5. NANETTE AYALA is an Individual residing at 247 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

6. RICHARD AYALA, JR. is an Individual residing at 247 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

7. HECTOR and GLORIA ALMA GALLARDO are Individuals residing at 246 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

8. JUAN GONZALES is an Individual residing at 254 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

9. DEBBIE and GERALD LARRIVEE are Individuals residing at 242 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

10. VELMA RIGGINS PATTON is an Individual residing at 266 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

11. ARGELIA and FERNANDO POMPA are Individuals residing at 213 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

12. FREDDIE and HAZEL L. POWELL are Individuals residing at 213 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

13. JAMES D. and MARY LOUIS RIDDLE are Individuals residing at 274 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

14. RANDALL SCOTT RIDDLE is an Individual residing at 274 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

15. PHILBERT P. and BEATRICE J. RODRIGUEZ are Individuals residing at 255 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

16. OLIVIA A. RODRIGUEZ is an Individual residing at 255 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

17. RAUL SANCHEZ, JR. is an Individual residing at 254 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

18. MARIA GUADALUPE SANCHEZ is an Individual residing at 254 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

19. RICKY LEROY SANCHEZ is an Individual residing at 254 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

20. PAUL JAMES SANCHEZ is an Individual residing at 254 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

21. MARIA ESTHER VALDERRAMA is an Individual residing at 278 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

22. ROLAND DELEON is an Individual residing at 278 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

23. LORI JEAN DELEON is an Individual residing at 278 Eastgate Drive, Corpus Christi, Nueces County, Texas, 78408.

24. LYMAN J. AND JOYCE COLLINS are Individuals residing at 3301 Southland, Corpus Christi, Nueces County, Texas.

25. Defendant, HOUSTON LIGHTING & POWER COMPANY, is a Texas Corporation that may be served with process on its registered agent, Kenneth W. Nabors, at 611 Walker Avenue, Houston, Texas.

26. Defendant, CENTRAL POWER & LIGHT COMPANY, is a Texas Corporation that may be served with process on its registered agent, C. Wayne Stice, at 539 N. Carancahua, Corpus Christi, Texas 78403-2121.

27. Defendant, GULF METALS INDUSTRIES, INC., is a Texas Corporation that may be served with process on its registered agent, C.T. Corporation System, at 811 Dallas Avenue, Houston, Texas 77002.

28. Defendant, COMMERCIAL METALS COMPANY, is a Texas Corporation that may be served with process on its registered agent, David Misudbury, at 7800 Stemmons Fwy, 10th Floor, Dallas, Texas, 75247.

29. Defendant, E.I. DU PONT DE NEMOURS AND COMPANY, is a Texas Corporation that may be served with process on its registered agent, C.T. Corporation System, at 350 N. St. Paul Street, Dallas, Texas, 75201.

30. Defendant, INDUSTRIAL SALVAGE COMPANY is a Texas Corporation that may be served with process on its registered agent, Abraham Arnold Kolpack, 5102 Hwy. 44, Corpus Christi, Texas.

31. Defendant, TEXAS MEXICAN RAILWAY CO., is a corporation that does not maintain a registered agent for service in the State

of Texas.

32. Defendant, MARTIN J. HAVEL CO., is a corporation that does not maintain a registered agent for service in the State of Texas.

33. Defendant, HOUSTON JUNK COMPANY, INC., is a Texas Corporation that may be served with process on its registered agent, Jules H. Rose, at 2902 Canter Street, Houston, Harris County, Texas.

34. Defendant, ALTER, INC., is a Texas Corporation that may be served with process on its registered agent, Terry D. Cashion, at 1305 S. Loth Street, McAllen, Texas.

35. Defendant, HOECHST CELANESE CHEMICAL GROUP, INC., is a Texas Corporation that may be served with process on its registered agent, C.T. Corporation System, at 350 North St. Paul St., Dallas, Texas 75201.

36. Defendant, RODGERS SALVAGE COMPANY, is a Texas Corporation that may be served with process on its registered agent, Lane Rodgers, at P. O. Box 1513, Victoria, Texas 77902.

37. Defendant, AT&T TECHNOLOGIES, INC., formerly WESTERN ELECTRIC COMPANY, INC., is a Texas Corporation that may be served with process on its registered agent, C.T. Corp. System, 1601 Elm Street, Dallas, Texas 75201.

38. Defendant, COMAL IRON & METAL, is a Texas Corporation that may be served with process on its registered agent, Johnnie J. Rodriguez, at Rt. 8, Box 70A, FM 306, New Braunfels, Texas 78130.

39. Defendant, LESLIE SIMON, JR., is an Individual believed to be residing in the State of Texas. Defendant's address is unknown at the time of filing of the complaint.

40. Defendant, HELEEN SIMON MANGE, is an Individual residing in believed to be residing in the State of Texas. Defendant's address is unknown at the time of filing of the complaint.

41. Defendant, SIMON PROPERTIES, INC., is a Texas Corporation that may be served with process on its registered agent, Tom Ballou, Jr., at 1100 N.W. Loop 410, Suite 605, San Antonio, Texas 78213.

42. Defendant, BEKER METALS, is an corporation that does not maintain a registered agent for service in the State of Texas.

43. Defendant, MADEWELL & MADEWELL, is believes to be an association that does not maintain a registered agent for service in the State of Texas.

44. Defendant, CITY OF SAN ANTONIO, is a city in the State of Texas. No service is requested at this time.

45. Defendant, FORT WORTH OIL & GAS, INC., is a Texas Corporation that may be served with process on its registered agent, Jesse A. Faught, Jr., at 3101 N. Pecos, Midland, Texas 79705.

46. Defendant, M. LEPSTIZ & CO., INC., is a a Texas Corporation that may be served with process on its registered agent, Tommy G. Salome, at 100 Elm Street, Waco, Texas, 76704.

47. Defendant, BROWNWOOD IRON & METAL, is a corporation that does not maintain a registered agent for service in the State of

Texas.

48. Defendant, NATIONAL STEEL COMPRESSING CO., INC., is a Texas Corporation that may be served with process on its registered agent, Robert J. Campion, at 726 El Paso Street, San Antonio, Texas.

49. Defendant, TYLER IRON & METALS, INC., is a Texas Corporation that may be served with process on its registered agent, Tommy G. Salome, at 100 Elm Street, Waco, Texas, 76704.

50. Defendant, NEWELL RECYCLING CO., INC., is a Texas Corporation that may be served with process on its registered agent, Wayne R. Mathis, at 700 N. St. Mary's, Suite 1700, San Antonio, Texas, 78205.

51. Defendant, MONTERREY IRON & METAL, is a corporation that does not maintain a registered agent for service in the State of Texas.

52. Defendant, ATLAS IRON & METAL, INC., is a Texas Corporation that may be served with process on its registered agent, E. Robert Adler, at 3702 Agnes, Corpus Christi, Texas, 78405.

53. Defendant, the UNITED STATES OF AMERICA. No service is requested at this time.

54. Defendant, ENSR CORPORATION, is a Texas Corporation that may be served with process on its registered agent, C.T. Corp System, at 811 Dallas Ave., Houston, Texas, 77002.

JURISDICTION AND VENUE

This Court has jurisdiction for claims arising under 42 U.S.C. § 9601, et seq., pursuant to 42 U.S.C. § 9613 and 28 U.S.C. § 1331. This Court also has pendent jurisdiction of all state law claims. Venue is proper in this Court pursuant to 28 U.S.C. § 1391, since all claims arose in Nueces County, Texas.

THE FACTS

Plaintiffs are owners of land that adjoin the superfund site commonly known as the Industrial Metals and Industrial Road Sites (the Site) located at 3000 Agnes Street, Corpus Christi. The Site was used for disposal of many hazardous substances pursuant to 42 U.S.C. §9601, et seq., including lead and polyclorinated biphenals ("PCB's"). All Defendants, except ENSR, have disposed of hazardous substances at the Site which has caused contamination of Plaintiffs' property. This disposal was conducted despite the fact that Plaintiffs' homes surrounded the disposal site.

The land disposal of lead by the Lead Defendants at the Site must be considered an ultrahazardous activity. Lead is a known poison and is extremely dangerous to human health.

The disposal of PCB's in a landfill at the Site is an ultrahazardous activity. PCBs are a known poison and are extremely dangerous to human health.

Both lead and PCB's are hazardous substances as defined by 42 U.S.C. § 9601 and Tex. Health § Safety Code Ann. § 361 (Vernon 1990). The property owned by Plaintiffs also constitute a facility as defined by 42 U.S.C. § 9601 and Tex. Health § Safety Code Ann. § 361 (Vernon 1990).

Lead disposed by the Lead Defendants has migrated from the Site to Plaintiffs' property. The lead has migrated continuously since the disposal by the Lead Defendants. The migration of the lead constitutes an unlawful trespass of an ultrahazardous substance by the Lead Defendants onto Plaintiffs' property.

In 1990, the PCB Defendants allegedly began to "remediate" the Site pursuant to a closure plan created by ENSR. The Lead Defendants and ENSR had a duty to not complete the closure of the Site in a manner to cause the transportation of hazardous substances onto Plaintiffs' property. The closure plan was created and undertaken in a complete breach of this duty since it caused additional lead to migrate unto Plaintiffs's property. This migration has occurred primarily by the manner in which contaminated soil was removed from the Site. The closure plan has caused contaminated water run off and lead dust to accumulate on Defendants property. These actions by ENSR and the PCB Defendants constitute negligence, nuisance and a trespass.

The lead contamination has proximately caused extreme damage to Plaintiffs property. In addition the lead has proximately caused injury to the Plaintiffs including, but not limited to, various chronic ailments and extreme mental anguish caused by the known health hazards of the contamination of their homes.

Despite attempts to remove the lead contamination from the property, Plaintiffs' property has become contaminated to such a degree that it is dangerous for Plaintiffs to continue to live in their homes. Furthermore, the contamination makes it impossible

for Plaintiffs to sell their houses to any purchaser. Plaintiffs have insufficient funds to move from the property, unless the Court finds that Defendants are liable for all expenses in moving Plaintiffs away from the unsafe contamination. The Plaintiffs are also confronted with the tremendous costs of future medical monitoring for adverse health effects due to the lead contamination. Any cost of remediation of the contamination, health monitoring and relocation of their homes constitute response costs consistant with the National Contingency Plan under 42 U.S.C. § 9601.

Plaintiffs are completely without the finances to bear these tremendous costs associated with Defendants contamination of their property. Plaintiffs have and will continue to suffer irreparable injury without any order from this Court requiring Defendants to take responsibility for their contamination.

Although the Texas Water Commission has taken an active role in attempting to remediate the Site, it and no other governmental agency has been engaging in any representation whatsoever, much less any adequate representation, of Plaintiffs in connection with any remediation of the substantial contamination existing on their Property.

CLAIM FOR CLEAN UP COSTS AND REQUEST FOR A DECLARATORY JUDGMENT

The Lead Defendants have arranged for disposal of hazardous substances pursuant to 42 U.S.C. § 9607 unto Plaintiffs' property.

The PCB Defendants and ENSR have arranged for the transportation of lead pursuant to 42 U.S.C. § 9607 onto Plaintiffs' property.

Plaintiffs to the extent that they have removed contaminated soil from their property have incurred necessary response costs that are consistent with the National Contingency Plan.

Pursuant to 42 U.S.C. § 9607 all Defendants are jointly and severally liable for all remediation costs for the removal of all hazardous substances from Plaintiffs' property.

Furthermore, Plaintiffs request that the Court find that Defendants are responsible for all future response costs incurred by Plaintiffs in either remedying the contamination, relocating Plaintiffs away from the contamination, or resulting from future medical surveillance pursuant to 42 U.S.C. § 9607. Such a finding would be in the public interest in avoiding piece meal litigation and forcing the clean up of a substantial health hazard. Furthermore such a finding is necessary in order to prevent Plaintiffs from being irreparably injured since they cannot neither afford to relocate, remediate the site, nor engage in long term medical monitoring.

NEGLIGENCE

The PCB Defendants and ENSR have acted negligently in closing the site by causing the transportation or hazardous substances unto Plaintiffs' property. Furthermore the PCB Defendants were negligent in completely failing to warn Plaintiffs of the disposal of lead on their property. Finally the PCB Defendants acted

negligently as a matter of law since they disposed of lead, a hazardous waste, without a permit in violation of the Resource Conservation and Recovery Act and the Texas Solid Waste Disposal Act.

Plaintiffs have suffered damages as a proximate result of the PCB Defendants and ENSR's negligence in the amount of at least $1,000,000.00.

TRESPASS

The PCB Defendants have trespassed onto Defendants property by causing the transportation of lead onto Plaintiffs' property. The trespass was as a result of Defendants negligence in the performance of the closure plan and as a result of their ultrahazardous activities associated with the disposal and remediation of hazardous wastes.

The Lead Defendants have also trespassed onto Plaintiffs property by permitting the disposal of lead upon Plaintiffs property. This trespass occurred as a result of their ultrahazardous activity of land disposing of hazardous wastes.

Plaintiffs have suffered damages in the amount of at least $1,000,000.00 to their property as a result of Defendants trespass.

NUISANCE

The PCB and ENSR Defendants have caused a nuisance which has substantially and unreasonably interfered with Plaintiffs use and enjoyment of their property. The PCB and ENSR Defendants have caused damage to Plaintiffs property and inflicted emotional distress in the amount of at least $1,000,000.00 for which

Plaintiffs seek recovery.

STRICT LIABILITY

Land disposal of wastes is an ultrahazardous activity. The PCB and Lead Defendants knew that a high degree of risk existed in their disposal of the extremely hazardous substances at a site bordered by homes. They also knew that a substantial likelihood existed that harm may occur as a result of their disposal at the Site and this danger could not be eliminated through the use of ordinary care. Disposal of hazardous substances at the Site certainly was inappropriate. The value of permitting land disposal in this manner is far outweighed by the dangers that it imposes upon society and Plaintiffs in particular.

Since the PCB and Lead Defendants engaged in an ultrahazardous activity they are strictly liable to Plaintiffs for all injuries they have caused to Plaintiffs and their property.

MARKET SHARE, ALTERNATIVE AND ENTERPRISE LIABILITY

The Lead Defendants have realized substantial gains as the result of their improper disposal of their ultrahazardous wastes. Furthermore, upon knowledge and belief substantially all persons that have engaged in the wrongful disposal of lead at the Site have been joined as Defendants. Defendants had actual knowledge of the dangers of disposal of lead. Despite the availability of safer alternatives for disposal, the Lead Defendants chose to improperly dispose of the hazardous wastes. The Lead Defendants, therefore, are liable for the presence of lead upon Plaintiffs property in proportion to the amount of lead that they disposed at the Site.

WHEREFORE Plaintiffs respectfully request

(a) a judgment against all Defendants jointly and severally in an amount of at least $1,000,000.00 and

(b) a declaratory judgment that Defendants are jointly and severally liable for all response costs incurred as result of the hazardous substances located on Plaintiffs' property.

DATED: December 20, 1990

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TAB 6 HWAC

ENVIRONMENTAL LAW

Real Estate Development Company Sufficiently Alleges Claim for Costs in Cleaning Up Contaminated Construction Site

Cite as 92 Daily Journal D.A.R. 13871

KAISER ALUMINUM & CHEMICAL CORPORATION, a Delaware Corporation; JAMES L. FERRY & SON INC., a California corporation, Third-Party Defendants-Appellees,
v.
CATELLUS DEVELOPMENT CORPORATION, Defendant-Third-Party Plaintiff-Appellant.

No. 92-15506
D.C. No. CV-89-02935-DLJ
United States Court of Appeals
Ninth Circuit
Filed October 8, 1992

Appeal from the United States District Court for the Northern District of California
D. Lowell Jensen, District Judge, Presiding

Argued and Submitted August 12, 1992
San Francisco, California

Before: KOZINSKI and THOMPSON, Circuit Judges, and
REA, District Judge.*
Opinion by Judge Thompson

THOMPSON, Circuit Judge:

Catellus Development Corporation ("Catellus") appeals the dismissal of its third-party complaint against James L. Ferry & Son ("Ferry"). In that complaint, Catellus sought contribution under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 9601 et seq., for costs incurred in cleaning up a contaminated construction site. We have jurisdiction under 28 U.S.C. § 1291, and we reverse.

FACTS

Catellus's predecessor, Santa Fe Land Improvement Company, sold 346 acres of land to the City of Richmond, California ("Richmond"). Richmond hired Ferry to excavate and grade a portion of the land for a proposed housing development. While excavating the development site, Ferry spread some of the displaced soil over other parts of the property. This soil contained hazardous chemical compounds, including paint thinner, lead, asbestos, and petroleum hydrocarbons.[1]

Richmond sued Catellus to recover part of the cost of removing the contaminated soil from the property.[2] Catellus filed a third-party complaint against Ferry for contribution under 42 U.S.C. § 9613(f)(1), alleging that Ferry exacerbated the extent of the contamination by extracting the contaminated soil from the

excavation site and spreading it over uncontaminated areas of the property.[3] The district court concluded that Ferry was not a person who could be held liable under CERCLA section 9607(a) and thus dismissed Catellus's complaint for failure to state a claim on which relief could be granted. See Fed. R. Civ. P. 12(b)(6). This appeal followed.

STANDARD OF REVIEW

We review de novo a dismissal under Rule 12(b)(6) for failure to state a claim under. Robertson v. Dean Witter Reynolds, Inc., 749 F.2d 530, 533 (9th Cir. 1984). We take all allegations of material facts pleaded in the complaint as true and construe them in the light most favorable to the plaintiff. Levine v. Diamanthuset, Inc., 950 F.2d 1478, 1482 (9th Cir. 1991). We will affirm a dismissal under Rule 12(b)(6) only if "it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." Conley v. Gibson, 355 U.S. 41, 45-46 (1957).

DISCUSSION

CERCLA was enacted with two primary purposes in mind. First, Congress intended to provide the federal government with the means to effectively control the spread of hazardous materials from inactive and abandoned waste disposal sites. Amspec Co., Inc. v. Johnson Controls, Inc., 922 F.2d 1240, 1247 (6th Cir. 1991). Second, it intended to affix the ultimate cost of cleaning up these disposal sites to the parties responsible for the contamination. Id. We construe CERCLA liberally to achieve these goals. 3550 Stevens Creek Assoc. v. Barclays Bank of Cal., 915 F.2d 1355, 1363 (9th Cir. 1990), cert. denied, 111 S. Ct. 2014 (1991).

To prevail in an action for contribution under CERCLA, a plaintiff must show, among other things, that the defendant falls within one of four classes of persons subject to liability under 42 U.S.C. § 9607(a). See 42 U.S.C. § 9613(f)(1) ("[a]ny person may seek contribution from any other person who is liable or potentially liable under section 9607(a)"); Stevens Creek, 915 F.2d at 1358 (discussing the requirements for recovery in a contribution action under CERCLA). This section imposes liability on:

(1) the owner and operator of a vessel or facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment . . . of hazardous substances owned or possessed by such person, by any other party or entity, at any facility . . . owned or operated by another . . . entity and containing such hazardous substances, and

(4) any person who . . . accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance . . . .

42 U.S.C. § 9607(a).

We agree with the district court that Catellus has failed to state a claim for contribution against Ferry under sections 9607(a)(1) and (3). Catellus has not alleged that Ferry currently owns or operates the development site. See United States v. Fleet Factors Corp., 901 F.2d 1550, 1554 (11th Cir. 1990) (liability under section 9607(a)(1) only attaches to the present owner or operator of a facility), cert. denied, 111 S. Ct. 752 (1991). Nor has it alleged that Ferry arranged for the contaminated soil to be disposed of "by any other party or entity" under 9607(a)(3). Ferry disposed of the soil itself by spreading it over the uncontaminated areas of the property. We conclude, however, that Catellus's allegations are sufficient to state a claim against Ferry under sections 9607(a)(2) and (4).

A. Liability Under Section 9607(a)(2)

A defendant may be liable under 9607(a)(2) for the cost of cleaning up a contaminated facility if, "at the time of disposal of any hazardous substance [he] owned or operated [the] facility at which [the] hazardous substances were disposed of." 42 U.S.C. § 9607(a)(2).[5]

Ferry was not an owner of the facility. The question is whether the allegations of Catellus's complaint are sufficient to show that Ferry was an operator of the facility and that it disposed of a hazardous substance.

1. Operator

CERCLA defines an owner or operator as "any person owning or operating such facility . . . ." 42 U.S.C. § 9601(20)(A). The circularity of this definition renders it useless. United States v. A & N Cleaners and Launderers, Inc., 788 F. Supp. 1317, 1331 (S.D.N.Y. 1992). But see Edward Hines Lumber Co. v. Vulcan Materials Co., 861 F.2d 155, 156 (7th Cir. 1988) ("The circularity strongly implies, however, that the statutory terms have their ordinary meanings rather than unusual or technical meanings.").

Relying on the Seventh Circuit's decision in Hines, Ferry argues that it cannot be considered an "operator" under section 9607(a)(2). In Hines, a contractor designed and built a wood treatment plant. After the plant was completed, the owner began processing wood for resale. During this process, hazardous materials were released on the site where the plant was located. The owner was forced to clean up the site, and then sued the contractor for contribution as an "operator" of the plant under section 9607(a)(2).

Although the Seventh Circuit affirmed a grant of summary judgment in favor of the contractor, Hines does not stand for the proposition that a contractor can never be liable as an operator under section 9607(a)(2). On the contrary, it is clear from the court's analysis in Hines that the contractor was not liable as an "operator" because, although he designed and built the wood treatment plant, he had no authority to control the day-to-day operation of the plant after it was built; and it was during the operation of the plant that the hazardous materials were released.

We read Hines as reiterating the well-settled rule that "operator" liability under section 9607(a)(2) only attaches if the defendant had authority to control the cause of the contamination at the time the hazardous substances were released into the environment. See Nurad, Inc. v. Hooper & Sons Co., 966 F.2d 837, 842 (4th Cir. 1992) (the authority to control the source of the contamination "is the definition of 'operator' that most courts have adopted"); CPC Int'l, Inc. v. Aerojet-General Corp., 731 F. Supp. 783, 788 (W.D. Mich. 1989) ("The most commonly adopted yardstick for determining whether a party is an owner-operator under CERCLA is the degree of control that party is able to exert over the activity causing the pollution.").

Unlike Hines, the activity which produced the contamination in the present case—the excavation and grading of the development site—occurred during, not after, the construction process. We conclude that Catellus's allegations of Ferry's operations on the property tend to show that Ferry had sufficient control over this phase of the development to be an "operator" under section 9607(a)(2).[6]

2. Disposal of Hazardous Materials

Catellus alleges that Ferry excavated the stained soil, moved it away from the excavation site, and spread it over uncontaminated portions of the property. These allegations are sufficient to support its claim that Ferry disposed of a hazardous substance as the term "disposed of" is used in 42 U.S.C. § 9607(a)(2).

CERCLA defines "disposal" as:

> the discharge, deposit, injection, dumping, spilling, leaking, or placing of any . . . hazardous waste into or on any land . . . so that such . . . waste . . . may enter the environment . . . or be discharged into any ground waters.

See 42 U.S.C. § 9601(29) (adopting the definition set forth in section 1004 of the Solid Waste Disposal Act, 42 U.S.C. 6903(3)). This definition has been interpreted to include the dispersal of contaminated soil during the excavation and grading of a development site. Tanglewood East Homeowners v. Charles-Thomas,

Inc., 849 F.2d 1568 (5th Cir. 1988).

In Tanglewood, developers built a housing subdivision on the site of a former wood treatment plant. During construction, they filled several creosote pools with soil and then graded the subdivision—spreading the creosote-tainted soil over the entire site. The Fifth Circuit held that by dispersing the contaminated soil throughout the subdivision the developers had disposed of it for purposes of section 9607(a). Id. at 1573.

In reaching this conclusion, the Fifth Circuit reasoned that the term "disposal" should not be limited solely to the initial introduction of hazardous substances onto property. Rather, consistent with the overall remedial purpose of CERCLA, "disposal" should be read broadly to include the subsequent "move[ment], disperse[al], or release[] [of such substances] during landfill excavations and fillings." Id. at 1573.[1]

We agree with the Fifth Circuit's analysis. CERCLA's definition of "disposal" expressly encompasses the "placing of any . . . hazardous waste . . . on any land." 42 U.S.C. § 6903(3). Congress did not limit the term to the initial introduction of hazardous material onto property. Indeed, such a crabbed interpretation would subvert Congress's goal that parties who are responsible for contaminating property be held accountable for the cost of cleaning it up.

C. Liability Under Section 9607(a)(4)

Castlas also seeks contribution from Ferry as a transporter of hazardous substances under section 9607(a)(4). This section imposes liability on any person who:

> accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance . . . .

42 U.S.C. § 9607(a)(4).

CERCLA defines "transportation" as "the movement of a hazardous substance by any mode . . . ." 42 U.S.C. 9601(26). Because Ferry necessarily moved the contaminated soil when it excavated and graded the property, this aspect of its conduct falls within section 9601(26)'s definition of "transportation."

The more difficult question is whether Ferry transported the soil "to . . . sites selected by such person." 42 U.S.C. § 9607(a)(4) (emphasis added). Ferry contends the "on-site" dispersal of hazardous substances does not fall within the scope of section 9607(a)(4). We disagree.

CERCLA does not define the phrase "to . . . sites selected by such person," nor have any cases discussed the meaning of this phrase. Although the Fifth Circuit in Tanglewood apparently assumed that the dispersal of contaminated soil over a development site satisfied the requirements of section 9607(a)(4), it failed to give any rationale for this position. Tanglewood, 849 F.2d at 1573.

We begin our analysis with the proposition that CERCLA "is to be given a broad interpretation to accomplish its remedial goals." Stevens Creek, 915 F.2d at 1363. Under section 9607(a)(4), liability attaches to transporters of hazardous substances because, like all potentially responsible parties under section 9607(a), their actions contribute to the release of contaminated material and increase the cost of remedial action. See H.R. Rep. No. 1016, 96th Cong., 2d Sess. 33 (1980), reprinted in 1980 U.S.C.C.N. 6119, 6136 (Congress intended to impose liability on those parties who "caused or contributed to a release or threatened release of hazardous waste").

Whether a transporter moves hazardous material from one parcel of land to another, or whether he simply takes the material from a contaminated area on one parcel and disposes of it on an uncontaminated area of the same parcel, he has spread contamination. There is no logical basis for a defendant's liability as a "transporter" under section 9607(a)(4) to hinge solely on whether he moves hazardous substances across a recognized property boundary.

We conclude that liability may be imposed under section 9607(a)(4) for transporting hazardous material to an uncontaminated area of property, regardless of whether the material was conveyed to a separate parcel of land. Castlas's allegations that Ferry excavated the contaminated soil from one area of the property and moved it to another are sufficient to allege potential liability predicated upon 42 U.S.C. § 9607(a)(4).

CONCLUSION

Castlas alleged facts sufficient to state a claim against Ferry under 42 U.S.C. § 9607(a)(2), on the ground that Ferry was the operator of a facility at which it disposed of hazardous substances. The complaint also states a claim against Ferry under 42 U.S.C. § 9607(a)(4), on the ground that Ferry accepted hazardous substances for transport to sites selected by it.

We reverse the dismissal of Castlas's third-party complaint and remand this cause to the district court for further proceedings.

REVERSED and REMANDED.

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* Hon. William J. Rea, United States District Judge for the Central District of California, sitting by designation.

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1. These chemicals were apparently deposited on the property during the 1940s when the site was used as a shipbuilding plant by the Richmond Shipbuilding Corporation, the predecessor of Kaiser Aluminum and Chemical Corporation.

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2. Richmond also sought contribution from the federal government because the Richmond Shipbuilding Corporation used the

site to construct ships for the United States Navy. That claim is not at issue in this appeal.

1. Casilan also sued Kaiser Aluminum for contribution. That claim is not at issue in this appeal.

4. In addition to showing that the defendant falls within one of the four categories set forth in section 9607(a), the plaintiff must also establish that: (1) the contaminated site is a "facility" under CERCLA, (2) a "release" or "threatened release" of a "hazardous substance" occurred at the facility, and (3) the release or threatened release caused the plaintiff to incur response costs. Stevens Creek, 915 F.2d at 1358. These additional requirements are not at issue in this appeal and we do not consider them.

5. The "facility" in this case is the proposed development site. See 42 U.S.C. § 9601(9) (defining "facility" to mean "any site or area where a hazardous substance has been deposited . . . .").

6. In its pleadings, Casilan alleged that:

> At all relevant times, third party-defendant Ferry was and is a California Corporation doing business in this district. On information and belief, in or about 1982 Ferry performed excavation, dredging, filling, grading and other construction and demolition (collectively, "construction") operations on the Property. In the course of these operations, Ferry mixed substances—which, if plaintiff's allegations are true, were contaminants—with soil and other fill materials, and then deposited the resulting mixture throughout portions of the Property. Consequently, if plaintiffs' allegations are true, then, on information and belief, Ferry negligently and carelessly (1) released contaminants on the Property and (2) arranged for transportation, treatment and disposal of said contaminants.

7. At least one other circuit has taken the rationale in Tanglewood one step further—holding that a landowner disposes of hazardous material under section 9607(a) when he passively allows the material to migrate into the environment. See Nurad, 966 F.2d at 846. This is contrary to a published decision of a district court in this circuit. San Kenyon Corp. v. Shaw, 718 F. Supp. 1454, 1456-57 (N.D. Cal. 1989). Because the present case involves the active disposal of hazardous material, we do not consider the passive migration question.

COUNSEL

Howard M. Hoffman, Sacramento, California, for third-party-defendants-appellees.

Sanford Svetcov, Landels, Ripley & Diamond, San Francisco, California, for defendant-third-party-plaintiff-appellant.

TAB 7 HWAC

The Risks of Ambiguous Standards of Negligence for DOD Environmental Restoration Firms

Environmental restoration firms face unparalleled risks in their participation in the cleanup of DOD facilities. The vast majority of the hazardous wastes at DOD facilities are underground; contamination levels are unknown; and current technology offers only a limited understanding of the behavior, spread, containment, and treatment of these wastes. Compounding these technical risks are uncertain standards of liability currently applicable to restoration firms and the absence of the insurance protection typically available to professionals in other fields. These additional risks are briefly discussed here.

- *What Negligence Is.* Negligence may be defined generally as the failure to use the care a reasonably prudent and careful person would use under similar circumstances. It is characterized by inadvertence and inattention, as opposed to the willfulness associated with reckless or wanton behavior.[1] Professionals are held to a similar, but more specific, standard of care that finds negligence where they fail to exercise the skill and knowledge normally possessed by like professionals in similar communities.[2]

- *Uncertain Standards for Response Action Contractors.* The negligence standard for professionals presupposes the existence of normally possessed knowledge and skill within a profession. Unfortunately, the infancy and mutability of environmental response knowledge and practices impedes identification of generally accepted practices and results in a "standard" of negligence too fluid to constitute a standard at all. Moreover, as years go by, it will also grow more difficult to demonstrate the state of technology at the time of the site cleanup. Judges and juries are likely to measure a firm's performance, not against a state of the art in existence at the time of the cleanup, but one existing at some subsequent date.

- *The Possibility of Negligence.* Even cautious people can, at times, act with inadvertence. A bulldozer might accidentally break an underground telephone line; a truck driver might misjudge the distance between the truck and a platform; an engineer might inadvertently miscalculate the stability of the soil below a building's foundation. Each of these people may be considered negligent, and their negligence would be imputed to their employer. Responsible persons and firms must recognize that having such negligence imputed to them is possible. In fact, to ignore this possibility would itself constitute a form of negligence.

- *Insurance Against Negligence.* In tacit recognition of the possibility of their own negligence, motorists, builders, engineers, and myriad other persons and firms engaged in activities involving risk obtain insurance coverage against their potential liability for negligence. Indeed, many states *require* certain types of negligence-based insurance. This insurance does not, of course, offer some sort of license to be negligent. Deductibles, premium adjustments, and the potential loss of coverage provide ample incentive for caution. The insurance does offer the insured a reasonable degree of security, allowing it to proceed -- cautiously -- with a limited fear of financial ruin in the unfortunate event of an accident. Equally important,

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1/ *See* BLACK'S LAW DICTIONARY 931 (5th Ed. 1979).

2/ *See* Restatement, Second, Torts, § 299A.

liability insurance protects victims, typically providing a more efficient means of recovery, with limits that often exceed the assets of the insured.

- *The Risks of Environmental Remediation.* The risks associated with negligence are particularly great in the field of environmental restoration. Such work regularly calls for judgments based on inherently incomplete information and new and emerging technologies. Accepted industry standards for design of hazardous waste remediation and use of emerging technologies have barely begun to evolve. Substantial uncertainties remain in predicting the effectiveness and potential unintended consequences of innovative technologies. Remediation firms recognize the risks of their practice, and endeavor to minimize these risks through heightened standards, training, and supervision. Nonetheless, risks can only be minimized, never eliminated.

- *Unavailable Insurance for Environmental Remediation.* Apart from the hazardous waste field, engineering and construction firms are generally protected from large third party claims by adequate insurance. However, pollution insurance is either wholly inadequate or unavailable to environmental remediation firms. What insurance is available is on a "claims made" basis, continuing protection only as long as the restoration firm continues to renew its coverage. Because many claims are likely to arise many years in the future, the projected costs of such insurance, even if otherwise adequate, is often prohibitive.

- *The Irony of Remediation Firms Assuming Risks.* Without the insurance protection available to firms in other industries, restoration firms are left to shoulder the risks of DOD site cleanups alone. This result is particularly ironic in light of the fact that the restoration firms are in no way responsible themselves for the site contamination. They arrive after the damage is done, and their efforts improve, rather than threaten, public health and safety. Nonetheless, likely Government immunity from most claims (as well as theories of joint and several liability), subject them to liability from which DOD, who is the owner and operator of the sites and was generator of the wastes, is likely immune.

- *DoD as Proper Risk Bearer.* As the owner of the hazardous waste sites, DoD should accept an equitable share of the liabilities associated with restoration. Moreover, current liability exposure has led a number of firms either to forego participation in DOD restoration procurements entirely, or at least to be extremely selective in participating. This reluctant participation will lead to increased costs as DoD selects from a limited pool of contractors. Finally, DoD should accept the responsibility of assuring that persons injured by the hazardous wastes from its sites receive compensation for their damages and injuries. These factors compel DoD to share the risks associated with the cleanup of its hazardous waste sites.

TAB 8 HWAC

HWAC

an association of engineering and science firms practicing in hazardous waste management

Testimony of

Peter W. Tunnicliffe, P.E.

President
of the
Hazardous Waste Action Coalition (HWAC)

and

Senior Vice President
Camp Dresser & McKee Inc.

Accompanied by

Paul F. Gabriel, P.E.

Member, HWAC Board of Directors and
Technical Practices Committee Chairman

and

Vice President
SEA Consultants

Before the

Investigations and Oversight Subcommittee of the House Public Works and Transportation Committee

September 15, 1992

A Coalition of
the American Consulting Engineers Council

Good Morning. My name is Peter W. Tunnicliffe, P.E., and I am President of the Hazardous Waste Action Coalition (HWAC) and Senior Vice President of Camp Dresser & McKee Inc. responsible for hazardous waste operations. With me is Paul F. Gabriel, P.E., Chairman of HWAC's Technical Practices Committee, HWAC Board member and Vice President of SEA Consultants. We are both professional engineers with direct, hands-on experience in implementing complex hazardous waste cleanup projects for federal, state, municipal, and private sector clients.

HWAC is an association of over 115 engineering and science firms that provide hazardous waste assessment, cleanup, and related services throughout the country. Our member firms employ over 75,000 of the nation's most highly trained and experienced hazardous waste professionals, including many engineering and technical disciplines. HWAC operates under the umbrella of the 5,000 firms that comprise the American Consulting Engineers Council, which represents engineers practicing in all technical disciplines.

HWAC members have been performing Superfund cleanup activities since the inception of the Superfund program in 1980. We have witnessed the program's transformation from a program originally intended to address a few orphan sites into a multi-faceted program developing solutions for thousands of sites across the nation. Superfund activities performed by HWAC members include Preliminary Assessments (PAs), Remedial Investigations and Feasibility Studies (RI/FS), Remedial Designs and Remedial

Actions (RD/RA), cleanup construction and construction management, and implementation of other federal and state environmental laws and regulations.

In my testimony today, I will discuss:

(1) HWAC's experience in implementing innovative and alternative technologies in Superfund cleanup activities, and

(2) Recommendations to spur the increased development and use of innovative and alternative technologies in hazardous waste cleanup.

HWAC applauds this Subcommittee for its leadership role in reviewing, in a constructive manner, operation of the federal Superfund program. HWAC has previously testified before this Committee on the technical uncertainties associated with hazardous waste cleanup, and the overall liability issues faced by the firms performing Superfund cleanup activities. We remain committed to working with you and the U.S. Environmental Protection Agency (EPA) to develop sound solutions to protect human health and the environment, while, at the same time, working to control site remediation costs.

WHAT'S NEEDED: AN ENVIRONMENT FOR INNOVATION

Let me begin by stating that Superfund cleanups are very complex. No two sites are the same due to the variety and complexity of waste mixtures, site topography, subsurface geology, proximity to population and sensitive ecosystems, and other factors. Even with statistical sampling and computer modeling, it is practically impossible to fully characterize all site contamination. EPA and the engineering community have come to recognize that no single solution is applicable to all site conditions. Furthermore, there are many sites for which permanent solutions simply do not exist. HWAC has documented this current situation in our report, "The Hazardous Waste Practice: Technical and Legal Environment 1991."

What is needed is an "environment for innovation." We need to develop tomorrow's solutions for today's hazardous waste problems. The engineers and scientists are the on-site professionals that recommend site remedies and, once approved by EPA, implement cleanup activities. These professionals need an environment whereby scientific and technical factors, rather than legal liability factors, drive the remedy selection and cleanup process. Only in this way will the overall goal of the Superfund program, which is protection of human health and the environment, be accomplished.

INNOVATIVE TECHNOLOGY DEVELOPMENT AND USE

Several initiatives are currently underway within the federal agencies, particularly EPA, to spur the development and use of innovative technologies. HWAC applauds EPA's Technology Innovation Office (TIO) and the activities of EPA's Office of Research and Development (ORD), in particular the Superfund Innovative Technology Evaluation (SITE) Program. EPA databases, which will be discussed in later testimony, foster exchange of information on developing technologies.

Other federal agencies, such as the Department of Defense (DOD) and the Department of Energy (DOE), also have established Research and Development (R&D) programs to spur the development and use of innovative technologies. Testing of innovative technologies in controlled situations at some DOD and DOE facilities is being fostered. DOD and DOE are also working to test the application of traditional defense-related technologies to hazardous waste cleanup situations. Overall R&D funding, however, is currently limited, and must be increased to further spur technology development and information transfer and, ultimately, reduce the high costs of site remediation.

HWAC Experience in Technology Implementation

HWAC is actively promoting innovative technology development, use, and information exchange. Some cases where innovative technologies were successfully

recommended for use by consulting engineers and scientists are as follows:

- At the Marathon Battery site in Cold Springs, New York, Malcolm Pirnie, Inc. applied a sophisticated computer modeling technique called geostatistical modeling to redefine areas of contamination.

- At the Libby Superfund site in Libby, Montana, Woodward-Clyde Consultants implemented in-situ bioremediation techniques, which is a process whereby microorganisms are encouraged by introduction of oxygen and nutrients to "eat," or transform, the hazardous organic chemicals into relatively harmless substances.

- At the American Thermostat Corporation Superfund site, the two lead firms, Ebasco Services, Inc. and TAMS Consultants, were involved in recommending the use of an innovative groundwater treatment process called air stripping. In this process, air is pumped into the subsurface environment, where it strips contaminants from the soil and groundwater and passes through a vacuum withdrawal system to the surface for capture.

Examples of other technologies used by HWAC members at hazardous waste sites include:

- o In-situ vitrification, which involves using electrodes to heat soil and melt silicate compounds into a glass-like substance which immobilizes contaminants.

- o Soil vapor extraction, which involves using vacuum pumps to extract volatile compounds (such as gasoline) from the soil.

- o Bio-venting, which involves use of oxygen to induce microorganisms to consume volatile contaminants in soil.

- o Soil washing, which involves mixing soil with water and other additives to remove contaminants from soil particles.

- o Air sparging, which involves injecting gas through aquifers into contaminated groundwater to capture contaminants in a vapor extraction system.

Many of these and other technologies currently under development or in use are actually "borrowed" from other industries and adapted for use in hazardous waste situations. Other technologies once considered sound, such as groundwater "pump and treat" technology, are now being proven ineffective in the long-term to remedy contamination and

restore aquifers. It is only through long-term technology testing and application that technologies will gain acceptance as proven, cost-effective technologies. To date, most hazardous waste treatment technologies remain classified as "innovative" due to the lack of long-term testing.

Information Exchange

An important element for fostering an "environment for innovation" is technology transfer. Information exchange on technology successes is just as important as information exchange on technology failures. Overall, technology transfer:

- Reduces costs by avoiding duplication of effort.
- Ensures productive use of limited funds through coordination of research efforts.
- Prevents repeat "mistakes."
- Creates partnerships for waste cleanup.

HWAC has taken an active role in technology transfer initiatives. To date, two nationally-televised videoconferences focusing on bioremediation, bioventing and vapor extraction have

been held. These videoconferences were held in conjunction with the Air & Waste Management Association, EPA, DOD, DOE, and other public and private sector organizations. To date, hundreds of people personally viewed the 4-hour videoconference at hundreds of site locations around the country. Countless others have viewed the videotapes and utilized the workbooks on these sessions. Future videoconferences are planned for early 1993 which will address thermal and chemical treatment technologies.

Progress in partnership efforts have also been made. EPA's "Project Listen" facilitates interaction between the public and private sector on ways to develop and improve cleanup technologies. One outgrowth of Project Listen is the newly-established Remediation Technologies Development Forum (RTDF). This forum is seeking to address specific technical problems involving technology development and application. HWAC is pleased to be an active participant in both Project Listen and the RTDF project.

Another information exchange activity is "WASTECH '92." WASTECH '92 is a project where technical experts are developing, in a peer-review setting, monographs which present the "state-of-the-art" for selected innovative technologies. Monographs currently under development address bioremediation, chemical treatment, chemical extraction, soil washing/flushing, stabilization and solidification, thermal desorption, thermal destruction, vacuum extraction and vapor extraction. This program is being managed by the American Academy of Environmental Engineers, and includes EPA, DOD, DOE and HWAC participation as well as the participation of other interested parties.

HWAC believes that information exchange is the cornerstone for future technology development. If a cost-effective, "cure-all" technology is developed that is not known to the technology implementers, namely the regulators and the engineers and scientists, then large-scale implementation of the technology will not occur and potential cost savings will not be realized.

LIABILITY: A DISINCENTIVE FOR INNOVATIVE TECHNOLOGY USE

Innovative technologies remain tomorrow's solutions for today's hazardous waste problems. These technologies have the potential to dramatically reduce the high cost of remediation for both Government and private industry. However, there is a serious negative incentive for use of these technologies in cleanup activities. This negative incentive applies to the engineers and scientists, who for liability reasons are hesitant to recommend and implement unproven technologies, as well as the PRPs who are hesitant to pay to implement a remedy that may not work in the long term. This negative incentive exists despite the Superfund law's preference for use of innovative, and, where practicable, permanent technologies in hazardous waste cleanup.

The reason for the negative incentives to use of innovative technology is quite simple. The standard of liability under the federal Superfund law is "liability without fault." Therefore, a firm can "do everything right" in remediating a site and still be subject to liability if harm results. As far as innovative technologies are concerned, our firms fear the

imposition of liability if a technology that they either recommend or implement at a site fails. Potential liability may include not only the amount of damages, but also the cost of site rework.

Inadequate protection from liability associated with the failure of innovative cleanup technologies at Superfund sites may result in application of "defensive engineering." This is where proven treatment technologies or containment are recommended instead of unproven, and often less costly and more effective, innovative technologies.

HWAC's previous testimony before this Committee specifically addressed EPA's current Superfund indemnification authority under Superfund Section 119.[1] The previous testimony pointed out the shortcomings of Section 119, and the lack of true liability protection for the firms involved in Superfund cleanups. The engineering and science firms hired to perform hazardous waste cleanup activities are not the polluters – they are firms that provide a public service to clean up sites created by other parties. Section 119 indemnification, while helpful as some form of liability protection, is insufficient to overcome the presumption favoring defensive engineering rather than use of innovative technologies.

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1 See HWAC Board-Approved policy on Section 119 Indemnification attached.

CONCLUSION

To truly create an environment for innovation, engineering and scientific principles must guide technology selection and implementation. Superfund's current liability scheme operates as a disincentive for the use of innovative technologies in hazardous waste cleanups. This negative presumption is the first hurdle that must be overcome if Congress is to promote use of innovative technologies, or development of the solutions for the future, in hazardous waste cleanups.

One approach that could encourage the use of innovative technologies could be adapted from the Clean Water Act's innovative technology grants program. Under that program, EPA expressly recognized the added risk of testing innovative clean water technologies. EPA provided assurances that, in the event that an approved innovative technology application should fail, the Agency would cover the cost of reperformance. A similar mechanism for hazardous waste remediation which relieves the engineers and scientists performing hazardous waste cleanup activities from liability for failed innovative technologies would prove beneficial to increasing the use of innovative technologies in Superfund cleanups. The short-term costs of such a program may be somewhat higher than existing program costs. However, for Government and industry, who face staggering cleanup costs, the potential long-term savings gained from such an incentive program could be significant, particularly in light of the fact that DOD and DOE environmental cleanup programs have been estimated to cost tens of billions of dollars over the next thirty years.

HWAC believes that the current system for innovative technology development and technology transfer provides a sound framework for moving into the future. Additional suggestions for increased use of innovative technologies include:

- The creation of additional incentives for the development and use of innovative technologies in hazardous waste cleanup.

- Increased public/private partnerships to encourage the development and use of innovative cleanup technologies.

- Increased funding of innovative technology R&D efforts.

- Increased funding of technology transfer efforts.

- Adequate protection from liability associated with the application of innovative technologies.

With the exception of HWAC's liability concerns, all of the above recommendations can be accomplished within the existing statutory and regulatory framework of the Superfund law.

In conclusion, significant progress has been made in the twelve years since passage of the federal Superfund law. However, more remains to be done to create the environment for innovation that is necessary to truly develop tomorrow's solutions for today's hazardous waste problems.

HWAC BOARD-APPROVED POLICY STATEMENT
ON
SECTION 119 INDEMNIFICATION

BOARD-ADOPTED POLICY STATEMENTS

EPA INDEMNIFICATION

The HWAC Board of Directors believes that the indemnification program adopted by EPA for response action contractors (RACs) should be consistent with these principles:

1. The indemnification should cover losses qualifying under SARA Section 119 but not compensated by insurance. Exclusions beyond those required by Section 119 should not be used.
2. The indemnification contract language should track closely with time-tested federal indemnity clauses such as EPAAR 1552.228-70 or FAR 52.228-7.
3. The limit of indemnification should allow coverage for catastrophic damage claims in the toxic tort system reasonably foreseeable for Superfund sites. The indemnification should be able to cover claims in the range of $200 million, at a minimum.
4. In order not to discriminate against small firms, the upper limit of indemnity should not vary with firm size.
5. In order not to discriminate against small firms, the risk retention or "deductible" to be paid by a RAC should be scaled to contract size. The risk retention should be in the range of $10,000 to $100,000 per occurrence.
6. The duration of the indemnity should be coincident with the duration of the uninsured risk which results from this work, like occurrence form insurance coverage.
7. Working sessions to develop contract language should discuss related liability concerns, such as:
   - Exclusion of warranty claims for RAC work.
   - Prompt and current payment of indemnity claims, particularly of defense costs.
   - Limitation of liability for future response costs.

- Approved by the Board of Directors -
- September 27, 1988 -

INDEMNIFICATION POSITION STATEMENT
(Sent to EPA with 52 signatures in December, 1991)

We, the undersigned organizations and companies, believe that significant developments in the environmental remediation of hazardous waste sites have occurred since EPA publication of its proposed Superfund Section 119 indemnification guidance over two years ago (54 Federal Register 46012). These developments include: (1) Recent EPA Superfund program direction to increase the speed of Superfund cleanups. (2) The exponential increase in federal facility cleanups, and the use of Agency-specific authorities to protect firms providing environmental restoration services, (3) The state of hazardous waste cleanup technology, (4) The continued lack of meaningful insurance and surety bonds covering hazardous waste releases, and (5) The increase in toxic tort lawsuits.

HWAC MEMBERSHIP LIST

HWAC MEMBER FIRMS

3D Environmental Services Corp.
ABB Environmental
AECOM Technology Corp.
Arthur D. Little, Inc.
AWD Technologies, Inc.
Ayres Associates
BCM, Inc.
B & V Waste Science and Technology
Babcock & Wilcox Nuclear Environmental
Bailey Environmental Engineering
Baker Environmental, Inc.
Badger Engineers, Inc.
Bechtel Environmental, Inc.
BNFL, Inc.
Braun-Intertec Environmental
Brown & Caldwell
Burns & McDonnell Engineering Company
CDM Federal Programs Corporation
CH2M Hill
Chester Environmental Group, Inc.
Consoer, Townsend & Associates
Consulting Services, Inc.
Corrigan Consulting, Inc.
Dames & Moore
Duffield Associates, Inc.
Dynamac, Inc.
Earth Technology Corporation, The
Ebasco Services, Inc.
Engineering-Science, Inc.
Environmental Management Operations
Environmental Engineering & Services Corp.
Environmental Science & Engineering, Inc.
Enviro/Consultants Group, Ltd.
Erler & Kalinowski, Inc.
ERM, Inc.
David Evans and Associates, Inc.
Fluor Daniel, Inc.
Fuller, Mossbarger, Scott & May
Gannett Fleming Environmental Engineers
GEI Consultants, Inc.
Geocon Environmental Consultants, Inc.
GeoEngineers, Inc.
Geomatrix, Inc.
Geotechnical and Environmental Consultants
Giles Engineering & Associates, Inc.
GZA GeoEnvironmental, Inc.
Golder Associates, Inc.
Grosser, P.W., Consulting Engineer, P.C.
Haley & Aldrich, Inc.
HALLIBURTON NUS Environmental Corp.
Hanson Engineers, Inc.
Harding Lawson Associates
Harza Environmental Services
Hatcher-Sayre, Inc.
HMM Engineers, Inc.
H2M Group
ICF International, Inc.
Interface, Inc.
IT Corporation
Jaycor
Kamber Engineering
Kellogg Corporation
KCI Technologies, Inc.
Killam Associates
Kleinfelder, Inc.
Lockheed Environmental Systems & Technology
Lockwood, Andrews & Newnam, Inc.
Lockwood Greene Engineers, Inc.
Los Alamos Technical Associates
Lowe Environmental Services
Lowney Associates
Malcolm Pirnie, Inc.
Fugro-McClelland
McCrone Engineering
Metcalf & Eddy, Inc.
Michael Brandman Associates
Montgomery, James M. Consulting Engineers
NTH Consultants, Ltd.
OHM Corporation
Ogden Environmental
Plexus Engineering Group, Ltd.
Project Time & Cost, Inc.
R. E. Warner & Associates
Raba-Kistner Consultants, Inc.
Radian Corporation
REACT Environmental Engineers
Rizzo Associates, Inc.
Rizzo, Paul C. Associates, Inc.
RMT, Inc.
SAIC
Schnabel Engineering Associates, P.C.
SEA Consultants, Inc.
SEC Donohue, Inc.
SSM/Spotts, Stevens & McCoy, Inc.
Stanley Environmental Consultants
Stewart Environmental Consultants, Inc.
Stone & Webster Environmental Services
Strand Associates
Sverdrup Corporation
TAMS Consultants
TRC Corporation
Terracon Consultants, Inc.
Versar, Inc.
VHB Environmental Engineering
Viar and Company
Weston, Roy F. Inc.
Whitman & Howard, Inc.
Woodard & Curran, Inc.
Woodward-Clyde Consultants

As of 9-11-92

TAB 9 HWAC

Department of Energy Authority to Indemnify Environmental Remediation Contractors at Nuclear Weapons Production Sites

In a letter dated September 30, 1991 to Department of Energy Secretary James D. Watkins, several members of the House Energy and Commerce Committee took exception to DOE's "indemnification policy" for contractors performing environmental remediation at nuclear weapons production facilities owned by the United States Government. The letter specifically objects to DOE's draft RFP for an Environmental Restoration Management Contractor (ERMC) at the Fernald Feed Materials Production Center ("the Fernald RFP" or "the RFP"). It suggests that the RFP's "indemnification policy" is inconsistent with SARA § 119, and that DOE may not, under any other law, indemnify contractors performing remedial work at its facilities.

This white paper discusses the following issues: (a) the confusion that apparently continues to exist concerning indemnification under U.S. Government contracts, (b) the fact that the Fernald RFP provides for *only Price-Anderson* indemnification and (c) the existence of statutory authority independent of SARA § 119 for DOE indemnification of remediation contractors at nuclear weapons production facilities.

I. Definition of the Term "Indemnification"

To indemnify is to "save harmless,"[1] to shift the entire loss,[2] "to exempt from incurred penalties or liabilities."[3] Indemnification "springs from a contract, express or implied, and full, not partial, reimbursement is sought."[4]

In a private contract for remediation of hazardous wastes, the parties may, and frequently do, provide for indemnification of the remediation contractor by the owner of the site against risks of releases or other environmental damage associated with the remedial activities. This contractual indemnity is enforceable against, and is supported by, the financial strength of the indemnitor. In some cases, the parties may agree to a financial guarantee such as an irrevocable letter of credit to assure that funds will be available for indemnification.

1/ *Keisler v. City of Peek-Shill*, 152 N.Y.S.2d 919, 922 (Westchester Co. 1955).

2/ *Ott v. Barash*, 491 N.Y.S.2d 661, 666, 109 A.D.2d 254 (1985).

3/ Webster's Third New International Dictionary 1147 (6th ed. 1966).

4/ *McDermott v. City of New York*, 50 N.Y.2d 211, 216, 428 N.Y.S.2d 643, 645-46 (1980), *quoted in Poling Transp. Corp. v. United States*, 613 F. Supp. 1319, 1321 (D.C.N.Y. 1985) (indemnitor must pay 100% of liability).

Contractors typically are unable to obtain the same protections in their government contracts that they receive in contracts with private parties. What is sometimes referred to as a contractual indemnification offered by an executive agency typically does not constitute an indemnification at all, but rather a commitment to *reimburse* the contractor to the extent of available funds. Generally, executive agencies are prohibited by law from obligating funds in advance of appropriations.[5/] An agency's contractual commitment to pay the contractor is therefore limited by the funds appropriated and available under the contract.[6/]

Therefore, even though an agency may commit itself contractually to protect the contractor from certain risks and liabilities, that commitment is not a binding, enforceable obligation beyond the period for which funds are made available. For this reason, in order for an indemnity to be meaningful in a Government contract, the obligation must not be subject to the Antideficiency Act[7/] or other statutes that limit it to available funds.[8/] Although some protection is afforded a contractor by an agency undertaking to reimburse or otherwise treat certain liabilities as allowable costs, the value of the commitment is limited to funds available for that program.[9/]

II. The Fernald RFP Complies with Applicable Procurement Laws and Provides Indemnification Only for Nuclear Incidents Under the Price-Anderson Act.

The Fernald RFP calls for a cost reimbursement type contract with award fee. DOE has general authority to award contracts, including cost reimbursement type contracts, under title 42 U.S.C. section 7256. DOE may not, however, enter into contracts for amounts exceeding funds provided in advance under appropriations acts. The Federal Acquisition Regulation (FAR), Part 16, defines a cost reimbursement type contract generally as a contract that provides for "payment of *allowable* incurred costs, to

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5/ *See* Antideficiency Act, 31 U.S.C. § 1301 (1988).

6/ Prior to 1982, executive agencies frequently indemnified contractors without imposing an availability-of-funds limitation on the indemnification. A 1982 Comptroller General Decision, however, held that such indemnification violated the Antideficiency Act, *supra* note 7, and the Adequacy of Appropriations Act. 41 U.S.C. § 11. *Assumption of Government of Contractor Liability to Third Persons*, B-201072, May 3, 1982, 82-1 CPD ¶ 406, *aff'd on reconsideration*, May 12, 1983, 83-1 CPD ¶ 501. The Comptroller General's decision has been widely criticized but remains in effect today.

7/ *Supra* note 7.

8/ *See, e.g.*, 41 U.S.C. § 11 (1988); 31 U.S.C. § 1341; *id.*, § 1502.

9/ Congress has recognized the inadequacy of "indemnification" agreements subject to the availability of funds in the context of RACs. *See* H.R. Rep. No. 253, 99th Cong., 1st Sess., pt. 3, at 27 ("the indemnification agreements [EPA previously offered RACs] use Superfund as the source of funding, as opposed to general appropriations (the typical source of funding for Federal indemnification). Consequently, the indemnification is only good for the life of Superfund, and therefore, does not provide sufficient 'longterm' protection from liability.").

the extent prescribed in the contract."[10/] Payments under such contracts are subject to the availability of funds.[11/] Therefore, DOE properly used its general procurement authority to include cost reimbursement provisions in the Fernald RFP.

The only indemnification commitment contained in the Fernald RFP is that required under the Price-Anderson Act to cover public liability resulting from nuclear incidents.[12/] In other words, the Price-Anderson indemnification is the only provision in the RFP that is not subject to the availability of funds and therefore constitutes indemnification. Although the RFP does include the basic terms of DOE's new Accountability Rule[13/] and a clause relating to the ERMC's responsibility for preexisting conditions at the site,[14/] the protection offered by those provisions is limited *to the availability of appropriated funds.* Therefore, the United States does not truly indemnify the ERMC under those provisions.

Under the Accountability-Rule provisions, the contractor would be responsible for unallowable avoidable costs.[15/] These costs will not be reimbursed. Rather, the Rule provides that they will be the responsibility of the contractor up to a ceiling, which is the amount of the contractor's fee or profit during the period in which the incident resulting in the cost occurred. Generally, avoidable costs above the cap will be reimbursed. (However, criminal fines and penalties, Major Fraud Act and Price-Anderson fines and penalties are not reimbursed.)

Because, under the Accountability Rule, certain avoidable costs above the ceiling are reimbursable, it has been mistakenly concluded that the contractor is indemnified for those costs. That conclusion is incorrect. As noted above, DOE's obligation to reimburse the contractor is limited by the contract funds made available by Congress. By contrast, if the contractor were given indemnification, the funds would be available without regard to the limitations in the DOE authorizing legislation and the Anti-deficiency Act.[16/]

10/ 48 C.F.R. § 16.302 (1990) (emphasis added).

11/ *See id.*, §§ 32.702, 32.705-2, 52.232-20, 52.232-21, 52.121-22; *see also* 42 U.S.C. § 7256(b) (1988).

12/ 42 U.S.C.A. § 2210(d)(1)(A) (West Supp. 1990); *see* Fernald RFP, cls. I-19, I-20.

13/ *See* 56 Fed. Reg. 28,099-28,110 (June 19, 1991); Fernald RFP, cl. H.31.

14/ *See* RFP, Fernald RFP, cl. H.25.

15/ These include civil and criminal fines and penalties, direct costs incurred as the result of negligence or misconduct on the part of contractor personnel, loss of or damage to government property as a result of negligence or willful misconduct, expenses for litigation and claims, and insurance against avoidable costs.

16/ The same is true for the preexisting site conditions clause contained in the RFP. Although that clause mistakenly uses the term "indemnification," DOE's obligations under the clause are also subject to the availability of funds.

In the past, GAO has suggested that executive agencies should use SARA § 119 to indemnify response action contractors, rather than a general FAR clause providing for reimbursement of third party liabilities.[17/] DOE has not relied in the Fernald RFP on the cited FAR clause or any other general procurement authority to provide indemnification. The only indemnification offered under the Fernald RFP is for liabilities arising from nuclear incidents covered under the Price-Anderson Act. As discussed further below, DOE is not only authorized, but indeed *required* to provide for Price-Anderson indemnification in the Fernald RFP.

III. Use of Indemnification Authorities Other Than SARA § 119

SARA § 119 does not preclude DOE from using the indemnification authority of the Price-Anderson Act and P.L. 85-804 to indemnify ERMC contractors and its Management and Operating (M&O) contractors and their subcontractors performing environmental remediation. Moreover, use of the latter authorities may be necessary for contracts at DOE facilities to cover long tail liabilities that may occur after the contracts have been closed out.

A. Price-Anderson Indemnity for Public Liability

The Price-Anderson Amendments Act of 1988 *requires* DOE to indemnify any DOE contractor (or subcontractor) whose contract involves the risk of public liability arising out of or resulting from a nuclear incident.[18/] "Nuclear incident" is broadly defined for these purposes as

> [a] any occurrence, . . .
>
> [b] causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property,
>
> [c] arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material. . . .[19/]

17/ *See* GAO Report, *Superfund: Contractors Are Being Too Liberally Indemnified by the Government*, RCED-89-160 at 25-26 (Sept. 1989) (citing FAR § 52.228-7, Insurance–Indemnification of Third Parties).

18/ 42 U.S.C.A. § 2210(d)(1)(A) (West Supp. 1990); *see id.*, § 2014(w).

19/ *Id.*, § 2014(q). "Byproduct material" is also defined broadly to include "(1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material, and (2) *the tailings or wastes* (continued...)

Simply put, Price-Anderson requires indemnification of all DOE contractors handling nuclear material or byproducts. Nuclear waste is known to exist at DOE's nuclear weapons production facilities, and ERMC contractors handle that waste during the course of their restoration activities. Price-Anderson therefore requires DOE to indemnify its ERMC contractors for resulting risks.

To the extent Price-Anderson indemnification authority could be viewed as conflicting with SARA § 119, Price-Anderson will control. The Price-Anderson Amendments Act of 1988 – enacted more recently than SARA § 119[20] – expressly provides that indemnification agreements authorized and required by Price-Anderson "shall be the exclusive means of indemnification for public liability arising from [covered] activities."[21] Therefore, not only is DOE *permitted* to use Price-Anderson instead of SARA § 119 to indemnify its contractors against nuclear hazards, it is *required* to do so.

B. Public Law 85-804

After consulting with the Office of Management and Budget, as well as the House and Senate Appropriations and Armed Services Committees, DOE recently granted *limited* P.L. 85-804 indemnification to the M&O contractor at Rocky Flats.[22] Although DOE has not provided P.L. 85-804 indemnification in its Fernald RFP, it has authority to do so. In relevant part, P.L. 85-804 provides:

> The President may authorize any department or agency of the Government which exercises functions in connection with the national defense, acting in accordance with regulations prescribed by the President for the protection of the Government, to enter into contracts *without regard to other provisions of law relating to the making, performance,*

19/ (...continued)
produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." *Id.*, § 2014(e) (emphasis added).

20/ SARA § 119 is a product of the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. § 9619. *See infra*, section III.B.3, for a discussion of principles of statutory interpretation.

21/ 42 U.S.C.A. § 2210(d)(1)(B) (West Supp. 1990).

22/ *See* DOE Memorandum, *Authorization to Indemnify EG&G Under Public Law 85-804* (Aug. 14, 1991), *cited in* September 30 letter to Secretary Watkins, *supra*, p. 1 approving the EG&G request for indemnification at the Rocky Flats facility, DOE provided only limited protection. It covers only allowable costs and avoidable costs above the contractor's ceiling as defined in the Accountability Rule. Therefore, the contractor is *not* indemnified for the first dollar, but only for amounts above its fee in the period in which the incident occurs. Additionally, the indemnification does not apply to costs otherwise covered by Price-Anderson. The indemnification means that DOE will be able to meet its reimbursement obligations in the event that contract appropriations cease to be available.

amendment, or modifications of contracts, whenever he deems that such action would facilitate the national defense.[23]

Although P.L. 85-804 does not actually mention indemnification, the authority granted to enter into contracts without regard to other provisions of law clearly provides sufficient authority for the President to indemnify where he determines it to facilitate the national defense. Indeed, the legislative history of P.L. 85-804 reveals that indemnification was a primary reason for enacting the legislation. As one example, the House Committee Report explains:

> One of the most significant developments under title II [of the First War Powers Act (the predecessor to P.L. 85-804)] has been use of that authority as a basis for indemnity provisions in certain contracts. Based on the broad language of that Act, the authority would continue under this bill. The need for indemnity clauses in most cases is a direct outgrowth of military employment of nuclear power and the highly volatile fuels required in the missile program. Because of the magnitude of the risks involved, commercial insurance policies are either unavailable or provide insufficient coverage . . . .
>
> [P]roduction contracts for items like nuclear-powered submarines and missiles, although not considered especially hazardous, still give rise to the possibility of an enormous amount of claims. The Department of Defense and the Committee believe, therefore, that to the extent commercial insurance is unavailable, the risk of loss should be borne by the United States.[24]

Finally, Executive Order 10789, as amended, expressly permits the Secretary of Energy to enter into indemnification agreements without regard to other laws limiting agency commitments to available funds. The Order provides:

> 1.A.(a) The limitation in paragraph 1 to the amounts appropriated and the contract authorization provided therefor shall not apply to contractual provisions which provide that the United States will hold harmless and indemnify the contractor against any of the claims or losses set forth in subparagraph

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[23] National Defense Contract Authorization Act, Pub. L. No. 85-804, § 1, 72 Stat. 9762 (1958), *codified as amended at* 50 U.S.C. § 1431 (1988) (emphasis added).

[24] H.R. Rep. No. 2232, 85th Cong., 2d Sess., 6 (1958).

(b), whether resulting from the negligence or wrongful act or omission of the contractor or otherwise. . . .[25/]

1. P.L. 85-804 Is in Force Pursuant to Proclamation 2914.

P.L. 85-804 is "effective only during a national emergency declared by Congress or the President and for six months after the termination thereof or until such earlier time as Congress, by concurrent resolution, may designate."[26/] Pursuant to Proclamation No. 2914,[27/] the United States is under a state of national emergency. Although the effects of the Proclamation were eroded through passage of the National Emergencies Act of 1976,[28/] that act expressly excludes P.L. 85-804 from its provisions.[29/] Therefore, the requirement that 85-804 be used only during a national emergency is satisfied.

2. P.L. 85-804 May Be Used When to Do so Would Facilitate the National Defense.

P.L. 85-804 indemnification may be used "whenever [the President] deems that such action would facilitate the national defense."[30/] Through Executive Order 10789, the President delegated the authority to determine whether a particular use of P.L. 85-804 would "facilitate the national defense."[31/] Executive Order 10789 authorizes the Secretary of Energy to "enter into contracts . . . without regard to other provisions of law

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25/ Exec. Order 10789, pt. I, *reprinted as amended at* 50 U.S.C. § 1431 note [hereinafter sometimes E.O. 10789]; *see id.*, pt. II, ¶ 21.

26/ 50 U.S.C. § 1435.

27/ 15 Fed. Reg. 9029 (1950), *reprinted at* 50 U.S.C.A. app., note, at 7 (West 1990).

28/ 50 U.S.C. § 1601-51 (1988).

29/ *See id.*, § 1651(a)(6). The original bill leading to the National Emergencies Act contained no exemption for P.L. 85-804. After reviewing comments submitted by various executive agencies, however, Congress was convinced that the "abrupt termination of [P.L. 85-804, among other specified laws] would disrupt activities deemed to be essential to the functioning of the government." S. Rep. No. 94-1168, 94th Cong., 2d Sess. 7 (Sept. 7, 1976). The executive agencies cited, in support of an exemption, a 1972 report of the Commission on Government Procurement, which recommended "that the authorizations of Public Law 85-804 be made available generally rather than being dependent upon the existence of a state of war or national emergency." *Id.* at 28; *see id.* at 24-26.

30/ 50 U.S.C. § 1433. Although a predecessor statute had required actions taken under that statute to "facilitate the prosecution of war," that language was broadened following the end of the Korean conflict to require only that actions "facilitate the national defense." *See* First War Powers Act, tit. II, *amended by* Pub. L. No. 81-921, 64 Stat. 1257, 1258 (1951).

31/ E.O. 10789, *supra* note 20, pt. I, ¶ 1.

relating to the making, performance, amendment or modification of contracts, whenever, in the judgment of the Secretary . . . the national defense will be *facilitated* thereby."[32/]

The requirement that the P.L. 85-804 action "facilitate the national defense" has been interpreted broadly. Thus, in 1981 the Secretary of the Department of Transportation authorized indemnification under P.L. 85-804 for contractors engaged in the upgrading of the FAA's En Route Air Traffic Control System.[33/] After finding that the liabilities resulting from a remotely possible catastrophic accident could substantially exceed available insurance, the Secretary concluded that indemnification of the contractors would facilitate the national defense.

As another example, the United States Army routinely indemnifies contractors engaged in the incineration of outmoded chemical weapons at such locations as Johnston Atoll.[34/] These indemnifications are granted despite the National Academy of Science's endorsement of incineration as the best method of destroying chemical agents,[35/] and the wide spread recognition of Johnston Atoll as a model facility for such activities.[36/]

The activities undertaken by DOE and its predecessors at the Government-owned weapons production facilities are clearly related to the national defense. The materials produced in these facilities and the wastes generated by their production are not separable from the nation's defense interests. Moreover, DOE's defense programs have been the only activities conducted at these government-owned sites. Referring to contractors at DOE nuclear facilities, former Secretary of Energy John S. Harrington wrote:

> these contractors engage in special working relationships with the Department to operate government-owned facilities that are vital to our national security. These relationships are

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32/ *Id.*, pt. II, ¶ 20.

33/ Dep't of Trans., Fed. Aviation Admin., *Indemnification of Contractors Who Participate in the Federal Aviation Administration's Computer Replacement Program*, 46 Fed. Reg. 62,596 (Dec. 24, 1981), *modified* at 47 Fed. Reg. 1,229 (Jan. 11, 1982); *see also Yakus v. United States*, 321 U.S. 414, 431-32 (1944); *Bowles v. Willingham*, 321 U.S. 503, 520 (1944).

34/ *See E & C Firms Gain in Nerve Gas Treaty*, Chemical Week, June 13, 1990, at 30 (quoting Marilyn Tischbin, Dep't of Defense, Chemical Demilitarization Center: "Indemnification could be turned down, but it never has been.").

35/ *See Army Formally Backs On-Site Incineration to Destroy Lethal Chemical Weapons Stockpile*, 18 Env. Rep. 2229 (1988).

36/ *Id.*; *E & C Firms Gain in Nerve Gas Treaty*, *supra* note 29.

> founded on an understanding that the interests of the Department and its contractors are largely inseparable.[37/]

Thus, P.L. 85-804 is peculiarly suited for the unusually hazardous or nuclear remediation activities conducted at these facilities.[38/]

P.L. 85-804 has been used recently by the Army for the same purposes. In 1988 the Army Contract Adjustment Board explicitly endorsed the use of P. L. 85-804 for the payment of non-nuclear environmental restoration costs by National Defense Corp. (NDC) at that company's Eau Claire, Wisconsin munitions facility. The agreement to pay these costs included 50 percent of past environmental restoration costs and 100 percent of future costs. NDC had operated the facility for the Army for over 32 years. Although the site was purchased from the Army in 1945, the Army had originally constructed and operated an ammunition factory there. The Army also owned all current production facilities and equipment. The Contract Adjustment Board, approving the use of P.L. 85-804, recognized that the site, together with the production facilities and Government-owned equipment, had played a critical mobilization role in the U.S. defense establishment. The Board also recognized that all parties at the site could be held jointly and severally liable under SARA for the cleanup.[39/]

3. SARA § 119 Does Not Supersede P.L. 85-804 Authority.

Although SARA § 119 provides authority for the indemnification of superfund response action contractors generally, that authority does not supersede the similar, yet more specific, authority provided under P.L. 85-804. As discussed above, P.L. 85-804 and accompanying E.O. 10789 authorize the Secretary of the Department of Energy to enter into contracts without regard to any other procurement law when necessary to facilitate the national defense. The legislative history of P.L. 85-804, as well as the text of E.O. 10789, clearly express the intent of Congress and the Executive that P.L. 85-804 be used to indemnify contractors for losses that arise out of or relate to defense contract activities that are unusually hazardous or nuclear in nature.

37/ Letter from John S. Harrington, Secretary of Energy, to Senator J. Benett Johnston (Feb. 18, 1988), *reprinted in* 134 Cong. Rec. S2008 (daily ed. Mar. 4, 1988).

38/ Additionally, many of the remediation contractors at DOE nuclear weapons production facilities also perform both related and unrelated work for the Department of Defense. Subjecting these contractors to liabilities substantially in excess of available insurance could place their very existence in jeopardy, leaving them unavailable to continue to support other Department of Defense initiatives. This alone would support a finding that indemnification under P.L. 85-804 would "facilitate the national defense." *See* NASA Memorandum Decision Under Public Law 85-804, ¶ 12 (Nov. 5, 1989), *reported to Congress and reprinted in* Contractual Actions, Calendar Year 1990 to Facilitate the National Defense, 137 Cong. Rec. H1908, 1909 (*daily ed.* Mar. 20, 1991).

39/ *P.L. 85-804 Application of National Defense Corporation*, ACAB No. 1231 (Mar. 25, 1988).

To establish section 119 as the *exclusive* means of indemnifying contractors whose unusually hazardous or nuclear activities facilitate the national defense, Congress would have had to repeal 85-804 by implication. Repeals by implication are disfavored under the law[40/] and should not be assumed absent "some expression by Congress that such results are intended."[41/] Indeed, the United States Supreme Court has held:

> In the absence of some affirmative showing of an intention to repeal, the only permissible justification for a repeal by implication is where the earlier and later statutes are irreconcilable.[42/]

Nowhere did Congress express its intention to repeal, through passage of SARA § 119, P.L. 85-804 as that law would apply to the indemnification of remedial action contractors engaged in unusually hazardous or nuclear activities. Moreover, the two laws are easily reconcilable. As stated above, where section 119 authorizes the indemnification of remedial action contractors generally, P.L. 85-804 and E.O. 10789 offer independent, alternative authority for indemnification of contractors whose activities (a) "facilitate the national defense" and (b) "are unusually hazardous or nuclear in nature."

Congress clearly intended that P.L. 85-804 permit executive agencies to indemnify contractors regardless of the limitations of other laws such as section 119. It is impossible to avoid the provision that P.L. 85-804 may be utilized "without regard to other provisions of law . . . ." As just one illustration of Congress' intent to do just that, P.L. 85-804 was made applicable to DOE's predecessor (the Atomic Energy Commission) despite the existence of section 162 of the Atomic Energy Act of 1954, which permitted the President to exempt the Atomic Energy Commission from other provisions of law when to do so would be in the interest of the common defense and security. In support of the passage of P.L. 85-804, the Atomic Energy Commission wrote:

> However, despite the other authority mentioned above, we believe there are certain situations in which it is desirable for us to utilize the provisions of the First War Powers Act [the predecessor to P.L. 85-804]. For instance, our agency would be required to present proposals for certain contract modifications pursuant to section 162 of the act directly to the President, whereas a determination to make the same

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40/ *Regional Rail Reorganization Act Cases*, 419 U.S. 102, 133 (1974).

41/ *United States v. United Continental Tuna*, 425 U.S. 164, 169 (1976); *see also Morton v. Mancari*, 417 U.S. 535, 551 (1974) ("The intention of the legislature to repeal 'must be clear and manifest.'" (citation omitted)).

42/ *Morton v. Mancari*, 417 U.S. at 550.

modifications under the First War Powers Act might be made within our own organization. . . .[43/]

With this statement in hand, Congress passed P.L. 85-804. Thus, not only can the terms of P.L. 85-804 be reconciled with SARA § 119, but P.L. 85-804 was passed with the clear intent of relieving the executive agencies, under certain circumstances, of the limitations of laws similar to section 119. While laws such as section 119 govern the actions of agencies generally, P.L. 85-804 remains an exemption from those laws where the designated executive agencies determine that an exemption would facilitate the national defense.

4. SARA § 119 Does Not Provide Adequate Protection for National Defense Sites.

SARA section 119 does not sufficiently protect contractors performing remediation work at national defense installations, particularly DOE's nuclear weapons production facilities. The proposed guidance published by EPA in October 1989 to implement section 119 is not sufficient to deal with the liabilities at national defense sites. The proposed guidance limits the indemnification of response action contractors providing cleanup services at superfund sites to $50 million per contract. This amount is expected to include subcontractor liability exposure. The proposed guidance limits coverage to ten years and authorizes EPA to withhold indemnification when the contractor is adjudicated to be liable under state law, as well as when EPA determines that the contractor has not made sufficient "diligent efforts" to obtain insurance. At the time EPA proposed its rule, in October 1989, DOE had not initiated its remediation program, and other measures, such as DOE's Accountability Rule, were not in existence. EPA's proposed guidance was not promulgated with the expectation that its application would be to nuclear weapons production sites owned by the United States Government.

In contrast, P.L. 85-804 is intended especially for use in contracts involving the national defense and nuclear materials. For those particular contracts, involving the special risks of dealing with defense installations, section 119 is not suitable and is not required.

43/ Letter from General Manager, United States Atomic Energy Commission, to Chairman, Comm. on the Judiciary, United States House of Representatives (June 18, 1958), *reprinted in* House Comm. on the Judiciary, Authorizing the Making, Amendment, and Modification of Contracts to Facilitate the National Defense, H.R. Rep. No. 2232, 85th Cong., 2d Sess., 11 (1958).

Conclusion

To summarize, the Fernald Request for Proposals contains no indemnification provision other than one required under the Price-Anderson Act. Nonetheless, DOE has authority to enter into indemnification agreements pursuant to P.L. 85-804. If use of P.L. 85-804 is necessary given conditions at the facility, there appears to be no reason why it could not be used.

SUMMARY OF EPA FINAL SECTION 119 RESPONSE ACTION CONTRACTOR (RAC) INDEMNIFICATION GUIDANCE

Indemnification Availability:

- FOR COST REIMBURSEMENT CONTRACTS AND FIXED PRICE SUPERFUND CONTRACTS ENTERED INTO AFTER PUBLICATION OF THE FINAL GUIDANCE, EPA WILL NOT OFFER INDEMNIFICATION. Exception: if the solicitation results in a lack of competition.

- Pre-existing cost reimbursement contracts: Indemnification will be "negotiated" into contracts in the amounts specified below. RACs with indemnification agreements MUST purchase a minimum $1 million in pollution insurance (or self-insure), or perform diligent efforts demonstrating that the insurance is unavailable. The minimum amount of insurance increases by 25% each year.

Claims Covered:

- Coverage is provided for third party claims of negligence only (Note: This appears to be contrary to the statute, which says that indemnification is for "any liability," not just third party liabilities). In addition, coverage is limited to actual releases, not actual and potential releases, and coverage is limited to RAC activities directly related to site cleanup.

Strict Liability Coverage:

- Strict tort liability claims are not covered; nor are any other theories of liability other than negligence.

Combined Claims:

- Indemnification will not be provided if the RAC is found to be both strictly liable and negligent.

Applicability To Other Federal Agencies:

- EPA's indemnification guidance must be used by the other federal departments or agencies when these agencies use Section 119 as the authority to provide indemnification to RACs (Note: the guidance does not mandate that the other federal agencies must use Section 119 as the sole source of indemnification authority. However, the guidance requires Section 119 claims against other federal agencies to be paid out of agency appropriations.)

EPA Determination of Insurance Availability:

- o EPA believes that insurance is currently available for RACs. EPA will continue to make this determination, on a case-by-case basis, based on the "diligent effort" submittals of contractors.

- o The following provision of the guidance requires further clarification to ensure that the purchase of insurance does not negate indemnification coverage: "Any pollution liability insurance (or self-insurance) acquired or maintained by the RAC ... reduces the limit of EPA indemnification on a dollar-for-dollar basis."

Indemnification Limits/Deductibles (General Information):

- o Indemnification limits are contract aggregate.

- o Deductibles are per occurrence.

- o The indemnification amounts include the expenses of litigation and settlement

- o RACs must exhaust all available insurance and pay the EPA deductible before indemnification will be provided.

Indemnification Limit/Deductible Amounts:

- o Indemnification limits and deductibles are to be selected by the contractor from the following menu based on the considerations listed below:

	Limit	Deductible
1.	$2 million	$20,000
2.	$5 million	$50,000
3.	$10 million	$100,000
4.	$25 million	$250,000
5.	$50 million	$1 million
6.	$75 million	$2 million

- o Selection criteria:

  - Single-site contracts under $10 million: Contractors can choose options 1, 2, or 3.

  - Singe-site contracts between $10 and $25 million, and multi-site contracts under $25 million: Contractors can choose options 1, 2, 3, or 4.

- Contracts over $25 million: Contractors may choose options 1, 2, 3, 4, or 5.

- ARCS contracts, or other contracts lasting more than 5 years: Contractors may choose any option. However, option #6 requires a dollar-for-dollar co-payment for all amounts over $50 million.

Period of Indemnification:

o Multi-site contracts: Ten years after completion of work at individual sites.

o Single-site contracts: Contract term plus ten years after the end of the contract term.

Subcontractor Flowdown:

o Prime contractors may flow down indemnification to subcontractors provided EPA approval is granted at the time of subcontract award. EPA will not directly indemnify subcontractors. Only one indemnification agreement will be offered per contract. Flow-down will require the prime contractor to indemnify the subcontractor. Prime contractors will be required to monitor the diligent efforts of subcontractors.

o Additional Subcontractor Issues:

- Pool subcontractors: $15 million aggregate may be flowed down to pool subcontractors (Note: This amount is separate from the prime's indemnification limits, can only be granted in amounts up to $5 million per subcontractor, and contains a $50,000 deductible.

- Remedial Action (RA) Subcontractors: Prime contractors may not offer indemnification to RA subcontractors unless the contracts are first offered without indemnification and there is a lack of competition. Up to $25 million in indemnification, with a $200,000 deductible, can then be offered to RA subcontractors.

- Innovative Technology Subcontractors and SITE contractors: Can be offered indemnification in varying amounts up to $25 million (with a $200,000 deductible).

- Equipment Providers: Are not eligible for indemnification.

Diligent Efforts:

o "Diligent efforts" to obtain insurance must be submitted to EPA before the RAC begins work at a new facility (Note: the one exception to this

requirement is where the RAC already has an insurance policy that covers work at the new facility).

- o Prime contractor diligent efforts are insufficient to demonstrate the diligent efforts of subcontractors.

- o Retroactive determinations that contractor diligent efforts were inadequate, thereby negating indemnification coverage, are likely.

Cost Reimbursement Considerations:

- o Deductibles paid by the RAC will not be reimbursed as either direct or indirect costs.

- o The cost of insurance to cover the deductible IS NOT an allowable cost.

Gross Negligence/Intentional Misconduct:

- o Indemnification does not apply for gross negligence or intentional misconduct.

Effect of Settlement on Indemnification:

- o Indemnification will apply if a negligence suit is settled.

Effect of a "No-Negligence" Determination:

- o Indemnification will apply if the RAC is found not liable for negligence.

Claims Processing:

- o To be eligible for indemnification, claims must be forwarded to both EPA and the insurers within 20 working days of receipt by the contractor. Additional, although limited, time is provided for claims against subcontractors to be provided, through the prime contractor, to EPA and insurers.

Surety Protection:

- o The sureties that issue performance bonds will be covered by the same indemnification agreement of the defaulting RAC. As a result, the surety only has access to the indemnification amount remaining under the contract, and therefore the surety has no guarantee that sufficient indemnification funds will be available in the event that the bond is activated. In addition, the indemnification does not apply to bid or payment bonds.

TAB 11 HWAC

HWAC

an association of engineering and science firms practicing in hazardous waste management

1015 Fifteenth Street, N.W., Washington, D.C. 20005 202-347-7474 FAX 202-898-0068

DOE INTERIM FINAL RULE: ACQUISITION REGULATION CONCERNING PROFIT MAKING AND FEE BEARING MANAGEMENT AND OPERATING CONTRACTORS (56 FR 5064, Effective March 11, 1991)

SUMMARY: The liability of DOE Management and Operating (M&O) contractors and their subcontractors, including response action contractors, is limited to the fee or profit earned by the contractor or subcontractor during the applicable award fee evaluation period. Increased fees are provided to the M&O and subcontractors in exchange for the assumption of facility "accountability."

DISCUSSION: Historically, DOE's M&O contractors have been fully indemnified by the government for all costs and liabilities incurred as a result of contract related activities. DOE has determined that, in an effort to ensure greater contractor accountability, M&O's and their subcontractors will be held responsible for specific nonreimbursable costs, in particular the costs of noncompliance with environmental laws and regulations, subject to a specific cap, or ceiling, on liability. In exchange for this increased liability exposure, increased fees will be provided. Specific provisions of the rule are as follows:

CEILING ON LIABILITY: M&O contractor and subcontractor liability, regardless of the tier or level of the subcontractor, will be limited to the fee or profit earned by the contractor or subcontractor during the applicable six month award fee evaluation period. The award fee amount is therefore treated the same as a deductible on an insurance policy. This limitation on liability applies regardless of the amount of the liability and includes third party liability claims and long tail claims. Such an arrangement ensures risk sharing with the facility's contractors, yet recognizes that DOE can not disclaim all liability for facility operations.

SUBCONTRACTOR ISSUES: While not breaking from traditional "privity of contract" arrangements where federal agencies deal primarily with prime contractors, the rule expressly requires all subcontracts to contain clauses (1) specifying that M&O's will pay subcontractors all amounts above the subcontractor's liability cap that are reimbursed by DOE to the M&O when the M&O is not jointly responsible for the loss, and (2) specifying that the M&O is required to reimburse subcontractors for all amounts above the subcontractor's liability cap which remain the liability of the M&O (i.e., costs which are not reimbursed by DOE and within the M&O's liability limit). This ensures that unequal bargaining power between M&O's and subcontractors is not leveraged by the M&O to the detriment of subcontractors.

ENVIRONMENTAL RESTORATION CONTRACTOR TREATMENT: Under the interim final rule, firms providing environmental restoration services to DOE as a subcontractor to an M&O are covered by the rule's provisions. Currently, DOE is implementing a new contracting strategy to channel restoration work directly to environmental cleanup firms, and has indicated an intention to apply the same or similar limitation of liability provisions to such contracts. The rule also contains a phase-in period whereby site conditions can be investigated prior to contractors assuming responsibility for environmental conditions at the facility.

TAB 12 HWAC

HWAC

an association of engineering and science firms practicing in hazardous waste management

Standard Terms and Conditions for Hazardous Waste Contracts

October 1986

A Coalition of
the American Consulting Engineers Council

10/86 Version

Standard Terms and Conditions For Hazardous Waste Contracts

1. Standard of Care

The services provided by Engineer shall be performed in accordance with generally accepted professional engineering practice at the time when and the place where the services are rendered.

2. Jobsite

(a) Owner shall furnish or cause to be furnished to Engineer all documents and information known to Owner that relate to the identity, location, quantity, nature or characteristics of any hazardous waste at, on or under the site. In addition, Owner will furnish or cause to be furnished such other reports, data, studies, plans, specifications, documents and other information on surface and subsurface site conditions required by Engineer for proper performance of its services. Engineer shall be entitled to rely upon Owner-provided documents and information in performing the services required under this Agreement; however, Engineer assumes no responsibility or liability for their accuracy or completeness. Owner-provided documents will remain the property of the Owner.

(b) Engineer will not direct, supervise or control the work of contractors or their subcontractors. Engineer's services will not include a review or evaluation of the contractor's (or subcontractor's) safety measures

(c) Engineer shall be responsible only for its activities and that of its employees on any site. Neither the professional activities nor the presence of Engineer or its employees or its subcontractors on a site shall imply that Engineer controls the operations of others, nor shall this be construed to be an acceptance by the Engineer of any responsibility for jobsite safety.

3. Disposal of Contaminated Material

It is understood and agreed that Engineer is not, and has no responsibility as, a handler, generator, operator, treater or storer, transporter or disposer of hazardous or toxic substances found or identified at a site, and that Owner shall undertake or arrange for the handling, removal, treatment, storage, transportation and disposal of hazardous substances or constituents found or identified at a site.

4. Indemnification

To the fullest extent permitted by law, Owner shall indemnify, defend and hold harmless Engineer and its subcontractors, consultants, agents, officers, directors and employees from and against all claims, damages, losses and expenses, whether direct, indirect or consequential, including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from the services or work of Engineer or any claims against Engineer arising from the acts, omissions or work of others. To the fullest extent permitted by law, such indemnification shall apply regardless of the fault, negligence, breach of warranty or contract, or strict liability of Engineer. Without limiting the generality of the foregoing, the above indemnification provision extends to claims against Engineer which arise out of, are related to, or are based upon, the actual or threatened dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollutant in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface (a) soil, (b) water or watercourses, (c) objects, or (d) any tangible or intangible matter, whether sudden or not. Such indemnification shall not apply to claims, damages, losses or expenses which are finally determined to result from willful or reckless disregard by Engineer of its obligations under this Agreement.

5. Engineer's Liability

Owner agrees that, to the fullest extent permitted by law:

(a) Engineer's total liability to Owner for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to this Agreement from any cause or causes, including but not limited to Engineer's negligence, errors, omissions, strict liability, breach of contract or breach of warranty, shall not exceed the total amount of $_____.

(b) Engineer shall not be liable to Owner for any special, indirect or consequential damages whatsoever, whether caused or alleged to be caused by Engineer's negligence, errors, omissions, strict liability, breach of contract or warranty, or performance of services under this Agreement.

COMMENTARY ON INDEMNIFICATION AND LIMITATION OF LIABILITY CLAUSES

Business Practices Committee
Hazardous Waste Action Coalition
American Consulting Engineers Council

COMMENTARY ON INDEMNIFICATION AND LIMITATION OF LIABILITY CLAUSES

INTRODUCTION

The American Consulting Engineers Council, through the Hazardous Waste Action Coalition, is acting in several areas to assist its members in dealing with the liability issues arising out of "hazardous waste" activities. One of those areas is the content of professional service agreements which expose the design professional to uninsurable and unpredictable pollution-based liabilities.

The Business Practice Committee of the HWAC has developed contract provisions which it recommends be included in contracts for hazardous-waste-related services. The topics covered by these contract provisions are.

- Standard of Care
- Jobsite Information and Safety
- Disposal of Contaminated Material
- Indemnification
- Limitation of Liability
- Client Insurance
- General Terms to Assure Post-Assignment Protection

The basic concept underlying the recommended contract provisions is fairness in allocating risk and benefit between the client and the engineer providing services. Some of the factors evaluated in arriving at a fair position are:

- the availability of risk-shifting mechanisms such as insurance
- prior benefit received from the generation of the pollutant or hazardous waste
- benefit (such as compensation) for risk taken
- control over the process or project
- benefit to be derived from the completed assignment
- capacity to absorb risk

The Business Practice Committee believes that, in general, the recommended contract provisions are equitable and fairly represent appropriate risk allocation. However, it cannot be too highly stressed that each assignment be evaluated on its own merits and the recommended language modified or supplemented by assignment-specific terms.

A warranty of fitness for a particular purpose generally guarantees that a product when used for the particular purpose for which it is required and in a foreseeable manner will produce the result intended by the user. This warranty is also usually and appropriately confined to the procurement of goods. Unless the engineer can control the manner and circumstances in which the product of his services is used, the fitness warranty is not appropriate.

Very few clients will object to the engineer's forthright disclaimer of such warranties.

II. JOBSITE

1.0 Site Data

The success of an engineer's efforts are directly related to his knowledge of the problem he is engaged to solve. The more complete and accurate his knowledge, the more certain and economic will be his solution to the problem.

Squarely into this equation falls the contaminated jobsite at, under and around which the engineer is attempting to repair damage of indeterminate origin, extent and potency. Any and all data, prior studies, manufacturing or waste disposal histories, and construction documents actually or potentially informative as to the actual conditions at the site should be given to the engineer. Every item of information withheld from the engineer increases the risk that the engineer's solution will be off the mark. If a client perceives a benefit to himself in withholding information, it is appropriate that the related risk of an incorrect solution arising from the lack of such information be borne by the client.

Further, when the engineer is given neither the time nor the funds to verify the accuracy of the information he has been given, the client ostensibly has received two benefits: a time saving and a cost saving. Again, the risk accruing from these savings -- the chance that actual site conditions may vary from the information given -- is appropriately left in the same hand that holds the benefit. The engineer should be able to rely on the accuracy of the information he is given without assuming a risk for which he receives no benefit.

III. DISPOSAL OF CONTAMINATED MATERIAL

Other than the engineer's willful or reckless disregard of his obligations to the client, it is difficult to justify the engineer's assumption of responsibility for contaminated materials found on the jobsite. Generally, the engineer engaged to provide services to clean up a site had nothing to do with the original generation, disposal or storage of the toxic or hazardous materials. The statutory or regulatory obligation to clean up and dispose of the contaminating material is the owner's. The attempt to transfer these obligations to the engineer who, as opposed to the owner, never derived any benefit from the original generation of the contaminants is unfair and inequitable.

The engineer should avoid agreeing to be responsible for any part of the contaminated material disposal obligation. Once attached to such obligation, the engineer may never be able to cut the cord and may have bought liabilities far beyond any compensation he received for his original work. Very few fees are sufficient to make whole a Potentially Responsible Party facing joint and several liability for a major cleanup of a disposal facility.

IV. INDEMNIFICATION

1.0 General

Indemnification is the making whole of another person for injury or damage done to that person. The making whole usually takes the form of paying money to the other person although it could take other forms, such as replacing or repairing property.

1.1 "Indemnification clauses" often contain obligations which go beyond indemnification. An agreement to "defend" the other party, for instance, may require the paying out of money to the other party's defense attorney at a much earlier point in time than if the clause had required one to "indemnify for the cost of defense." Similarly, an agreement to indemnify for "damages" may not necessarily include an obligation to pay the other party's "defense costs" or "attorney's fees" unless those items have been specifically included in the clause.

1.2 The agreement to indemnify the Client by the engineer creates serious obligations which do not exist in the absence of such a clause. Probably the most serious of these are the potential loss of the worker's compensation shield and the extension of the time for

2.4 Indemnification by the design professional for his negligent acts and those of parties for whom he is responsible such as employees and subconsultants.

2.5 Indemnification by the design professional for his acts (negligent and non-negligent);

2.6 Indemnification by the design professional for his acts (negligent and non-negligent) and those of parties for whom he is responsible such as employees and subconsultants;

2.7 Indemnification for all damages arising out of the performance of the work excepting that arising from the sole negligence of the client.

2.8 Indemnification for all damages arising out of the performance of the work.

3.0 Assessing Risk of Indemnification - All Assignments

The advisability of agreeing to any of the contractual positions delineated in 2.0 above will depend on several factors, primary among which are:

3.1 Insurance coverage:

- Is it in force now?
- Will it be in force when the claim arises?
- Does it cover the indemnification agreement through either a blanket or specific endorsement to the policy?

3.2 The nature of the assignment:

- The technical discipline involved (structural, soils, electrical, etc.)
- The type of service (study, design, construction inspection, etc.)

3.3 Prior experience with this type of project:

- Does it have a history of litigation?
- Is a reasonable budget set for the project?

- o No insurance coverage is available to pay for pollution-caused damage. With rare exceptions, all professional liability insurance policies contain exclusions which specifically deny pollution damage coverage. Without such coverage, the design professional must pay, out of his own or his firm's assets, all pollution-caused damages for which he becomes liable.

- o Liability for pollution-caused damage may arise without any fault on the part of the design consultant. This is known as strict liability and may be found against the design professional under statutory law or under the common law. The basis for such a finding is that those who involve themselves with situations or substances which, by their nature, are "ultrahazardous" or pose abnormal risk to the public shall be held responsible for any injury or damage resulting from such involvement. It may be safely said that each state has different laws concerning strict liability. The wise design professional will acquaint himself with those laws before taking on a hazardous waste assignment or agreeing to an indemnification clause.

- o Joint and several liability. This is a concept which literally causes one responsible party among many responsible parties to pay the entire bill if the other parties have no assets or are "judgment-proof."

4.3 These factors make it mandatory for the prudent design professional to aggressively seek indemnification from the client to the maximum degree allowed by law both for claims arising out of the engineer's services and for claims arising out of the work of others. The indemnification position which should be sought is: total indemnification of the design professional by the client for all liabilities except those arising out of the willful or reckless disregard of his obligations under the service agreement. The indemnification should include defense costs and, if possible, the cost of in-house labor expended in defending the case even if pursuant to subpoena.

VI. INSURANCE

An agreement by a client to indemnify the engineer has meaning only if there are and will be assets to back up the agreement. If the engineer is dealing with a major client, the assets may lie in the physical property, cash or other such assets if the client is a private business entity If the client is a governmental entity, the asset may be the taxing authority of the government.

If the client is of a lesser stature, careful attention must be paid to the current and foreseeable financial condition of the client. Any question as to the client's capacity should be resolved from a conservative point of view. It is foolhardy for the engineer to risk his established business by being a "nice guy."

If the client is of marginal stability or has an uncertain future, the prudent engineer would be well-advised to insist that the indemnification agreement be backed by insurance of appropriate coverage and having sufficient dollar limits (and a deductible amount the client is capable of paying or, if he is incapable, the engineer is willing to pay). The policies should be written on an "occurrence" basis; i.e., if the injury occurs while the policy is in effect, coverage will be available even if the claim is made after the policy has expired. "Claims made" policies are extremely risky if the engineer doesn't have the power to have the policies renewed for a prudent and reasonable time period. Have your professional insurance advisor evaluate the client's policies before you accept any proof of coverage such as a certificate. If pollution damage is excluded from coverage, the policies are probably of little value in limiting your risk.

If the marginal client refuses or is unable to insure the indemnification agreement, the engineer should ask himself whether the assignment and the attendant risks are really worth taking.

VII. GENERAL TERMS

The terms of a contract are of value only if they are in effect when called upon and if legally permissible. It is most prudent to make certain that the carefully negotiated provisions upon which the engineer is relying are and remain not only meaningful but superior to any contrary terms that may exist in other parts of the contract. Accordingly, it is recommended that the three general provisions: Precedence, Severability and Survival be incorporated in all contracts employing the recommended provisions.

GAO

Report to the Chairman, Subcommittee on Policy Research and Insurance, Committee on Banking, Finance and Urban Affairs, House of Representatives

TAB 13 HWAC

February 1991

HAZARDOUS WASTE

Pollution Claims Experience of Property/Casualty Insurers

GAO/RCED-91-59

GAO

United States
General Accounting Office
Washington, D.C. 20548

TAB 13 HWAC

Resources, Community, and
Economic Development Division

B-242300.1

February 5, 1991

The Honorable Ben Erdreich
Chairman, Subcommittee on Policy
Research and Insurance
Committee on Banking, Finance and
Urban Affairs
House of Representatives

Dear Mr. Chairman:

On August 13, 1990, you asked us to testify on the potential liability of property/casualty insurers for costs of cleaning up hazardous waste sites. In preparing for our testimony at the Subcommittee's September 27, 1990, hearing,[1] we surveyed the pollution claims experience of 20 of the nation's largest property/casualty insurers. These insurers accounted for 67 percent of the total general liability market in 1989.[2] During the hearing we presented some preliminary results of this survey. This report provides more specific information on our survey results, as you requested.

Results in Brief

Of the 13 responding insurers included in our survey, only 9 provided us with data on the claims they closed with payment in 1989. These nine respondents reported that they paid about $106 million, or an average of about $44,000, on the 2,393 claims they closed with payment in 1989. While only four of the nine respondents provided claim payment data for the 5-year period from 1985 to 1989, all four experienced a sharp increase in their average pollution payments during this period.

Responding insurers did not provide data on the reserves they had set aside to cover pending (open) and future pollution claims, as our survey requested. However, the large number of open claims (about 50,000) and pending lawsuits over insurance coverage for pollution liability (about 2,000) indicates that insurers may have much more at stake than their past pollution claims experience would otherwise suggest. Our survey

[1] Potential Liability of Property/Casualty Insurers for Costs of Cleaning Up Hazardous Waste Sites (GAO/T-RCED-90-109, Sept. 27, 1990).

[2] Pollution insurance is one of many forms of liability insurance in the property/casualty industry's "general liability" (or "other liability") line.

further shows that in 1989 responding insurers spent about $158 million, or an average of $15.8 million per insurer, on lawsuits involving pollution coverage issues or claims against insureds by third parties.[3]

As we stated in our September 1990 testimony, the actual cleanup costs that insurers will ultimately have to defray will depend in part on the share of the nation's cleanup effort for which insurers are found liable under lawsuits. However, without a centralized source of data on the pollution claims experience of insurers, the magnitude of cleanup costs being absorbed by insurers will remain unknown.

Background

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), more commonly known as Superfund, requires the parties responsible for contamination at the nation's worst hazardous waste sites either to clean up the sites themselves or reimburse the government for cleaning them up. The Environmental Protection Agency (EPA), which administers Superfund, currently has identified about 1,200 sites as eligible for long-term, permanent cleanup under Superfund.[4] The parties liable for these cleanups include present and past owners or operators of sites, all generators of hazardous waste found at the site, and certain transporters of these wastes.

In interpreting CERCLA's liability provisions, courts have consistently held that Superfund liability is strict and, where the harm is indivisible, joint and several. Strict liability means liability without fault. Under a strict liability standard, a responsible party may be held liable for cleanup costs regardless of the care it has taken to prevent contamination. Under the joint and several liability standard, one party may be held liable for all cleanup costs even if others contributed to the contamination. In theory, then, a single party may be threatened with potentially large costs.[5]

Given these liability standards and the millions of dollars often required to clean up a hazardous waste site—an average of at least $29 million

[3]Typically, general liability insurance policies call for the insurer to defend the insured in suits brought against the insured for damages covered by the policy.

[4]Sites not eligible for Superfund cleanup may be subject to cleanup under state programs.

[5]Joint and several liability applies in most cases because wastes have been commingled. But where the harm is divisible and a reasonable basis exists for apportioning costs, the responsible party will be held liable only for the portion of the harm that it caused.

for a single Superfund site, according to EPA estimates—responsibl ties are looking to their insurers to pay for site cleanups.

Before the 1970s, insurers provided coverage for a broad range of mercial liability resulting from accidental personal injury or prope damage—which might have included pollution incidents—under c prehensive general liability policies. But as their awareness of the cial liabilities associated with pollution incidents increased, insure began in the late 1960s to revise, redefine, and limit policy languag might apply to pollution damages. For example, a "pollution exclu clause was added to the standard comprehensive general liability p to specify that the policy covered only sudden and accidental pollu incidents.

During the 1970s, insurers further revised their policies to better d their financial responsibility for pollution incidents. For example, insurers developed entirely separate environmental impairment lia policies specifically to cover pollution risks. By the mid-1980s, tho most insurers had ceased to offer new insurance policies cove tion-related damages.

Insurers withdrew from the pollution market for several reasons. rily, they contended that environmental legislation, as well as rece trends in common law and court interpretations of environmental had broadened their liability for pollution coverage beyond what been intended under past policies. They maintained that this incre liability left them exposed potentially to enormous payments for c presented under these past policies.

While insurers have acted to limit pollution coverage, disputes ha arisen over the years between insurers and their policyholders ov extent to which their policies provided pollution coverage. In a 19 report, we reviewed court cases involving these coverage disputes. These disputes focused on key contract issues, such as whether an insurance contract's pollution exclusion clause applies to the insur release and whether pollution cleanup costs are covered damages the policy. At that time, we reported that the resulting court decis varied, sometimes favoring the insurer and sometimes favoring th insured, with no trends emerging. In our September 1990 testimon stated that the extent of insurers' obligations to pay responsible p cleanup costs remained undefined.

[6]Hazardous Waste: Issues Surrounding Insurance Availability (GAO/RCED-88-2, Oct. 16, 19

Insurers' Pollution Claims Experience

The nine respondents that provided claim payment data for 1989 reported that they paid about $106 million, or an average of about $44,000, on the 2,393 pollution claims that they closed with payment during that year. While our survey sought claim payment data for the 5-year period from 1985 to 1989, only four insurers responded with information for this entire period. As shown in table 1, the average pollution claim payments for these four insurers as a group more than quadrupled between 1985 and 1989. The number of pollution claims that the four closed with payment also more than quadrupled during this period. Individually, each insurer experienced a sharp increase in average pollution claim payments during this period, with average payments for 1989 ranging from three to eight times higher than average payments for 1985.[7] The experience of these insurers, however, does not necessarily reflect other insurers' claims experience or pollution liability exposure.

Table 1: Claim Payments for Four Insurers (1985-89)

Year	Number of claims closed with payment	Claim payments[a] Total (in millions)	Claim payments[a] Average per claim
1985	176	$2.7	$15,600
1986	266	5.2	19,500
1987	241	5.6	23,400
1988	426	25.7	60,300
1989	786	51.4	65,400

[a]Total claim payments are rounded to the nearest hundred-thousand, whereas average claim payments are rounded to the nearest hundred.

The number of open claims and lawsuits in which insurers are involved indicates that insurers potentially have much more at stake than even their past claim payment experience would suggest. The 13 responding insurers reported that they had 49,947 pollution claims open at the time of our survey, not all of which will necessarily be closed with payment. Also, these 13 insurers reported that they were engaged in 1,962 lawsuits with insureds over pollution coverage issues. According to 10 of these responding insurers, these lawsuits involved about 6,000 hazardous waste sites. However, the number of lawsuits and affected sites is no doubt inflated because such suits can and do involve multiple insurers for the same site.

Insurers also reported that they had incurred millions of dollars in legal costs in pursuing these lawsuits and in defending insureds against third-

[7]These four insurers accounted for about 11 percent of the premiums written for general liability insurance in 1989.

party claims. In 1989, according to our survey, 10 responding insurers spent about $158 million, or an average of $15.8 million per insurer, on lawsuits over pollution coverage issues or involving the defense of insureds against third-party pollution claims.[3]

While our survey also sought information on the reserves insurers had set aside to cover both open and expected future claims, none of the 13 responding insurers provided this information. An attorney representing seven of the respondents stated that these insurers did not believe that their policies provide coverage for Superfund cleanups or for many other environmental claims. This attorney also stated that any reserves these companies may have established reflect a variety of management policies and perceptions and are of no general significance to pollution claims.

No Centralized Record of Pollution Claim Payments Exists

Cleaning up this nation's hazardous waste sites will cost billions, or possibly hundreds of billions, of dollars, according to estimates by insurers, federal agencies, and others. How much of these cleanup costs insurers will ultimately have to absorb will depend, as we stated in our September 1990 testimony, on (1) the size of the nation's cleanup effort, (2) the share of this effort that responsible parties will fund, and (3) the share of this effort for which insurers are found liable under coverage lawsuits. However, without a centralized source of data on the pollution claims experience of insurers, the magnitude of cleanup costs being absorbed by insurers will remain unknown.

We first noted the absence of a centralized, comprehensive data source on pollution claim payments in our 1987 report to the Congress entitled Hazardous Waste: Issues Surrounding Insurance Availability (GAO/RCED-88-2, Oct. 16, 1987). In that report we suggested that the Congress consider requiring insurers or responsible parties, as appropriate, to report to EPA the amounts of pollution claim payments made to cover cleanups and other expenses relating to these claims.

In our September 1990 testimony, we noted that centralized information on the pollution claims experience of insurers is still not available. We therefore reiterated our 1987 suggestion that this information be collected to aid congressional policy-making in this area.

[3]Some of the legal costs for defending insureds may have been included in the $44,000 average pollution claim payment that responding insurers made on the claims they closed with payment in 1989.

Conclusions

Average claim payments for some survey respondents increased sharply between 1985 and 1989. Also, the large number of open claims and lawsuits involving pollution coverage issues suggests that responding insurers could be faced with substantial claim payments in the future. The millions of dollars that responding insurers spent in 1989 on these lawsuits and on the defense of insureds is further evidence of the magnitude of the pollution claim problem insurers could face.

Unfortunately, no centralized, comprehensive data on the pollution claims experience of insurers are available. For this reason, we suggested in both our October 1987 report and our September 1990 testimony that, to remedy this problem, the Congress may want to require insurers or responsible parties to report the amount of their pollution claim payments to a central source.

Our survey was conducted during September and October 1990 in accordance with generally accepted government auditing standards. Appendix I contains information on our survey objectives, scope, and methodology.

As arranged with your office, copies of this report are being sent to appropriate congressional committees; the Administrator, EPA; the Director, Office of Management and Budget; and other interested parties.

Major contributors to this report are listed in appendix II. Please contact me at (202) 275-6111 if you have any questions.

Sincerely yours,

Richard L. Hembra
Director, Environmental Protection
Issues

Our survey of insurers was designed to obtain data on (1) the pollution claims that insurers closed with payment from 1985 to 1989 on their comprehensive general liability and environmental insurance liability policies, (2) open claims, (3) available reserves for open and future claims, (4) lawsuits involving pollution coverage issues, and (5) legal fees resulting from these suits and suits involving the defense of insureds against third party claims. Our survey was initiated in response to a request from the Chairman of the Subcommittee on Policy Research and Insurance, House Committee on Banking, Finance and Urban Affairs, to testify on the potential liability of property/casualty insurers for costs of cleaning up hazardous waste sites.

We selected the 20 property/casualty insurers for our survey on the basis of the dollar amount of direct premiums they wrote for general liability insurance in 1989, as reported by A.M. Best Company.[1] We limited our review to general liability (other liability) insurance because most pollution coverage comes under this category. Also, we limited our survey to the 20 largest insurers in hopes of completing this limited survey in time to include its results in our testimony.

In all, we received responses from 14 insurers, or a 70 percent response rate. However, we did not include one insurer's response in our survey results because this insurer provided estimated rather than actual claim payments. The 13 responding insurers included in our survey results accounted for about 49 percent of the total general liability insurance premiums written in 1989. Only 4 of the 13 insurers provided claim payment data for the full 5-year period. We could not verify survey responses because insurers consider their claim files to be confidential. Furthermore, given the number of insurers surveyed and the number of responses received, our survey results do not provide a statistical basis for making projections.

Our survey was conducted during September and October 1990 in accordance with generally accepted government auditing standards. Participation in our survey was voluntary since we do not have authority to require the insurers to respond. To encourage a good response rate, we extended a formal pledge of confidentiality to the insurers, promising that we would report only summaries of aggregate data.

[1] A.M. Best evaluates and rates insurance industry financial performance.

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C.	Peter F. Guerrero, Associate Director Lawrence J. Dyckman, Assistant Director Thomas J. Storm, Evaluator-in-Charge

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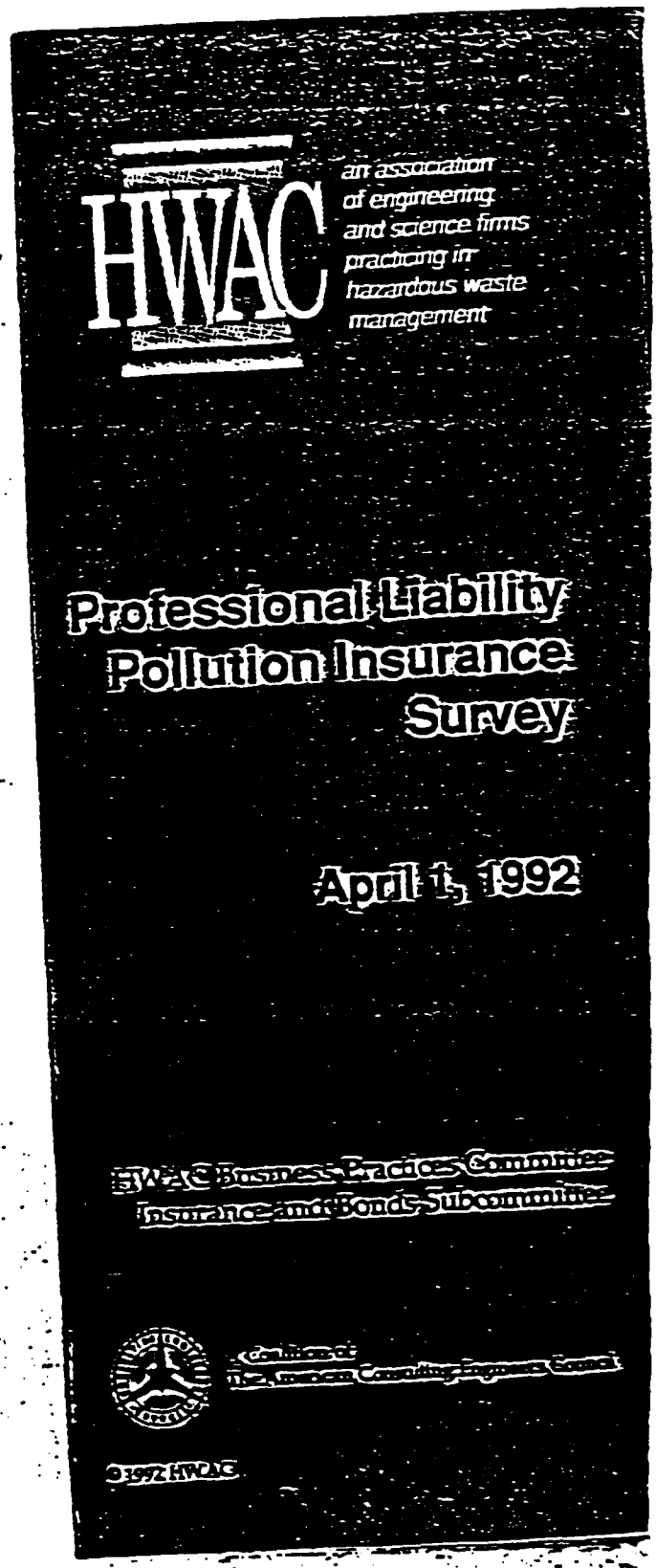
HWAC
an association of engineering and science firms practicing in hazardous waste management
Professional Liability Pollution Insurance Survey
April 1, 1992
HWAC Business Practices Committee
Insurance and Bonds Subcommittee
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Attached is a general survey of insurance companies who are willing to underwrite professional liability pollution risks, along with a very general description of their policies. This survey is intended to be a brief sketch of insurance resources that are currently available. The pollution liability insurance market continues to be quite turbulent, with carriers entering and leaving this risk market annually. Any firm desiring to look into purchasing professional liability pollution insurance is strongly advised to work through its broker and attorney, and to find out which policies are available for the size and type of firm and the work that is involved.

This information was gathered by subcommittee members through direct contacts with the insurance companies. Since no two insurance policies look alike, policy descriptions don't fit neatly into the blocks on the chart every time. We have made efforts to be accurate, but any interested firm should contact the insurance company directly (through its broker) to get a more complete description of policy terms and costs.

The major weakness common to all of the professional liability pollution insurance programs is that they are written on a "claims made" basis. "Claims made" means that the insurance policy that is in effect when the claim against the engineer is first stated (usually by a letter demanding money or a lawsuit), is the insurance policy that covers the loss. The loss is not covered by the insurance policy that was in effect when the engineer's contract was signed, or the engineer's work was performed, or the loss or injury actually happened. The special risk that this presents to engineers is that losses rarely occur during execution of the engineer's work; major losses in particular usually occur after the engineer's work is complete and the project is in operation. Occasionally many years pass before a claim is made against the engineer, so that it is essential that professional liability insurance remains in effect year after year to provide reasonable protection to an engineer. In 1986, pollution insurance for engineers virtually disappeared within the space of a year, and was substantially unavailable for five years. Contracts that engineers signed and performed in the 1970s and the early 1980s under the assumption that they had professional liability pollution insurance lead to uninsured risks, if the pollution claims were made against the engineer in the 1986-1991 time period. Although there are a number of reputable insurance companies offering professional liability pollution insurance in 1991, the engineering profession has no assurance that these programs will be available in several years. Accordingly, as engineers make their business decisions today, they cannot know if the professional liability pollution risks will be covered in the future when claims are likely to arise. Engineers should be very careful about relying on claims made insurance for management of risk over a long period of time.

It is essential that an engineer carefully review the coverages and exclusions from coverage of any pollution insurance policy. The quality of professional liability pollution insurance has improved over the last two years, but all of the policies still contain significant risks that the policy will not cover. For example, some insurance policies cover risks arising from underground storage tank work or asbestos work, and other policies do not cover these risks. Different insurance programs are available, and one program may be more suitable for an engineer's work mix than another program. The only way to determine which insurance program is best for your firm is to read the insurance policies with your attorney or insurance advisor.

The engineer needs to understand that the insurance policy dollar limits are "aggregated" meaning that the dollar amount of the insurance coverage is a fixed amount for all claims made during the insurance policy term, not an amount that applies to each separate claim that is made during the policy term. Once the insurance company has paid the aggregate amount, there is no coverage for any other claims made during the policy term. Accord-

ENVIRONMENTAL ARCHITECTS AND ENGINEERS
PROFESSIONAL LIABILITY SPECIALTY INSURANCE MARKETS
APRIL 1, 1992

Market	American Empire Surplus Lines	American International Group	Environmental Compliance Services	Environmental Compliance Services	Home Insurance Company
Insurer	American Empire Surplus Lines	National Union	Planet Insurance Company (Reliance)	Planet Insurance Company (Reliance)	Home Insurance Company
Best's Rating	A,VIII	A+, XV	A, XI	A, XI	A, XI
Coverage	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made
Product Description	Combined General Liability and E&O Form	Pollution Liability Errors & Omissions Insurance (E&O) No Pollution Exclusion	Consultants Environmental Liability General and E&O with Pollution Coverage	Environmental Consultants Professional Liability Amended Pollution Exclusion	Professional Errors & Omissions Liability Amended Pollution Exclusion
Maximum Limits Available	1,000,000/claim 2,000,000 all claims	10,000,000/claim 10,000,000 all claims	10,000,000/claim 10,000,000 all claims	10,000,000/claim 10,000,000 all claims	500,000 - Combined Limits 500,000 Reinsurance Available
Minimum Premium	$5,000	$25,000	$20,000	$25,000	$20,000
Minimum Self Insured Retention/Deductible	$5,000	$50,000	$25,000	$25,000	$10,000
Target Markets	Environmental Consulting - No Design/Build	Larger Firms, primarily Environmental Services	All Engineers and Contractors	All Engineers	Looking for "Passive" Environmental Consulting Exposure Phase I assessments
Is This Work Covered?					
Design/Build Your Work	Yes	Silent	Yes	Silent	Silent
Laboratory Analysis	Yes	Yes	Negotiable	Negotiable	Silent
Asbestos	Yes	No	Negotiable	Negotiable	Silent
Strict Liability, Rees and Presidio	No	No	No	No	Silent
Underground Tanks	Yes	No	Yes	Yes	Silent

The coverage provided by these programs has significant limitations; please read the discussion on here. Review of any insurance policy with your attorney and insurance advisor is essential.

ENVIRONMENTAL ARCHITECTS AND ENGINEERS
PROFESSIONAL LIABILITY SPECIALTY INSURANCE MARKETS
APRIL 1, 1992

Market	London	Shand Morahan	United Coastal	Terra Insurance Company	Terra Ins. Ltd. Bermuda Corp.	CNA	DPIC
Insurer	Various London Underwriters	Evanston Insurance Company	United Coastal Insurance Company	Terra Insurance Company (a Vermont risk retention group)	Terra Ins. Ltd. (Bermuda)	CNA	DPIC
Best Rating	No Best Rating	B+, VI	B+, VI	Not Rated	Not Rated	A+, XV	B+, VIII
Coverage	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made	Claims Made
Product Description	Environmental Consultants Professional Liability Amended Pollution Exclusion	Specified Professional Services E&O Amended Pollution Exclusion	Practice E&O coverage including Pollution and Asbestos	Practice E&O without Pollution Exclusions	E&O without Pollution Exclusions	E&O without Pollution Exclusions	E&O without Pollution Exclusions
Maximum Limits Available	2,000,000/claim 2,000,000 all claims 10,000,000 excess	1,000,000/claim 1,000,000 all claims 1,000,000 Excess Available	7,000,000	1,000,000 per claim and in the aggregate	$5,000,000	$1,000,000 (Sublimit)	$1,000,000 (Sublimit)
Minimum Premium	$10,000	$5,000	$40,000	$15,000	$10,000	5% of policy cost	5% of policy cost
Minimum Self Insured Retention/Deductible	$10,000	$10,000	$5,000	$25,000	$25,000	1% of gross billings	
Target Markets	Environmental Practice	Mid size companies with sales in the $500,000 to $1,000,000 range	All business mixes considered	Civil and Geotech Individual Account Consideration	Geotechs and Environmental Consultants	All Engineers	All Engineers
Is This Work Covered?							
Design/Build Your Work	No	Added	Silent	Yes	No	Yes	Yes
Laboratory Analysis	Yes	Yes	Yes	No	Yes	No	Yes
Asbestos	Yes	Yes	Yes	No	Yes	Yes	Yes
Strict Liability, Fines and Penalties	No	Silent	Yes	Yes	No	Yes	Yes
Underground Tanks	Yes	No	Yes	No	Yes	No	Yes

The coverage provided by these programs has significant limitations; please read the discussion here. Review of any insurance policy with your attorney and insurance advisor is essential.

ingly, the engineer must carefully consider whether the amount of insurance that he is purchasing will be adequat[illegible]over expected risks from doing environme[illegible]work.

[illegible]should examine the insurance

On project specific pollution liability insurance policies, premiums may range from 2½ to 5 percent of gross project invoices. Project specific insurance is available from reputable carriers, but continues to be expensi[illegible]

In summary, insura[illegible]s not a complete [illegible]. Careful client and

TAB 15 HWAC

Need for Risk Sharing in DOD Environmental Restoration Contracts

Environmental restoration firms seeking to participate in the cleanup of DOD's hazardous waste sites today face a difficult decision: either decline to participate in DOD's restoration programs or effectively "bet the company" on the risk of potential liability stemming from each contract awarded to them. Since the vast majority of the hazardous wastes are underground, the extent and nature of the contamination at these sites cannot be fully determined in advance. In any event, current technology allows at best an imperfect understanding of the behavior and spread of contaminants in a subsurface environment. Accordingly, even the most conscientious professionals, using the most sophisticated technology available, cannot ensure their cleanup efforts will not have unintended consequences. As a result, there is a substantial risk of third-party claims against the restoration contractor arising at some later date, perhaps many years after the remediation work is completed.

In other engineering or construction endeavors, the risk of future third-party liabilities is managed by purchase of liability insurance in an amount felt to be sufficient to cover the likely liability risk, and incorporating a deductible chosen by the insured to best fit its particular needs and financial circumstances. In the hazardous waste field, however, liability insurance is not available to fulfill its normal risk management role. To the extent liability insurance is available at all, it is on a "claims made" basis, extremely expensive, limited in amount, and subject to other onerous policy terms. As a result, if restoration firms cannot obtain reasonable limitations on their potential liability risks from their clients (as is the case on DOD contracts today), they are effectively operating without any risk managment mechanism, and betting the firm's assets on each restoration project.

The irony of the dilemma facing restoration firms is in the fact that they are in no way responsible themselves for the existing contaminated sites. Restoration firms arrive after the damage is done, and their efforts improve, rather than threaten, public health and safety. Nonetheless, the combination of strict liability theories, joint and several liability, and likely Government immunity from most claims subject them to liability from which the Government, who is the owner and operator of the sites and was generator of the wastes, is immune. This liability exposure has led a number of contractors to either forego participation in DOD restoration procurements entirely, or at least to be extremely selective in participating in this market. Ultimately, this situation will jeopardize the efficient, cost-effective progress of DOD's cleanup programs.

Strict Liability

Many of the bases under which a restoration firm can be found liable for events relating to a waste cleanup are premised on one form or another of strict liability, meaning liability without any fault or negligence on the part of the restoration firm. Under state common law, a person who engages in abnormally dangerous activities is

liable in tort for damages resulting from that activity, regardless of whether he or she acted negligently. In recent years, several court decisions have imposed strict liability on owners of hazardous waste disposal sites, as well as on generators and transporters of hazardous wastes, on the ground that these activities are abnormally dangerous. Under the same theory, restoration firms could be held strictly liable for damages resulting from their restoration activities, even if the activities are conducted with the utmost care. Two other common law theories frequently used in toxic tort cases, trespass and nuisance, also require no finding of any fault on the part of the defendant to impose liability. Several courts have found that whenever hazardous wastes have been deposited on the claimant's property, whether they traveled on the surface, through subsurface aquifers, or through the air, the party whose actions caused the deposit is liable for trespass. Similarly, in nuisance cases the focus is generally on the harm to the injured party, and not on the conduct of the defendant.

In the statutory arena, CERCLA and the various state hazardous waste statutes based on CERCLA typically impose strict liability on any firm falling within the defined classes of liable parties, such as an "operator" or one who "arranged for" the transport or disposal of hazardous wastes. As a result, restoration firms performing a site cleanup may become strictly liable under CERCLA without being negligent in their activities in any way.

Joint and Several Liability

The doctrine of joint and several liability applies to most of the legal theories potentially applicable to DOD environmental restoration contractors. CERCLA and RCRA both provide for joint and several liability, and joint and several liability is also the general rule under the various State tort law theories. Under joint and several liability, one financially viable defendant is potentially responsible for paying all of the assessed damages, even if other defendants are also responsible in part (even for the most part) for causing the damage. The likelihood of being liable for the entirety of the damages is greatly increased in a situation where the primary co-defendant, who generated the wastes and owns and operates the site, enjoys sovreign immunity from third party claims. This is precisely the typical case presented by a DOD restoration site.

When sued by a third party injured by a release or threatened release from a restoration site, DOD will in the great majority of cases be able to invoke the "discretionary function" exemption from the Federal Tort Claims Act (which waives the Government's sovereign immunity to a limited extent), and thus remain immune from suit. As a result, even if DOD were ultimately judged to be 90% liable and the restoration firm only 10% liable, the restoration firm would, under joint and several liability, be required to pay the entire judgment. In a comparable situation in the private sector, by contrast, the restoration firm would be able to obtain contribution from other financially viable defendants (such as the waste generators and the former and current site owners and operators), and thus bear only its fair share of the damages.

Standard of Care

The performance of environmental remediation services involves skill, discretion, and judgment. Professionals in this field regularly utilize inherently incomplete information to select relatively new technologies and techniques, in order to achieve cost effective site remediation. The legally applicable standard of care for these activities requires that they be performed in accordance with generally accepted practices as applied by professionals of similar expertise in the area. Conduct falling below this standard constitutes negligence.

Although this standard of care may be sufficiently defined in other areas, it is unacceptably vague in its application to environmental restoration activities. Widely accepted industry standards have barely begun to evolve. Substantial uncertainties remain in predicting the effectiveness and potential unintended consequences in many of the emerging technologies available for environmental remediation. Such factors preclude a restoration firm from knowing in advance what might later be judged as negligence. Moreover, as new technologies emerge, restoration firms can later be second-guessed by judges or juries on issues such as determining the point at which a new technology becomes the relevant "state of the art" (such that use of older techniques falls below acceptable practice), or whether use of the new technology represents unduly rash experimentation.

Finally, because of the long latency period for many injuries caused by exposure to hazardous substances, the conduct of restoration firms is likely to be judicialy examined only long after the fact. In such situations it is extremely difficult to evaluate past actions without regard to all that has become known in the years since the actions were taken. This "20-20 hindsight" problem is of great significance in a rapidly changing and developing technical area such as the hazardous waste field.

Lack of Available Insurance -- Risk Sharing

Apart from the hazardous waste field, engineering and construction firms are generally protected from large third party claims by adequate insurance, subject to a deductible level largely of their choosing. Such firms nevertheless still have strong incentives to avoid negligent conduct. They remain directly liable for the deductible, and know full well that claims against them may well lead to policy cancellation, or at a minimum, substantially higher premiums (in addition to factors such as damage to reputation in the industry). It does not require an ever-present threat to the firm's very existence to assure that the firm will utilize every effort to use the highest degree of care in performing its work.

In the hazardous waste field, where insurance is either wholly inadequate or unavailable, the concept of risk sharing involves leaving the restoration firm with sufficient risk to assure that care will be used in performing the work, while relieving the

risk of larger liabilities that would cripple or destroy the restoration firm. Accordingly, the restoration firm should be fully protected from liability imposed without fault, since by definition the restoration firm cannot avoid such liability by the use of greater care.

With regard to negligence, the restoration firm would remain exposed to liability up to a reasonable deductible amount, with the deductible being significant enough to assure the firm's concern and care to perform the work to the best of its ability. A reasonable deductible could thus appropriately be based upon the fee or anticipated profit under the contract, which would equitably relate the restoration firm's liability exposure to the benefit it receives for undertaking the contract. Such a deductible level should permit maximum participation in DOD's restoration programs, yet still ensure a sufficient incentive to perform at the highest level. To the extent the restoration firm incurred liability as a result of willful conduct on its part, that liability would properly remain solely with the restoration firm.

Risk Sharing for Subcontractors and Sureties

By statute (the Miller Act), DOD is required to obtain performance and payment bonds from qualified sureties for construction work performed as part of DOD' environmental resoration programs. Since sureties view themselves as potentially liable to the same extent as their principles, they have been understandably reluctant to provide such bonds to date. Accordingly, any risk sharing program implemented by DOD needs to extend its application to the performance and payment bond sureties involved. Otherwise, lack of bonding availability will continue to restrict participation in the DOD restoration market.

Similarly, the benefits of any DOD risk sharing program must be extended to subcontractors on restoration projects. Subcontractors are exposed to liabilities similar to those of prime contractors. Many DOD restoration contracts as currently being structured contemplate a large percentage of the restoration work actually being accomplished through subcontractors. Accordingly, a risk sharing program that does not extend to subcontractors would fail to obtain the intended benefit to DOD.

Deductible Time Limit

While conceivably a claim against a restoration firm could be asserted a very long time after the site work was completed (exposure estimates extend up to at least 50 years, corresponding to a full generation), it does not follow that the restoration firm needs to remain exposed to liability for such a duration to assure that it utilizes maximum care in performing its work.

Moreover, what insurance is available to cover the deductible amount of liability not covered by a risk sharing program is on a "claims made" basis. To obtain continuing insurance coverage, the restoration firm would have to keep purchasing a new "claims

made" policy covering that site every year, for many, many years after the work was completed (although such continuing policies covering such "long tail" liabilities are not even sold at present). As a result, the deductible amount associated with any DOD risk sharing program should terminate at some reasonable period following completion of the work. As three years of continuing coverage for a completed site is the best known to be available in the insurance market, a three year limit would be appropriate.

Definition of "Unusually Hazardous"

Public Law 85-804 provides authority to establish an appropriate risk sharing program for DOD environmental restoration contractors, in that it allows DOD to indemnify contractors engaged in activities giving rise to "unusually hazardous or nuclear" risks. DOD has provided indemnification in the past under P.L. 85-804 to contractors operating many GOCO sites such as Army ammunition plants, etc. Many of these same sites are now slated for major environmental restoration efforts. Cleaning up the wastes generated by unusually hazardous operations involves many of the same unusually hazardous risks.

Similarly, cleaning up many other DOD sites involves extremely toxic or hazardous substances, typically in undetermined concentrations, exposure to which poses a serious risk to human health. In this regard, the risk to the public and the restoration contractor is not related to the dollar value of the DOD restoration contract. Wherever there is a serious risk to the public in the event of a release of the hazardous substances involved, whether because of the nature of the substances involved, their concentration, or the proximity of large numbers of people who could be adversely affected by them, the restoration contractor is exposed to unusually hazardous risks that should fall within the scope of a risk sharing program premised on P.L. 85-804.

Conclusion

From the standpoint of being able to fully understand the liability risks involved, the environmental restoration field still presents far more questions than answers. Largely because of this, insurance providers have been understandably unwilling to offer adequate, reasonably priced insurance coverage for restoration firms. Given the legal principles of strict liability, joint and several liability, uncertain negligence standards, and DOD's sovreign immunity from suit, restoration firms are exposed to unusual risks of incurring large liabilities as a result of undertaking DOD restoration contracts. Imposing these risks on restoration firms is inappropriate because the restoration firms are simply trying to provide the solution, and were not part of creating the problem. In order to assure DOD access to the largest number of financially strong, highest quality firms to perform its restoration activities, DOD needs to institute an equitable risk sharing program that relieves this inequity, but still leaves restoration firms with sufficient incentive to perform at the highest level.

Rec'd from HWAC 12 Feb. 93

PENDING AND RECENT CASES REGARDING HAZARDOUS WASTE REMEDIATION CONTRACTS

Andrew D. Ness
Morgan, Lewis & Bockius
Washington, D.C.

A number of currently pending or recently decided cases raise issues of major significance to both environmental restoration firms and their clients. While the law in this area is still developing, these cases promise to provide substantial guidance to all participants in the environmental restoration market.

FIRST-PARTY LIABILITY

1. IT Corp. v. Motco Site Trust Fund, No. H-91-3532, (S.D. Tex. pending). The Response Action Contractor (RAC) for a remediation involving on-site incineration claims $56 million on breach of contract/quantum meruit theories for alleged extensive delays, changes to work scope and conditions differing from those represented in the contract. The contract breaches are alleged to be so extensive as to constitute material breach/frustration of the contract, entitling the RAC to terminate the contract. The Trust Fund (an entity representing the Potentially Responsible Parties (PRPs)) claims that the RAC was performing incompetently and breached the contract by walking off the project.

2. Weston Services, Inc. v. Halliburton NUS Environmental Corp., No. 91-1133, (E.D. Pa. pending). An EPA ARCS contractor awarded a Remedial Action (RA) subcontract involving tank removal and offsite incineration of tank contents. A dispute arose concerning an alleged differing site condition. The RA subcontractor was terminated for default on the grounds that it failed to proceed with the work in the absence of an agreement resolving the differing site condition dispute in its favor. The RA subcontractor contends that it was not in default because its continued performance was made impossible by the ARCS contractor.

THIRD-PARTY LIABILITY/CERCLA LIABILITY

3. Atlantic Richfield Co. v. Oaas, No. CV-90-75-BU-PGH, (D. Mont. pending). The lead PRP at the Montana Pole and Treating Plant Superfund site initiated a contribution action against other PRPs, and also against two RACs, seeking to shift to these defendants a portion of the total liability for site remediation costs and natural resource damages under CERCLA. Working under EPA contracts, the RACs allegedly designed, installed and operated an oil/water separation system at the site

intended to remove oil contaminated with PCP from the groundwater. The RACs are alleged to have been negligent or grossly negligent in their efforts, in that the system alleged further spread the PCP contamination. Alternatively, the RACs allegedly became "operators" of a CERCLA "facility" (the oil/water separation system) at the site themselves, and thereby became directly liable under CERCLA Section 107.

4. Dumes v. Houston Lighting & Power Co., No. C-90-330, (S.D. Tex. pending). Residents and property owners adjacent to a State Superfund site in Corpus Christi sued a number of parties that allegedly disposed of lead-II or PCB-containing substances at the site. One RAC that developed and implemented a State-approved closure plan for the site was also named as a defendant. It is alleged that the closure plan as implemented allowed lead to migrate onto the adjacent properties. The specific claims against the RAC include negligence, nuisance and trespass, as well as a claim that the RAC "arranged for transportation of lead," a hazardous substance, and so is directly liable under CERCLA Section 107.

5. Fowler v. Union Carbide Corp., No. 15,477, (76th Dist. Tex. pending). Present or former workers (and their spouses or survivors) at the Lone Star Steel Co. plant (1,786 plaintiffs in all) brought this action against a large variety of defendants (405 in total) who allegedly sold products or services to the Lone Star Steel plant. The combined actions of the defendants are alleged to have created a "toxic mushroom cloud" or "chemical fog" of pollution enveloping the plant, and eventually causing the workers to become ill with a variety of diseases. The services provided by a number of the defendants are more or less similar to services that might be provided by a RAC, although no defendant is specifically alleged to be a RAC. Theories of recovery include negligence, strict product liability, misrepresentation, breach of warranty, private nuisance, conspiracy and fraud, and other intentional torts.

6. Crawford v. Nat'l Lead Co., 784 F.Supp. 439 (S.D. Ohio 1989). Residents in the vicinity of the Fernald Materials Production Center (operated by DOE) sued DOE's Management and Operations (M&O) contractor for damages due to release of radioactive and other harmful materials. Damages claimed included emotional distress and diminished property values. Six theories of liability were asserted, including negligence, strict liability, nuisance, willful or wanton conduct, breach of contract, and violations of the Price-Anderson Act. In its 1989 ruling on various cross-motions for summary judgment, the court found that operation of Fernald was an "abnormally dangerous" activity for which strict liability was appropriate, and denied the applicability of the Government Contractor defense to the M&O contractor. A few months following this decision, the case was settled for a payment to the plaintiffs exceeding $60 million.

7. Stepp v. Monsanto Research Corp., No. C-3-91-468, (S.D. Ohio pending). This action closely parallels Crawford v. National Lead, in that the plaintiffs are a class of residents in the vicinity of the Mound facility operated by DOE, and the defendants are the M&O contractors for the Mound facility for the period from 1949 to 1991. Theories of recovery alleged include negligence, strict liability, private nuisance, trespass, and violations of CERCLA (the M&Os are alleged to be both "operators," and "arrangers for disposal").

8. Amtreco, Inc. v. O.H. Materials, Inc., No. CA 90-65-VAL (M.D. Ga., October 13, 1992). The primary PRP for a Superfund site claimed that EPA's "emergency response" (ERCS) contractor had inflated the cost of the cleanup by various tortious actions. The court found that the Government contractor defense did not bar the action against the RAC, since the contract was for services, and also found that the similar "Government agent" defense was inapplicable. The court took the permissive indemnification language of CERCLA Section 119 as an indicator that the Government's sovereign immunity does not extend to RACs via these defenses.

9. Daigle v. Shell Oil Co., 972 F.2d 1527 (10th Cir. 1992). Residents living near the Rocky Mountain Arsenal brought this action against Shell Oil and the Federal Government for injuries from airborne pollutants released in excavating Basin F at the Arsenal as part of a cleanup action. Theories pled included CERCLA claims, various tort theories and a strict liability claim for "ultrahazardous activity." The court held that: the Government's sovereign immunity barred all claims against the Government; CERCLA response costs did not extend to cover claimed "medical monitoring" costs; and that a claim had been stated against Shell that cleanup of Basin F was an abnormally dangerous activity, for which Shell might be found strictly liable for any resulting damages.

10. United States v. Stringfellow, 31 Env't Rep. Cas. 1315; 20 Envtl. L. Rep. 20656 (C.D. Cal. 1990). This is a CERCLA action in which the liability of the State of California as an operator, owner and generator with regard to the site was extensively litigated. The State was assessed the predominant share of the cleanup liability, based upon its heavy involvement with the selection, design, opening, managing and closing of the site. Particular emphasis has been placed on the negligence of State engineers in the mid-1950's (some 35 years ago) in investigating the suitability of the site for disposal of hazardous wastes and designing the disposal facilities.

11. Brookfield-North Riverside Water Comm. v. Martin Oil Marketing, Ltd., 1992 WL 63,274; 1992 U.S. Dist. LEXIS 2920 (N.D. Ill. March 11, 1992). A construction contractor who unknowingly installed a water main through soil that had been

contaminated by hazardous substances from a nearby leaking underground storage tank was found not to be an "owner," "operator" or "arranger for transport" under CERCLA. The decision relies heavily on an earlier case involving a design/build contractor. Edward Hines Lumber Co. v. Vulcan Materials Co., 685 F. Supp. 651 (N.D.Ill. 1988), aff'd 861 F.2d 155 (7th Cir. 1988).

12. Kaiser Aluminum & Chemical Corp. v. Catellus Development Corp., 976 F.2d 1338 (9th Cir. 1992). A site excavation and grading contractor who unknowingly disturbed hazardous wastes while grading for a planned housing subdivision was held to be both an "operator" and a "transporter" under CERCLA. The contractor was considered to be an "operator" because it "had authority to control the cause of the contamination at the time the hazardous substances were released into the environment," even though it had no knowledge of the existence of the contamination at the time. The contractor's unknowing movement of contaminated soil from one part of the site to another was also sufficient to make it a "transporter." The court expressly held that movement of hazardous substances across a recognized property boundary was not required to establish "transporter" liability.

INDEMNIFICATION CLAUSES

13. Danella Southwest, Inc. v. Southwestern Bell Tel. Co., 775 F.Supp. 1227 (E.D. Mo. 1991). This was a CERCLA contribution action against a contractor who excavated and transported soils contaminated with dioxin, not knowing they were so contaminated. In assessing whether a general indemnification clause required the contractor to indemnify the generator for the response costs incurred under CERCLA, the court held that "there must be some suggestion that the parties intended liability under CERCLA to be within the scope of the indemnity provision." Since neither party knew that the dirt was contaminated with dioxin, the indemnification clause was limited in scope to liability that might arise from the excavation and transportation of regular dirt.

14. Bennett v. Bank of Montreal, 554 N.Y.S. 869 (App. Div. 1990). The architect on a building renovation project subcontracted with a consulting engineer for related services, and agreed in the contract to indemnify the consulting engineer against any claims unless the consulting engineer's negligence was "the sole cause for all such losses, damages or injuries." A construction worker injured in a jobsite accident sued both design professionals and recovered a judgment against both. The consulting engineer then sought to enforce its indemnity agreement against the architect for its share of the judgment. The court held, however, that under the broadly drafted New York anti-indemnification statute, the indemnity was unenforceable

with regard to liability due to the consulting engineer's own negligence, whether in whole or in part.

HWAC

an association of engineering and science firms practicing in hazardous waste management

1015 Fifteenth Street, N.W., Washington, D.C. 20005 202-347-7474 FAX 202-898-0068

February 18, 1993

Dr. Shun C. Ling, Ph.D., P.E.
Office of Deputy Assistant Secretary of Defense (Environment)
ODASD(E)
400 Army Navy Drive, Room 206
Arlington, VA 22202

Subject: Follow-up to Risk Sharing Meeting

Dear Dr. Ling:

The Hazardous Waste Action Coalition (HWAC) appreciated the opportunity to meet with you on Friday, February 12, 1993 to discuss HWAC's response to Mr. Thomas Baca's request for risk sharing information. As indicated during the meeting, HWAC continues to believe that appropriate risk sharing between DOD and its environmental restoration firms is a critical component of DOD's cleanup program. Risk sharing is needed to (1) ensure the availability of surety bonds for construction activities, (2) provide the certainty necessary for insurers to provide policies that more appropriately address the risks posed by DOD cleanup activities, (3) ensure the prompt, competent cleanup of DOD's sites and facilities, and (4) ensure a sufficient supply of competent contractors.

HWAC believes that the recent rise in lawsuits against firms involved in cleanup activities is a trend which will continue. Because DOD is responsible for the existence of waste on its facilities, and because the waste was generated in furtherance of DOD's defense mission, HWAC is concerned that the lack of risk sharing will leave the environmental restoration firms exposed to lawsuits for activities performed while cleaning up DOD's waste.

Feel free to contact me at(202) 331-8510 or Carolyn Kiely of the HWAC staff at (202) 347-7474 if you have any additional questions on HWAC's risk sharing submittal. In addition, I would greatly appreciate it if you could send me a copy of the other comments on risk sharing that you received. Thank you again for taking the time to meet with HWAC representatives to discuss this very important issue.

Sincerely,

John E. Daniel

John E. Daniel
Chairman, HWAC Federal Action Committee

Appendix 7
Potentially Responsible Party (PRP) Information

Contents

Approved
OMB No. 0704-0354
Expires August 31, 1996

QUESTIONS ON PRIVATE SECTOR PRACTICE ON INDEMNIFICATION OF ENVIRONMENTAL CLEANUP CONTRACTORS

(1) What portion (by dollar amount) does your firm perform environmental cleanup work by contract, through in-house work force, or through state or Federal agency?

(2) Please describe the nature of the environmental cleanup work which your firm has performed since 1980.

(3) May we have a list of contractors you have used for environmental cleanup work?

(4) Describe the phase of work performed by the cleanup contractor: preliminary assessment (PA), site inspection (SI), remedial investigation/feasibility study (RI/FS) or remedial design/remedial action (RD/RA). Please provide factual data on type of action, contractor name, location, type of pollutant being remediated, value of contract, and type of contract (fixed price, cost plus award fee or cost plus fixed fee).

(5) How many times have you indemnified your environmental cleanup contractor(s)?

(6) What circumstances (nature of the pollutant, magnitude of the job, type of activity, technology employed, etc.) led you to provide indemnification on those occasions that you did? Please give us examples of the indemnification clauses used.

(7) Have you made any payments, or incurred any costs as a result of contractors you indemnified having claims or litigation initiated against them? If so, please provide details.

(8) Have you used any other risk-sharing approaches with environmental cleanup contractors? If so, please describe these approaches and provide examples of contract clauses.

Please forward answers by August 24, 1993:

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

List of Top 26 Potentially Responsible Parties (PRPs)
That Received Questions, in Rank Order* of Site Frequency

1. General Electric Company†
2. General Motors Corporation
3. Dupont DeNemours and Company†
4. Monsanto Company
5. PPG Industries, Incorporated†
6. Union Carbide Corporation†
7. Westinghouse Electric Company
8. Browning-Ferris Industries†
9. Ashland Company
10. Dow Chemical Company†
11. Shell Oil Company
12. Ford Motor Company
13. Texaco, Incorporated
14. Rockwell International
15. Ciba-Geigy Corporation
16. Reynolds Metal Company
17. Goodyear Tire and Rubber Company†
18. Allied-Signal, Incorporated
19. American Cyanamid Company
20. Chrysler Corporation
21. Rohn & Haas Company†
22. Burlington Northern Railroad
23. NL Industries, Incorporated†
24. Waste Management, Incorporated
25. Reichhold Chemicals, Incorporated
26. W. R. Grace & Company

* Ranked according to site frequency from EPA listing of 31 March 1993.

† Did not submit a response to the questions

General Motors
Environmental and Energy Staff
Remediation Group
2860 Clark Street
Detroit, Michigan 48232

September 22, 1993

FAX (313) 554 7289
Phone 7056

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Sir:

Enclosed is our response to the questionnaire on Private Sector Practice on Indemnification of Environmental Cleanup Contractors that you requested.

Sincerely yours,

W. J. McFarland

W. J. McFarland

Enc.

QUESTIONS ON PRIVATE SECTOR PRACTICE ON INDEMNIFICATION OF ENVIRONMENTAL CLEANUP CONTRACTORS

(1) What portion (by dollar amount) does your firm perform environmental cleanup work by contract, through in-house work force, or through state or Federal agency?

(a) All of General Motors cleanup work (approximately $100 million in 1993) was performed by contracts with outside professional consultants and contractors.

(2) Please describe the nature of the environmental cleanup work which your firm has performed since 1980.

(a) General Motors has performed a variety of environmental cleanup work under an assortment of Federal and state statutes including CERCLA, TSCA, RCRA and UST. The work to date, in terms of dollars spent, has focused on site investigations, RD/RA, removal actions and risk assessment.

(3) May we have a list of contractors you have used for environmental cleanup work?

(a) General Motors purchases professional services from a host of suppliers too numerous to mention. Our suppliers are both large and small and are located throughout the U.S. Remedial contractors used for actual RA work are also quite broad and tend to be selected on a regional basis.

(4) Describe the phase of work performed by the cleanup contractor: preliminary assessment (PA), site inspection (SI), remedial investigation/feasibility study (RI/FS) or remedial design/remedial action (RD/RA). Please provide factual data on type of action, contractor name, location, type of pollutant being remediated, value of contract, and type of contract (fixed price, cost plus award fee or cost plus fixed fee).

(a) General Motors is involved in all phases of remediation work and uses internal resources to negotiate scope of work and regulatory agreements. Professional consultants/contractors are selected on a competitive lump sum basis for virtually every phase of the remediation process. Very few turnkey projects are offered.

(5) How many times have you indemnified your environmental cleanup contractor(s)?

(a) General Motors standard terms and conditions for environmental contracts contain specific indemnification language. Such terms and conditions may be modified depending on the nature of the project and the service being purchased.

(6) What circumstances (nature of the pollutant, magnitude of the job, type of activity, technology employed, etc.) led you to provide indemnification on those occasions that you did? Please give us examples of the indemnification clauses used.

(a) See attachments for examples of indemnification language used for various environmental cleanup work.

(7) Have you made any payments, or incurred any costs as a result of contractors you indemnified having claims or litigation initiated against them? If so, please provide details.

(a) No

(8) Have you used any other risk-sharing approaches with environmental cleanup contractors? If so, please describe these approaches and provide examples of contract clauses.

(a) No

8.11 Indemnification

8.11.1. The Consultant and its Subcontractor(s) shall indemnify, defend and save harmless the Buyer and GM, their subsidiaries, affiliates, employees, agents, servants, and representatives, from and against claims, suits, actions, damages and costs of every name and description resulting from the negligent performance of the Work or Services by the Consultant or its Subcontractor(s) under this Purchase Order, including, but not limited to, contamination of, or adverse effects on, the environment or any person; directly or indirectly caused by or arising out of any direct or indirect exposure of an employee, agent, or vendor of Consultant or its Subcontractor(s), (or an employee or agent of such entity or vendor) to toxic or otherwise hazardous substances or conditions in the performance of the Work or Services covered by this Purchase Order.

8.11.2. Negligent performance of service, within the meaning of this Article, shall include, in addition to negligence founded upon tort, negligence based upon the Consultant and its Subcontractor(s) failure to meet professional standards and resulting in obvious or patent errors in the performance of the Services and/or Work.

8.11.3. Nothing in this Article or in this Purchase Order shall create or give to third parties any claim or right of action against the Consultant, its subcontractors, the Buyer or GM beyond such as may legally exist irrespective of this Article or this Purchase Order.

8.11.4. In no event shall the Buyer or GM be liable to the Consultant or its Subcontractor(s), in contract or in tort for consequential damages, which for purposes of this Purchase Order shall be defined as loss of profits, downtime expense or increased cost of operation of equipment, lost production, loss of use of productive facilities, or increased expenses of operation.

8.11.5. Consultant and its Subcontractor(s) hereby further agree to indemnify Buyer for any taxes, payments or penalties assessed on Buyer, and expenses incurred in connection therewith, by state or federal taxing authority for any failure to properly withhold and remit necessary payroll taxes to such authorities with respect to self-employment of Consultant and its Subcontractor(s), their employees, or the employment of others.

8.12 Consultant Warranties & Standard of Workmanship

8.12.1. Consultant agrees to perform work timely, diligently and to the reasonable satisfaction of Buyer in an efficient and economical manner consistent with the best interests of the Buyer. Consultant shall use its best skills and

judgment and shall perform all services in accordance with the highest engineering professional standards, codes and regulations. Consultant agrees to reperform, at no charge to Buyer, any work which in the reasonable opinion of Buyer does not meet the foregoing standard.

8.12.2. The Consultant, its employees and Subcontractor(s) specifically agree that each shall possess the experience, knowledge and character necessary to qualify them individually for the particular duties they perform. Consultant further acknowledges and warrants that it currently possesses valid New York State license or licenses (in particular, a New York State Professional Engineers license), required to undertake and complete the Services and/or Work as contained in Exhibit "A".

8.12.3. Consultant further represents and warrants to Buyer that Consultant is engaged in the business of providing environmental engineering and consulting Services, and has developed environmental engineering and consulting Services, and has developed the requisite expertise required to perform such Services; and further, it is understood that the Buyer is relying on Consultant and its Subcontractor(s) expertise.

8.12.4. Consultant and its Subcontractor(s) represent and warrant to Buyer that Consultant and its Subcontractor(s) understand and accept the currently known hazards and risks which are presented to human beings, property and the environment in the performance of the Services and/or Work.

8.12.5. Consultant and its Subcontractor(s) represent and warrant that the Services and/or Work will be performed in full compliance with all applicable laws, regulations, and ordinances and in full conformity with the standards of care and diligence normally practiced by reputable environmental consulting and engineering firms in performing similar Work or Services. If, during the two (2) year period following completion of Work or Services or cancellation or termination of the Purchase Order, Consultant and/or its Subcontractor(s) are notified in writing that there is an error in the Work or Services as a result of those standards not having been met, Consultant and/or its Subcontractor(s) shall, at their own expense, take such corrective actions as may be necessary to remedy the error.

8.12.6. Consultant and its Subcontractor(s) represent and warrant that, in performing the Services and/or Work, their employees may be Working with, or be exposed to, substances or conditions which are toxic or otherwise hazardous. Consultant and its Subcontractor(s) acknowledge that Buyer has engaged Consultant and its Subcontractor(s) on the basis of their representations concerning the conditions affecting the site and the performance of the Services and/or Work, and that Buyer is relying on

Consultant and its Subcontractor(s) to identify and evaluate the potential risks in performing the Services and/or Work and to take all appropriate precautions to avoid such risks to its employees and others. Consultant and its Subcontractor(s) agree to assume full responsibility for ascertaining the existence of such risks, evaluating their significance, implementing appropriate safety precautions and making the decision on how (and whether) to carry out the Services and/or Work with due regard to such risks and safety precautions pursuant to Article __.

ADDITIONAL CONDITIONS TO PURCHASE ORDER TERMS & CONDITIONS FOR CONSTRUCTION PROFESSIONAL SERVICES

(NOT APPLICABLE FOR THE PURCHASE OF PROCESS EQUIPMENT)

GM 1788 (8/89)

The Purchase Order Terms and Conditions shall be revised as specified in these Additional Conditions to Purchase Order Terms & Conditions for Construction Professional Services to delete paragraphs, to supersede deleted paragraphs, to amend paragraphs and add paragraphs as follows:

SHIPPING, BILLING & FLSA CERTIFICATION, Paragraph 2, delete the following sentence:

"Seller's invoice must include a certification...in connection therewith."

DELIVERY SCHEDULE, Paragraph 3, delete and substitute with the following:

The services shall be performed on a timely basis consistent with the Buyer's requirements outlined in the scope of work.

A completion schedule for key activities shall be mutually determined so actual progress can be compared with scheduled progress. Therefore additional time required to meet original schedule will not be performed at Buyer's expense unless the original scope of work is revised at Buyer's request.

INTELLECTUAL PROPERTY, Paragraph 14, amend by adding the following:

Proprietary Information

In order that Seller's employes may effectively provide the services to Buyer under this Purchase Order, it may be necessary or desirable for Buyer to disclose proprietary information pertaining to Buyer's past, present and future activities. All information furnished or made available by Buyer to Seller or to Seller's employes or subcontractors in connection with the work or services to be performed for Buyer hereunder, and all proprietary information generated or developed by Seller or its employes and subcontractor for Buyer shall be treated as confidential by Seller and its employes and subcontractors and shall not be disclosed by Seller, its employes, and subcontractors to anyone, either in whole or in part, except upon written authorization by Buyer.

Rights of Title

Seller agrees that all work products of Seller's employes, including drawings, designs, reports, manuals, programs, tapes and any other material prepared by Seller's employes under this Purchase Order shall belong exclusively to Buyer.

Seller agrees that all writing, discoveries, designs, mask works, inventions and improvements whether copyrightable, patentable or not which are written, conceived, discovered or made by the Seller's employes or subcontractors in the course of the work done under this Purchase Order shall be promptly disclosed to Buyer and shall become Buyer's sole property.

Seller agrees to sign and execute, and require Seller's employes to sign and execute, all assignments and other papers necessary to vest the entire right, title and interest in such writings, designs, drawings, mask works, inventions, processes, compositions of material, specifications, improvements or discoveries in Buyer, and do all lawful acts and sign all assignments and other papers Buyer may reasonably request relating to applications for patents, mask works registrations, trademarks, and copyrights, both United States and foreign, or relating to the conduct of any interference, litigation or other controversy in connection therewith, provided that all expenses incident to the filing of such applications, the prosecution thereof and the conduct of any interference, litigation or other controversy shall be borne by the Buyer.

Prior to the start of work, Seller agrees to require Seller's employes assigned to perform services for Buyer to sign the attached Intellectual Property Rights Agreement form (see exhibit A). Seller agrees to witness the signing of such agreements for Buyer and to preserve the executed Intellectual Property Right Agreement forms for a period of five (5) years.

License

The Seller agrees and grants to Buyer and its affiliates a non-exclusive, royalty-free license under any patents, domestic as well as foreign, which it may now own, control or hereafter acquire to make, have made, use and sell, including:

> Product, process equipment or facilities designed and/or developed under this Purchase Order together with the corresponding right and license to use and have used processes and to make, have made and use equipment for the manufacture of such product or part thereof or the operation of such facilities.

For purposes of this Purchase Order, the term "affiliates" shall mean any company in which General Motors Corporation owns fifty percent (50%) or more of the voting shares of the company.

INDEMNIFICATION, Paragraph 16, delete and substitute with the following text:

Seller assumes all risks of damages and injuries, including death, to any property or person resulting from its error, omission or negligent act under this Purchase Order.

819/jms

Seller shall indemnify, hold harmless, and defend Buyer, its subsidiaries, affiliates and their employees, agents, servants, and representatives from and against any and all losses, damages, expenses, suits, and demands, including injury or death to persons or damage to property (hereinafter collectively "Claims") to the extent such Claims are caused by or arise from any error, omission, or negligence by Seller, including Seller's employes, agents, servants, and representatives, in connection with the performance of services under this Purchase Order.

Buyer shall indemnify, hold harmless, and defend Seller from and against any and all Claims against Seller by third parties to the extent such Claims result from conditions existing at the Property at the time of this Purchase Order and so long as such Claims are not due to Seller's errors, omissions, or negligence.

In no event shall either the Buyer and Seller be liable to the other in contract or in tort for consequential damages which for purposes of this Purchase Order shall be defined as loss of profits, downtime expense or increased cost of operation of equipment, lost production, loss of use of productive facilities, or increased expenses of operation.

INSURANCE, Paragraph 17, amend by adding the following:

The Seller shall also maintain insurance coverage for:
(e) Professional Liability insurance, including contractual liability coverage with minimum limits of $1,000,000 annual aggregate plus any applicable deductibles disclosed prior to a claim being made by the Buyer.

Buyer shall be named as an additional insured under all Seller's policies except insurance for Workers Compensation or Professional Liability.

A Certificate of Insurance must be submitted to Buyer prior to the start of any work under this Purchase Order and must identify the Purchase Order number in "Description of Operation" section of the Certificate.

DELETE THE FOLLOWING PARAGRAPHS:

PREMIUM SHIPMENTS, Paragraph 4
NONCONFORMING GOODS, Paragraph 7
WARRANTY, Paragrapn 9
INGREDIENTS DISCLOSURE AND SPECIAL WARNINGS AND INSTRUCTION, Paragraph 10
TOOLS, Paragraph 18

ADD THE FOLLOWING PARAGRAPHS:

AUDIT, Paragraph 32:

The Buyer reserves the right to audit and adjust the final Purchase Order price for discrepancies for any compensation amount included in Purchase Order which was based on methods other than lump sum or fixed price. Seller must segregate his records in such a manner as to facilitate a complete audit and agrees that such audit may be used as the basis for settlement of charges against this Purchase Order. Seller further agrees, for this purpose to preserve all such documents for a period of three (3) years after final payment or acceptance.

This right to audit will also apply to any charges resulting from cancellation for breach or termination. Cancellation or termination charges shall be submitted in sufficient detail, together with adequate supporting information, to facilitate checking by the Buyer.

STANDARD OF WORKMANSHIP, Paragraph 33:

Seller agrees to perform work timely, diligently and to the reasonable satisfaction of Buyer in an efficient and economical manner consistent with the best interests of Buyer. Seller shall use its best skills and judgment and shall perform all services in accordance with the highest engineering professional standards, codes and regulations. Seller agrees to reperform, at no charge to Buyer, any work which in the reasonable opinion of Buyer does not meet the foregoing standard.

SAMPLES; Paragraph 34:

In the event this purchase order requires environmental assessment samples, then such samples shall be returned to Buyer for final disposition or at buyer's direction shall be disposed of in a proper manner according to the applicable regulations for the handling, storage, transport and disposal of such materials. Seller shall be solely responsible for proper handling of samples while samples are in the possession of Seller. At the time samples are to be disposed of, Seller shall provide Buyer with a representation of their contents.

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shall immediately notify the Committee in writing if: (i) notice is received of violation of any governmental enactment, requirement or authorization which relates to Contractor's performance under this Agreement; (ii) proceedings are commenced or threatened which could lead to revocation of permits, licenses or other governmental authorizations which relate to such performance; (iii) permits, licenses, or other governmental authorizations relating to such performance are revoked; (iv) litigation is commenced or threatened which could affect such performance; or (v) any other condition occurs or is threatened to occur which may have a material adverse effect on the timely performance of any of Contractor's duties under this Agreement, or the timely performance of any duties the Committee or its constituent members may have under the Consent Decree.

I. Contractor shall provide such assistance as the Committee may reasonably request in connection with any litigation with respect to the Site in which the Committee or its constituent members may become involved.

J. Contractor shall draft and submit to the Committee all notifications, reports and other documents which relate to its work and which are required to be submitted by the Committee or its constituent members to the United States Environmental Protection Agency ("USEPA") or any other governmental agency pursuant to the Consent Decree, or otherwise in connection with the Site, on a schedule and in such a manner as to allow the meeting of any applicable submission deadline, and in any event, at least five (5) business days before any such deadline.

K. Not later than five (5) business days after the beginning of each calendar month, Contractor shall submit to the Committee a written report on its activities under this Agreement during the previous calendar month, in such form and detail as the Committee may reasonably prescribe. Contractor shall submit such additional reports and other information related to its work as the Committee may reasonably request.

L. Contractor shall have sole responsibility for the health, safety and welfare of its subcontractors, employees and agents in connection with this Agreement, and shall exercise due care, and comply with the Site Health And Safety Plan, a copy of which has been received and reviewed by Contractor, and with all legal requirements, to protect the health, safety and welfare of all other persons involved in or exposed to its performance under this Agreement.

M. Except where the Committee has agreed in writing to waive sharing in the stipulated penalty by Contractor, Contractor shall reimburse the Committee for one

hundred percent (100%) of all stipulated penalties which are assessed against and paid by the Committee under the Consent Decree, and which have been incurred solely through a willful act or omission of Contractor, and Contractor shall reimburse the Committee for fifty percent (50%) of all stipulated penalties which are assessed against and paid by the Committee under the Consent Decree which arise in whole or in part due to any acts or omissions of Contractor in relation to work performed or to be performed by Contractor under this Agreement, and which are not incurred solely through a willful act or omission of the Committee.

N. Except as to the stipulated penalties covered in paragraph 2.M. of this Agreement, Contractor shall fully defend, indemnify and hold harmless the Committee, its constituent members, its Project Coordinator, its Common Counsel, its Technical Committee, its Oversight Contractor and their respective representatives and agents from any and all obligations and liabilities to third parties arising from any negligence, reckless or willful misconduct, or breach of this Agreement on the part of Contractor.

O. Contractor shall not undertake any other employment or engagement, or, except as required by law, perform any act or allow any omission, which is inconsistent with the interests of the Committee under this Agreement. In the event that Contractor is called upon under a purported requirement of law to do or omit anything which may violate the duty set forth in the preceding sentence, Contractor shall give the Committee, through its Common Counsel, sufficient advance written notice thereof to allow the Committee to contest the matter.

P. Contractor shall not take any action or allow any omission inconsistent with its sole status as an independent contractor under this Agreement.

Q. Contractor shall not enter into any agreement or contract, make any representation or warranty, or incur any other obligation or liability in the name, or on behalf, of the Committee, or subcontract or delegate any of its duties under this Agreement, without the express prior written authorization of the Committee.

R. Contractor shall be solely responsible for, and the Committee shall have no obligation or other liability for, the management of Contractor's own internal affairs, including without limitation as to its compliance with laws, regulations and rules governing its formation, preservation and functioning as a corporation, its subcontractees and

G. A lack of timely payment by the Committee of any billing of Contractor shall not excuse the performance by Contractor of its obligations under this Agreement. Under no circumstances is Contractor to have or acquire any lien or security interest in tangible or intangible property of the Committee, its constituent members, its Project Coordinator, its Common Counsel, its Technical Committee or its Oversight Contractor by reason of such non-payment, or otherwise. The sole remedies of Contractor for such non-payment will be attempted collection of the unpaid amounts through other means legitimately available to Contractor, and termination of this Agreement in accord with paragraph 6.D. hereof.

H. Except as to the stipulated penalties covered in paragraph 2.M. of this Agreement, the Committee shall fully defend, indemnify and hold harmless Contractor, and its officers, directors, shareholders, employees, agents and representatives from any and all obligations and liabilities to third parties arising from transportation, treatment or disposal of waste associated with the Site, and not due in any way to any material negligence, reckless or willful misconduct, or breach of this Agreement on the part of Contractor or any of its officers, directors, shareholders, employees, agents, representatives, subcontractees or delegatees.

4. Force Majeure.

A. Any delays in or failure of performance of either party hereto shall not constitute a default under this Agreement, or give rise to any claim for damages, to the extent; (i) such delays or failure of performance are not reasonably foreseeable, are caused by circumstances beyond the control of the party thereby affected, and constitute "force majeure" under paragraph 32 of the Consent Decree ("force majeure condition"); and (ii) the affected party gives the notice thereof required under this Agreement.

B. In the event an actual or potential force majeure condition comes to the attention of Contractor which might affect the obligations of the Committee or its constituent members under the Consent Decree, Contractor shall give oral and written notification thereof to the Committee on a schedule and otherwise sufficient to allow the Committee and its constituent members to report the matter in a timely and otherwise sufficient manner to USEPA under paragraph 33 of the Consent Decree. Otherwise, in the event a force majeure condition arises which wholly or in part prevents or will prevent either party hereto from performing hereunder, the affected party shall inform the other in writing within five (5) business days from the date upon which the affected party first has reason to believe the condition has occurred or may

Barrels, Inc. RI/FS
○ Contract w/ Consultant

Group to execute remedial work described in any Addendum to this Agreement. CRA shall have the right to use subcontractors to perform services normally performed by subcontractors, except to direct, inspect and manage the contractors engaged by Group.

If CRA wishes to use a subcontractor, except for the performance of laboratory services, CRA shall first obtain written approval from Group.

8. In the event that Group does not own or control the project site, Group warrants to CRA that it will obtain permission from the project site owner for a right of entry as needed by CRA, its employees, agents and subcontractors for providing the services called for in this Agreement. CRA agrees that its employees, agents and subcontractors will comply with all health and safety requirements of the project site owner which may be imposed upon CRA as a condition of its right-of-entry.

9. CRA shall preserve all samples obtained from the project site as it deems necessary for the project, but not longer than forty-five (45) days after the issuance of any document that includes data obtained from such samples. CRA shall be responsible to arrange for the lawful removal and disposal of samples. Group agrees to pay CRA for the cost of disposing of such samples.

10. (a) CRA warrants that its services shall be performed, within the limits prescribed by Group, in any manner consistent with the level of care and skill ordinarily exercised by engineers and consultants under similar circumstances. No other warranties or representations of any kind, either expressed or implied, are included or intended in this Agreement or in any proposal, contract, report, opinion or other document in connection with this project.

(b) Indemnity

(i) CRA:

CRA agrees to indemnify and hold harmless Group (including its officers, directors, employees, and agents) from and against any and all losses, damages, liabilities and expenses (including legal fees and reasonable costs of investigation) resulting from or arising out of (a) failure of CRA to comply in material respects with federal, state, and local laws and regulations applicable to services undertaken by CRA hereunder; (b) breach by CRA of warranties hereunder; or (c) any injury or death of any person (including employees and agents of Group and CRA), or damage or loss or destruction of any property (including property of Group and CRA and their respective employees and agents) resulting from or arising out of negligence or willful misconduct on the part of CRA in performing services hereunder, except to the extent any losses, damages, liabilities, or expenses resulting from, are attributable to, or arise out of: (i) negligence or willful misconduct of Group (ii) delay attributable to Group's conduct; or (iii) breach by of warranties or other provisions hereunder.

Rev 1

is threatened to occur which may have a material adverse effect on the timely performance of any of Contractor's duties under this Agreement, or the timely performance of any duties the Committee or its constituent members may have under the Consent Decree.

I. Contractor shall provide such assistance as the Committee may reasonably request in connection with any litigation with respect to the Site in which the Committee or its constituent members may become involved.

J. Contractor shall draft and submit to the Committee all notifications, reports and other documents which relate to its work and which are required to be submitted by the Committee or its constituent members to the United States Environmental Protection Agency ("USEPA") or any other governmental agency pursuant to the Consent Decree, or otherwise in connection with the Site, on a schedule and in such a manner as to allow the meeting of any applicable submission deadline, and in any event, at least five (5) business days before any such deadline.

K. Not later than five (5) business days after the beginning of each calendar month, Contractor shall submit to the Committee a written report on its activities under this Agreement during the previous calendar month, in such form and detail as the Committee may reasonably prescribe. Contractor shall submit such additional reports and other information related to its work as the Committee may reasonably request.

L. Contractor shall have sole responsibility for the health, safety and welfare of its subcontractors, employees and agents in connection with this Agreement, and shall exercise due care, and comply with the Site Health And Safety Plan, a copy of which has been received and reviewed by Contractor, and with all legal requirements, to protect the health, safety and welfare of all other persons involved in or exposed to its performance under this Agreement.

N. Except where the Committee has agreed in writing to waive sharing in the stipulated penalty by Contractor, Contractor shall reimburse the Committee for one hundred percent (100%) of all stipulated penalties which are assessed against and paid by the Committee under the Consent Decree, and which have been incurred solely through a willful act or omission of Contractor, and Contractor shall reimburse the Committee for fifty percent (50%) of all stipulated penalties which are assessed against and paid by the Committee under the Consent Decree which arise in whole or in part due to any acts or omissions of Contractor in relation to work performed or to be performed by Contractor under this Agreement, and which are not incurred solely through a willful act or omission of the Committee.

Draft LDI RA Contract

O. Except as to the stipulated penalties covered in paragraph 2.N. of this Agreement, Contractor shall fully defend, indemnify and hold harmless the Committee, its constituent members, its Project Coordinator, its Common Counsel, its Technical Committee, its Oversight Contractor and their respective representatives and agents from any and all obligations and liabilities to third parties arising from any negligence, reckless or willful misconduct, or breach of this Agreement on the part of Contractor.

P. Contractor shall owe a duty of loyalty to the Committee under this Agreement. Contractor shall not undertake any other employment or engagement, or, except as required by law, perform any act or allow any omission, which is inconsistent with that duty of loyalty. In the event that Contractor is called upon under a purported requirement of law to do or omit anything which may violate that duty of loyalty, Contractor shall give the Committee, through its Common Counsel, sufficient advance written notice thereof to allow the Committee to contest the matter.

Q. Contractor shall not take any action or allow any omission inconsistent with its sole status as an independent contractor under this Agreement.

R. Contractor shall not enter into any agreement or contract, make any representation or warranty, or incur any other obligation or liability in the name, or on behalf, of the Committee, or subcontract or delegate any of its duties under this Agreement, without the express prior written authorization of the Committee.

S. Contractor shall be solely responsible for, and the Committee shall have no obligation or other liability for, the management of Contractor's own internal affairs, including without limitation as to its compliance with laws, regulations and rules governing its formation, preservation and functioning as a corporation, its subcontractees and delegatees, and its management, shareholder and labor relations, for purposes of Contractor's performance under this Agreement, and otherwise.

T. During the term of this Agreement and thereafter, Contractor shall keep strictly confidential, and shall not disclose to any other person or entity, any information it receives from the Committee, its constituent members, its Project Coordinator, its Common Counsel, the Technical Committee, the Oversight Contractor or their respective representatives or agents in the course of Contractor's performance under this Agreement, and shall not use or disclose any such information other than for purposes of such performance, except: (1) as to information which has come

Monsanto

Monsanto Chemical Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63167
Phone: (314) 694-1000

September 24, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Re: Indemnification - Environmental Cleanup Contractors

Dear Mr. DeHart:

In response to the Department of Defense request for information on contractor indemnification, Monsanto Company is please to provide information as follows:

1. On a percentage basis contractors account for approximately 92% of the environmental cleanup work with the remaining 8% through in-house work force. Remediation expenditures through 1992 total approximately $200M.

2. Remediation work to date includes state and federal superfund sites, 3rd party clean-ups, and plant site remediations.

3. Because contracts are issued by a variety of units at various locations, we don't have a listing of contractors we have used. In some way or another we have probably contracted with all of the major environmental consultants/contractors over the past thirteen years.

4. Cleanup contractors are used for all phases of the remediation work from the preliminary assessment to the remedial design/remedial action. Both fixed price and cost plus contracts have been negotiated for the work. Factual data on past remediation work in terms of value of individual contracts, contractors, or type of contract is not readily available.

5. We do not have a way to determine the specific number of times Monsanto has agreed to indemnify an environmental cleanup contractor, but we believe the number is small.

6. Monsanto's standard form of contract for Remediation Services does not include a promise to indemnify the contractor. It is Monsanto's regular policy and position that it will not indemnify the contractor. Nevertheless, there are some rare instances where Monsanto has agreed to indemnify a contractor on a limited basis and by a limited indemnification provision. Such instances arise in situations where there is a rather urgent need for the work, the selected or desired contractor insists on some kind of indemnification protection, and Monsanto judges that there is a need to engage that particular contractor because another suitable contractor is not available on an acceptable contract or price basis. In such instances Monsanto may agree to indemnify the contractor against specific features or happenings, but only by the most limited indemnification provision which can be arranged to satisfy that contractor. Several samples of such limited indemnification provisions are enclosed, each with indication of the kind of services contract in which those provisions appeared.

7. I am not aware of any instance where Monsanto made any payment or incurred any cost or was called upon to fulfill an indemnification commitment to an environmental cleanup contractor.

8. No. On appropriate environmental work, however, we require the contractor to carry (in addition to customary general liability insurance) specified limits of environmental impairment and pollution liability insurance, covering liability for personal injury and property damage arising from sudden and non-sudden events of pollution and impairment.

We hope that the above information will be helpful in preparation of your report to Congress.

Sincerely,

Michael R. Foresman

Michael R. Foresman
Director, Remedial Projects

Enclosure

cc: M. A. Pierle - A3NA
D. B. Redington - A3NA

Sample A (see paragraph 10.3) From an agreement under which Contractor prepared the Remedial Design for a Superfund site project (not physical performance of the cleanup).

ARTICLE 10.0 Indemnity

10.1 Except as hereafter set forth in this Article, Contractor agrees to indemnify and save the Trustee and the Settlers, their directors, officers and employees harmless against any and all liabilities, penalties, demands, claims, causes of action, suits, losses, damages, costs and expenses (including cost of defense, settlement and reasonable attorneys' fees) which any or all of them may hereafter suffer, incur, be responsible for or pay out (whether the same arise out of or in connection with the Contract) as a result of bodily injuries (including death) to any person or damage (including loss of use) to any property occurring to, or caused in whole or in part by any "ACT OR OMISSION" (as defined below) of, Contractor (or any of his employees), any of his subcontractors (or any employee thereof), or any person, firm or corporation (or any employee thereof) directly or indirectly employed or engaged by either Contractor or any of his subcontractors. Upon the request of Trustee, Contractor shall promptly defend any such demand, claim, cause of action or suit. In the case of joint negligence on the part of the parties hereto (including their respective directors, officers and employees) liability, losses, damages, costs and expenses (including costs of defense, settlement and reasonable attorneys' fees) caused thereby shall be borne by each party in proportion to each party's respective degree of negligence in causing such injury, damage, liability, losses, damages, costs and expenses (including costs of defense, settlement and reasonable attorneys' fees). The

term "ACT OR OMISSION", as used in this Article, shall mean any act or omission which is negligent, or tortious, or gives rise to any strict liability or statutory liability.

10.2 Any damage to or loss of Contractor's property, tools and equipment, regardless of the cause or reason for said damage or loss and regardless of whether same may arise from or as a result of the sole or concurrent negligence of Trustee, the Settlers, or their directors, officers, employees or agents, shall be the loss of Contractor, his underwriters, or insurers; and Contractor hereby expressly relieves Trustee, the Settlers, their directors, officers, employees or agents, and their underwriters or insurers from any claim or responsibility for such damage or loss and waives his and his underwriter's and insurer's right or rights of recovery, if any, against them. Contractor hereby agrees that any insurance policy covering said equipment will be suitably endorsed to provide for this waiver of right of recovery.

10.3 Except to the extent covered by the insurance required by this Agreement, Trustee agrees to indemnify, defend and save Contractor, its directors, officers and employees harmless against any and all liabilities, penalties, demands, claims, causes of action, suits, losses, damages, costs and expenses (including cost of defense, settlement and reasonable attorney's fees) arising out of bodily injury (including death) to any person (except employees of Contractor and his subcontractors) or damage (including loss of use) to any property (other than Contractor's property) which arise out of the Work and are not caused by or resulting from any "ACT OR OMISSION" (as defined in the last sentence of paragraph 10.1 hereof) of Contractor, its directors, officers and employees.

10.4 Trustee agrees that Contractor shall not be liable to Trustee or Settlers under this Article for liabilities, penalties, demands, claims, causes of action, suits, losses, damages, costs and expenses arising out of bodily injury (including death) to any person or damage (including loss of use) to any property (other than Contractor's property) caused by or resulting from the sole negligence of Trustee or the Settlers, their directors, officers and employees.

ARTICLE 11.0 Insurance

11.1 Contractor shall take out and maintain, at his own expense throughout the duration of the Work, insurance as described in the following subparagraphs. Contractor shall secure from his workers' compensation carrier a waiver of subrogation in favor of Trustee, the Settlers and their directors, officers and employees.

11.1.1 Workers' Compensation Insurance. Such insurance shall be in an amount equal to the limit of liability and in the form and amount prescribed by the laws and regulations of each State where any portion of the Work is performed, for all of Contractor's and his subcontractors' employees employed on the Work.

11.1.2 Employer's Liability Insurance. Such insurance shall be provided for bodily injury by accident or disease, including death at any time resulting therefrom, in amounts not less than

$500,000 each accident (bodily injury by accident)
$500,000 each employee (bodily injury by disease)
$1,000,000 policy limit (bodily injury by disease).

11.1.3 Liability Insurance (Except Automobile Liability). Such insurance shall be in a form providing coverage not less than that of the Comprehensive or Commercial ("occurrence" type coverage) General Liability Insurance Policy. Such insurance shall include coverage for all operations exposures including coverage for explosion, collapse and underground damage, independent contractors liability, products liability, completed operations liability, contractual liability, and personal injury coverage. Contractor agrees to maintain such completed operations coverage for two (2) years following final acceptance of the Work by Trustee. Such insurance shall be in the amount of $1,000,000 per occurrence and $1,000,000 annual aggregate, combined single limit, bodily injury and property damage.

11.1.4 Automobile Liability Insurance. Such insurance shall cover all owned, non-owned, hired and rented automotive equipment used in the performance of the Work. It shall include bodily injury and property damage coverage in the amount of $1,000,000 combined single limit per occurrence.

11.1.5 Umbrella Liability Insurance. Such insurance shall provide excess coverage over the underlying primary insurance required by subparagraphs 11.1.2 through 11.1.4 hereof in an amount not less than $2,000,000 per occurrence and annual aggregate, combined single limit.

11.1.6 Equipment Floater Insurance. Such insurance shall protect all mobile construction equipment used by Contractor in the performance of the Work against physical damage.

The liability insurance coverages and policies providing the insurance required by subparagraphs 11.1.3 and 11.1.5 shall be endorsed to include Trustee and the Settlers as additional insureds with respect to the Work and Contractor's performance of this Agreement; and such insurance shall, with respect to the Work and Contractor's performance of this Agreement, be primary to any similar coverage maintained by Trustee and/or Settlers.

11.2 Contractor shall not begin any of the Work at the Jobsite until he has obtained all the insurance required by paragraph 11.1 hereof and certificates evidencing such coverage have been furnished to and approved by Representative.

11.3 Contractor shall make such arrangements as are necessary to ensure that no reduction, cancellation or expiration of any policy of insurance providing the coverages required herein shall become effective until thirty (30) days after the date written notice is actually mailed to the Trustee.

11.4 All policies of insurance providing the coverages required hereby shall be carried with insurance companies authorized to do business in such State or States where any of the Work is performed and in such companies which hold a current Policyholder's Alphabetic and Financial Size Category Rating of not less than A XIII according to Best's Insurance Reports.

11.5 Contractor shall assure that each of his subcontractors has and maintains insurance coverages similar to those herein required of Contractor.

ARTICLE 12.0 Standard of Care

Sample B, page 1

Sample B (see paragraph 8.4) from an agreement in which contractor ("Consultant") performed environmental studies, laboratory analysis and related services (not physical cleanup).

8.2 Notwithstanding the provisions of paragraph 8.1 hereof, Monsanto agrees that Consultant shall not be liable to Monsanto for loss, damage, costs and expenses as aforesaid:

8.2.1 which result solely from errors or omissions in Consultant's engineering or design work hereunder (other than that not done in a workmanlike manner) performed completely under, and in accordance with, the direct technical supervision of Monsanto, or

8.2.2 to the extent caused by the negligence of Monsanto or its employees.

8.3 Notwithstanding the foregoing, Monsanto agrees that Consultant's liability to Monsanto under the foregoing provisions of this Article 8.0 shall not exceed the sum of $4,000,000 each loss, injury or damage, except that there shall be a $4,000,000 annual aggregate limitation on Consultant's indemnification for losses falling within the coverages identified in subparagraphs 9.1.3 and 9.1.5, below.

8.4 Monsanto agrees to indemnify and hold harmless Consultant against liability (including reasonable cost of defense and settlement) arising from any claim, action or suit on account of environmental pollution or contamination arising from Consultant's performance of the Work, excepting pollution or contamination caused by the willful misconduct of, or caused solely by the negligence of, Consultant, his employees or his subcontractors or their employees; provided, however, that this obligation to indemnify and hold harmless shall apply only to that portion of the amount of any such liability (including reasonable cost of defense and settlement) which is in excess of the sum of $4,000,000 for any such loss liability and shall not apply to any such loss liability which is less than $4,000,000 in amount. If Consultant should become aware of any such claim, action or suit which might give rise to a liability (including reasonable cost of defense and settlement) in excess of $4,000,000, Consultant shall promptly give notice thereof to Monsanto and shall permit Monsanto (at Monsanto's cost) to cooperate and participate in the defense and handling thereof, in such manner as Monsanto and Consultant may agree for the protection of each of their interests.

ARTICLE 9.0 INSURANCE

9.1 Consultant shall take out and maintain at his own expense, for the term of this Agreement, the following insurance:

	Coverage	Limits
9.1.1	Worker's Compensation	Statutory
9.1.2	Employer's Liability	$4,000,000 each loss

9.1.3 Comprehensive or Commercial General Liability Insurance affording coverage for bodily injury and property damage liability, including coverage for all contractual liability under the Agreement.	$4,000,000 each loss and annual aggregate, bodily injury and property damage combined.
9.1.4 Comprehensive Automobile Liability Insurance affording coverage for bodily injury and property damage liability, including coverage for all owned, non-owned, hired and rented automotive equipment.	$4,000,000 each loss, bodily injury and property damage combined.
9.1.5 Professional Errors and Omissions Liability Insurance	$4,000,000 each loss and annual aggregate, bodily injury and property damage combined.

Environmental Impairment Liability coverage shall be included within the insurance coverages mentioned in subparagraphs 9.1.3, 9.1.4, and 9.1.5 above.

9.2 When equipment (owned or rented by Consultant) is required for the performance of the Work stipulated by a particular Work Order, Consultant shall also take out and maintain at his expense, during the performance of such Work, the following insurance:

9.2.1 Equipment Floater Insurance: Such insurance shall protect all mobile construction equipment and tools used by Consultant in the performance of the Work against physical damage; but Consultant may self-insure the same and shall have sole responsibility for any loss, damage or destruction of such equipment and tools.

9.3 Monsanto reserves the right to increase the insurance required (both as to dollar limits and scope of coverage) should the Work or its location warrant such increase in Monsanto's sole judgment. Consultant agrees to obtain such additional insurance when requested by Monsanto, provided such additional insurance is commercially obtainable and its cost is reimbursable by Monsanto to Consultant. All such increases must be requested prior to commencement of the Work.

9.4 Consultant shall make such arrangements as are necessary to insure that no reduction, cancellation or expiration of any policy of insurance providing the coverages required herein shall become effective until thirty (30) days from the date written notice is actually mailed to:

Sample C, one page

Consultant agrees that if Monsanto so requests, Consultant shall defend any such claim, action or right of action.

9.2 Notwithstanding the provisions of paragraph 9.1 hereof, Monsanto agrees that Consultant shall not be liable to Monsanto for loss, damage, costs and expenses as aforesaid which result solely from the negligence of Monsanto or its employees.

9.3 Monsanto further agrees that the provisions of paragraph 9.1 hereof shall not apply to occurrences caused by professional errors or omissions, or other professional negligence of Consultant in his performance of the Work, but liability as a result of such occurrences shall be as provided by law.

9.4 Any damage to or loss of Consultant's construction tools and equipment, regardless of the cause or reason for said damage or loss, shall be the loss of Consultant, its underwriters or insurers, and Consultant hereby expressly relieves Monsanto, its directors, officers or employees and its underwriters or insurers, from any claim or responsibility for such damage or loss and waives its right or rights of recovery, if any, against them. Consultant hereby agrees that any insurance policy covering said equipment will be suitably endorsed to provide for this waiver of right of recovery.

9.5 Except to the extent arising out of Contractor's negligence, Monsanto agrees to indemnify, defend and hold harmless Consultant from any third party claim, action or right of action at law or in equity, or injury (including death) to any third party, or damage to any property of third parties which arises out of or in any way is connected directly or indirectly to preexisting conditions or existing contamination at a site at which Work is performed under this Agreement.

ARTICLE 10.0 INSURANCE

10.1 Consultant shall take out and maintain at his own expense, for the term of this Agreement and at each location where Work is to be performed, at least the following insurance:

Sample C (see paragraph 9.5). From an agreement in which contractor ("Consultant") performed certain environmental groundwater investigations and studies, wells sampling, analysis and related services (not physical cleanup).

Sample D From an agreement in which contractor undertook design, installation, and/or repair of monitor wells, where well drilling and reworking was performed by subcontractor(s).

33. SUBCONTRACTORS - RESPONSIBILITY FOR LOSS OR DAMAGE.

(a) It is understood that there are certain risks inherent with well drilling, completion, reworking and testing due to the uncertainty of subsurface conditions and forces of nature. Therefore, notwithstanding any other provision in this Agreement, except as set forth in paragraph (b) below, Monsanto agrees to indemnify and hold Contractor harmless from and against all liabilities assumed by Contractor in its contracts with its subcontractors ("Subcontract(s)") relative to loss or damage:

(1) to equipment in the hole being drilled, completed, reworked or tested;

(2) to the hole itself;

(3) to such subcontractor's surface equipment, to the extent caused by any subsurface conditions or obstructions, pipelines, power lines and telephone lines which are not known to Contractor;

(4) to such subcontractor's equipment, in-hole or surface, to the extent caused by exposure to highly corrosive or otherwise destructive elements;

(5) to oil, gas or other mineral substances or water, if at the time of the act or omission causing such loss or damage said substance had not been reduced to physical possession above the earth's surface; and

(6) to formations, strata or reservoirs beneath the surface;

(7) caused by pollution/contamination resulting from subsurface or down-hole conditions, such as uncontrolled flow of water or other substance, the use or disposition of chemically treated drilling fluids, contaminated cuttings or casings, lost circulation and fish recovery materials and fluids;

provided that Contractor furnish Monsanto with a copy of applicable Subcontracts for Monsanto's approval prior to execution by Contractor, such Subcontracts to be furnished sufficiently in advance to allow Monsanto time for a thorough review.

(b) The provisions of this Section 33 shall not apply to the extent:

(1) said liabilities result from the negligence of Contractor or its subcontractors; or

(2) said liabilities are recoverable from insurance maintained by Contractor's subcontractors on such subcontractor's own equipment.

(c) Contractor agrees to use all reasonable efforts to ensure that the subcontractors' indemnity obligations assumed under the applicable Subcontracts will also be extended to Monsanto. In any event, Contractor agrees to pursue recovery from such subcontractors for losses, damages, costs or expenses incurred by Monsanto and covered by such subcontractors' contractual obligations to Contractor. All reasonable third party expenses incurred by Contractor in connection with such recovery effort shall be paid by Monsanto.

Sample E. From a contract covering removal, treatment and disposal of sludge from an industrial pond. A like indemnity provision also appeared in another agreement with that same contractor for handling and disposal of waste materials and assigned site remediation services.

24. INDEMNIFICATION.

(a) Contractor agrees to indemnify and hold Monsanto harmless from and against any and all liabilities, damages, fines, claims, penalties, forfeitures, costs, claims and expenses incident thereto (including costs of defense, settlement and reasonable attorneys' fees), which are caused by or arise from any negligent act or omission or any willful misconduct or any breach of contract by Contractor, its agents, employees or subcontractors relative to this Contract.

(b) Monsanto agrees to indemnify and hold Contractor harmless from and against any and all damages, fines, liabilities, claims, penalties, forfeitures, costs, claims and expenses incident thereto (including costs of defense, settlement and reasonable attorneys' fees) which are caused by or arise from any negligent act or omission or any willful misconduct or any breach of contract by Monsanto or its subcontractors relative to this Contract.

(c) In the event of joint or concurrent negligence, Contractor and Monsanto shall contribute to the common liability its pro rata share based upon the relative degree of the fault of each.

(d) Notwithstanding paragraphs 24(a), (b) and (c) above, as between Contractor and Monsanto:

(1) Contractor shall be fully responsible for bodily injury (including death) to any of its employees, agents or subcontractors (or any employee thereof), and

(2) Monsanto shall be fully responsible for bodily injury (including death) to any of its employees, agents, contractors (or employees thereof), excepting Contractor, its agents, subcontractors or employees of any of them),

and such responsible party shall indemnify and hold harmless the other party against all claims of whatever kind or nature arising out of such injury regardless of the cause of same, including, without limitation, those injuries caused by the joint or concurring negligent acts or omissions, but not to the extent caused by the willful misconduct, of such responsible party. Upon the request of the indemnified party, the responsible party shall promptly defend any such demand, claim, cause of action or suit.

25. INSURANCE CERTIFICATES/ENDORSEMENTS. Contractor shall not begin the Work under this Contract until:

(a) it has obtained all the insurance required herein,

(b) it has furnished certificates of insurance satisfactory to Monsanto, and

(c) it has furnished endorsements, in the form of Exhibit "C" attached hereto and made a part hereof, satisfactory to Monsanto,

(d) such insurance, the certificates and the endorsements have been approved by Monsanto.

All certificates of insurance and the endorsements evidencing the coverages required herein shall provide that no reduction, cancellation or expiration of such insurance coverage shall become effective until thirty (30) days from the date written notice thereof is mailed to the name and address of the person designated in Article 29 hereof as the recipient of notices to Monsanto. Additionally, during the term of this Contract, Contractor shall provide further certificates and endorsements to Monsanto at least thirty (30) days prior to expiration dates shown on certificates and endorsements furnished pursuant to subparagraphs (b) and (c) above evidencing that the insurance required herein is in effect after said dates.

26. INSURANCE REQUIREMENTS. Contractor shall take out and maintain for the life of this Contract (at its own expense unless otherwise specifically set forth) at least the following insurance:

Westinghouse Electric Corporation

Samuel R Pitts
Vice President
Environmental Affairs

Westinghouse Building
Gateway Center
Pittsburgh Pennsylvania 15222

August 24, 1993

Ms. Sherri Wasserman Goodman
Deputy Under Secretary of Defense
Office of the Under Secretary of Defense
Washington, DC 20301-3000

Dear Ms. Goodman,

The Chairman of Westinghouse Electric Corporation has requested that I respond to your letter of August 3, 1993, pertaining to the indemnification of environmental clean-up contractors in the private sector.

Over the past 13 years, Westinghouse has contracted with a substantial number and variety of organizations that provide services related to environmental clean-up. Given the broad scope of your request, substantial resources and time would have to be devoted to the collection and compiling of the information that would provide the basis of the answers to your questions. Unfortunately, the substantial cost, coupled with the time constraints, does not allow Westinghouse to respond to your request.

If Westinghouse can be of assistance in any other way with respect to this project, please feel free to contact me directly.

Very truly yours,

Samuel R. Pitts
Vice President
Environmental Affairs

Ashland

Ashland Petroleum Company

DIVISION OF ASHLAND OIL, INC.

P. O. BOX 391 • ASHLAND, KENTUCKY 41114 • (606) 329-3333

LAW DEPARTMENT

September 29, 1993

Office of Deputy Under Secretary of Defense
(Environmental Security Department of Defense)
Pentagon Room 3E808
Washington, D.C. 20301-3000

Attention: Earl Dehart, ODUSD(ES)CL

Dear Mr. Dehart:

Pursuant to our recent conversation, I am providing the information that was requested. The items below generally follow the order of the questions which were posed on the private-sector survey.

- While a portion of all environmental cleanup work conducted by this company is performed by in-house staff, a majority is performed by and through environmental contractors.

- Typical environmental cleanup projects that have been conducted by and for Ashland since 1980 include UST removals/closures, RCRA closure activities, non-hazardous material management and Superfund site remediation activities. (The later in conjunction with other potentially responsible parties.)

- Ashland has contracts with a number of companies that perform environmental cleanup work, such as Environ, Dames & Moore, Geraghty & Miller, Chem Waste Management and BFI. Depending on the circumstances, Ashland also utilizes regional cleanup contractors.

- A contractor might perform any or all of the work phases identified in the survey, although typically Ashland closely coordinates or participates in these activities. Most work is performed under a fixed price contract. Although again, in rare circumstances, other arrangements may be made.

- To the best of my knowledge, Ashland has neither indemnified a environmental cleanup contractor for any work, at any location, at any time, nor endeavored to develop other risk sharing approach with these same contractors.

- Ashland negotiates specific contract provisions which provide this company with both indemnification and the necessary insurance coverage.

- In the past year, Ashland has spent more than $10 MM, throughout the corporation, for environmental cleanup projects of all kinds.

While we are happy to have participated in this survey, we ask that both the written and telephonic responses not be specifically identified with the Company for a number of business reasons.

Should you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Joseph A. French
Environmental Group Counsel

dlh
jf031ltr

cc: R. V. Willenbrink, Ashland Oil, Inc.

Telecon 28 Sep 92

Joseph French/Ron Willenbrink

Ashland Petroleum Co.

(606) 329 3471

(1) 10 M+

(2) Pump & Treat Ground water, soil

(3) Enviro-, Dames & Moore, Garity/Miller, Chemical waste, RFI

(4) RI/FS & RD/RA (Do some clean up themselves)
Fixed Price Mostly

(5) Never

(6) N/A

(7) No

(8) Not Needed Plenty of bids 3 or 4

Shell Oil Company

One Shell Plaza
P.O. Box 4320
Houston, Texas 77210

August 23, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
ATTN: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Gentlemen:

This is in response to Ms. Goodman's letter concerning the indemnification of contractors performing environmental cleanup work for Shell Oil.

Over the past several years, Shell has made substantial progress in the contracting of environmental services. Because Shell spends ten of million of dollars annually with consultants and contractors for environmental projects at its refineries, chemical plant, E&P sites and service stations, significant attention is paid to managing the contracts for these materials and services.

A key aspect of the contracting strategy has been to standardize the commercial and legal requirements for firms performing environmental services for Shell. In 1990, Shell's Purchasing and Legal Departments jointly developed the Master Environmental Service Agreement (MESA); since then, the MESA has become the standard contract document for environmental contractors working on Shell sites.

A copy of the MESA is attached; section 3.0 of the agreement addresses liability-indemnity.

Thus far, Shell has not had to indemnify any of its contractors who have been working under the terms and conditions of the MESA.

We have also attached a list of contractors who currently have agreed to the terms and conditions of the MESA. These firms currently are performing the vast majority of the environmental consulting and cleanup activity for our refineries, chemical plants and service stations.

It should be noted that not all of the contractors on the attached list have the same technical capabilities. Some contractors are small regional firms specializing in underground storage tank removal; others are international companies capable of providing the entire range of environmental services.

The list of MESA contractors includes firms specializing in air, water and soil and covers all services that the consultants are capable of performing. The services typically provided by the consultants include site assessments, remediation, sampling, monitoring, permitting and emissions control testing.

Since the MESA requires the contractors to indemnify Shell up to the limits specified in the agreement, the contractors are assuming some of the risk associated with the project. We have also been successful in having the consultants assume some of the financial risks associated with the projects by placing a greater emphasis on lump sum and unit price contracting. Both of these contracting methods require the contractor to establish prices for specific phases of a project and, in effect, assume the financial risk for costs exceeding the quoted price.

Unit pricing has been particularly successful in the cleanup of our service stations where wells are drilled on a $/ft and soil is excavated on a $/yd basis. This is the same strategy adopted by the Texas Water Commission (refer to the TWC's Reasonable Cost Guidelines dated June 1993).

If you have any questions about the MESA or the manner in which Shell contracts for its environmental services, please contact Bill Meyer at (713) 241-5050. Bill is assigned to the HS&E procurement group and is responsible for environmental contracting in Shell's Mid-Continent Region.

Your truly,

Kent W. Rogers
Manager Remediation

WEM/cal

Attachments

CONTRACTORS USING THE SHELL MASTER ENVIRONMENTAL SERVICE AGREEMENT (MESA)

ATEC Associates Inc.
AWD Technologies
Brown & Caldwell
Brown & Root Environmental Services (Halliburton-NUS)
Chemical Waste Management
CURA, Inc.
Dames & Moore
Enecotech, Inc.
Engineering-Science
ENSR
ERM-Midwest
ERM-Southwest
Fugro-McClelland
Groundwater Technology INc.
Heritage Environmental Services
ICF/Kaiser Engineers
International Technology Corp. (I. T. Corp.)
Jones & Neuse
Laidlaw Environmental Services
Law Companies Group
LWD, Inc.
Metcalf & Eddy
O. Erickson Enterprises
OHM Corporation
Radian Corporation
Riedel Environmental Services
Safety Kleen Corporation
Woodward-Clyde Consultants

VERSION 1.3

TABLE OF CONTENTS

MASTER ENVIRONMENTAL SERVICES AGREEMENT

*** ADDENDA ARE TO BE INCLUDED WHEN COMPANY PROVIDES THESE SERVICES IN ADDITION TO BASE ENVIRONMENTAL SERVICES

MASTER ENVIRONMENTAL SERVICES AGREEMENT
CONTRACT NO.: _____

This Master Environmental Services Agreement (Agreement), made and entered into as of the 1st day of _____, 19__, by and between SHELL OIL COMPANY, a Delaware corporation, hereinafter referred to as "BUYER" and _____, a _____ corporation, hereinafter referred to as "CONTRACTOR", establishes the terms and conditions that will apply to the purchase of _____ services ordered by BUYER on an Order, as hereinafter defined, and accepted by CONTRACTOR.

This Agreement will apply to Orders issued by any Affiliate of BUYER, or Subsidiary of BUYER, as hereinafter defined, and accepted by CONTRACTOR if such Affiliate or Subsidiary, at its option and sole election, chooses to use this Agreement by placing Orders hereunder.

BUYER shall have no obligations or liability under this Agreement for Orders issued or committed or for the performance or failure to perform hereunder by any Affiliate or Subsidiary of BUYER.

An Affiliate or Subsidiary of BUYER shall have no obligation or liability under this Agreement for Orders issued or committed or for the performance or failure to perform hereunder by BUYER or by any other Affiliate or Subsidiary of BUYER.

AFFILIATES AND SUBSIDIARIES OF BUYER:

"Affiliate of BUYER" shall mean N.V. Koninklijke Nederlandsche Petroleum Maatschappij, a company of The Netherlands, The Shell Transport and Trading Company, P.L.C., an English company, and any company (other than BUYER) in whatever country organized, in which either or both of said companies shall, at the time in question and directly or indirectly through one or more intermediaries, own or have the power to exercise control of fifty percent (50%) or more of the stock having the right to vote in election of directors.

"Subsidiary of BUYER" shall mean any company (other than BUYER), in whatever country organized, in which BUYER, at the time in question and directly or indirectly through one or more intermediaries, owns or has the power to exercise control of fifty percent (50%) or more of the stock with the right to vote in an election of directors.

PURPOSE:

BUYER and CONTRACTOR agree as follows:

1.0 MASTER AGREEMENT

1.1 DURATION - This Agreement shall remain in effect until terminated, as provided herein, by either party.

1.2 PREVAILING TERMS AND CONDITIONS - In no event shall the preprinted or conflicting terms or conditions found on any BUYER purchase or work order or any CONTRACTOR's usual field work orders and/or job tickets be considered an amendment or modification of this Agreement, even if such documents are signed by representatives of BUYER and CONTRACTOR. The terms and conditions of this Agreement shall prevail in determining the rights and liabilities of the parties hereto.

1.3 ORDERS - Orders may be placed against this Agreement using whatever documentation deemed appropriate by the BUYER's Location, Affiliate, or Subsidiary, but every such Order ("Order") must reference the contract number of this Agreement and be assigned a release number by the BUYER Location, Affiliate, or Subsidiary. Additional instructions and requirements may be included in the Order, but the terms of this Agreement shall not be modified, terminated, or discharged except by written instrument signed by authorized representatives of the parties hereto.

1.4 RATES - Rates charged under this Agreement shall be according to the Rates in Schedule A of this Agreement, or as stated in the Order and accepted by CONTRACTOR, whichever are lower. Rates shall remain firm for a period of twelve months from last accepted change. Rate increases caused by circumstances beyond the control of the CONTRACTOR, (e.g. federal, state and local tax increases, etc.) may be submitted at anytime, but any proposed changes to Rates must be submitted 60 days prior to requested effective date and be accompanied by adequate cost justification and documentation to allow for proper review by the BUYER.

1.5 PAYMENT - Each invoice for services performed under this Agreement, shall be paid, net terms, by BUYER within thirty (30) days upon receipt of invoice by BUYER at the Bill To address indicated on the Order. To ensure timely payment, CONTRACTOR must include the following information on all invoices:

1. Invoice number and date.
2. Location, Lease, Field and/or Rig name or address where materials/services are received.
3. Name of person ordering materials/services (first and last).
4. This contract number and Release number
5. Delivery Ticket (if applicable) with ship date.
6. Supporting documentation for third-party charges, i.e. copy of third party invoice, handling charge (if applicable) shown separately.
7. A full description of the materials delivered and/or the services rendered and the price per unit with totals fully extended.
8. Discount extended by CONTRACTOR.
9. For work performed on a time and materials basis, include the names and specific hours worked (starting and stopping time) for each contract employee and the rates charges per hour. Time sheets must be approved by BUYER personnel and submitted in support of CONTRACTOR'S invoice.

2.0 ETHICS AND QUALITY

2.1 ETHICS

BUYER and CONTRACTOR will maintain relationships based on mutual respect, honesty, and integrity. The offer or acceptance of gifts, entertainment, or other special favors is not permissible. Courtesies of nominal value and social invitations readily deemed to be customary and proper under the circumstances are not considered unethical, provided they imply no business obligation whatsoever nor involve significant or out of the ordinary expense.

2.2 QUALITY

CONTRACTOR warrants and represents that it has or will have adequate equipment in good working order and fully trained personnel, properly

certified and capable of efficiently providing services.

All goods and services furnished by CONTRACTOR will be in accordance with mutually agreed to requirements and/or CONTRACTOR's representations and will be free from defects.

CONTRACTOR shall perform all work safely, diligently, carefully and in a good and workmanlike manner; shall furnish all necessary labor, supervision, machinery, equipment and materials and supplies (except those furnished by BUYER). CONTRACTOR shall be fully responsible for all work performed by its subcontractors.

All material and equipment furnished by CONTRACTOR and all work performed by CONTRACTOR and its subcontractors shall be subject to inspection by BUYER or BUYER's representative who shall have access at all reasonable times, upon notice to CONTRACTOR and when accompanied by a representative of CONTRACTOR. BUYER's inspection shall not constitute acceptance of patent defects or relieve CONTRACTOR or its subcontractors from any duties, obligations, or liabilities under this Agreement associated with such defects.

CONTRACTOR warrants that the services and/or goods to be provided pursuant to the provisions of this Agreement shall comply with the applicable scope of work document and services shall otherwise be provided to BUYER in accordance with sound and generally accepted industry standards. In the event that CONTRACTOR's services and/or goods are defective in that they fail to comply with the foregoing standards, CONTRACTOR shall be obligated to and shall promptly perform at CONTRACTOR's expense, (i) such corrective services of the type originally performed and/or (ii) repair or replace such defective goods as may be necessary to correct any such deficiencies.

When CONTRACTOR is employed to render professional services only, CONTRACTOR shall follow the practice of the engineering profession to make findings, provide opinions, make factual presentations, and provide professional advice and recommendations.

CONTRACTOR's express warranties shall be

specifically limited to those contained in this Agreement (set forth above or elsewhere herein) or provided by CONTRACTOR in their proposal which act to extend or grant BUYER greater protection.

No acceptance or payment by BUYER shall constitute a waiver of the warranties set forth herein.

3.0 LIABILITY-INDEMNITY

3.1 CONTRACTOR'S EMPLOYEES, ITS AGENTS OR SUBCONTRACTORS

CONTRACTOR shall defend, indemnify and hold harmless BUYER, its parent, affiliates and subsidiary companies, coventurers, and directors, employees and agents of such companies against any loss, damage, claim (including but not limited to any claims of any government agency), suit, liability, judgment and expense (including attorneys' fees and other costs of litigation), and any fines, penalties and assessments, arising out of injury, disease or death of, or damage to or loss of property of, CONTRACTOR's employees, its agents or subcontractors resulting from or in connection with the negligence or fault of the CONTRACTOR, its agents or subcontractors (including but not limited to employment decisions or employee relations practices or policies of the CONTRACTOR, its agents or subcontractors made or instituted in connection with performance of this Agreement), even though caused by the concurrent or contributory negligence (whether active or passive or of any kind or description) or fault of a party indemnified, subject to the next succeeding sentence herein. Without regard to the extent of negligence, if any, of an indemnified party, CONTRACTOR, at its expense shall defend any such claim or suit against an indemnified party and shall pay any judgment resulting therefrom. If, after CONTRACTOR has both defended any such suit and paid any resulting judgment, it is judicially determined that the injury, disease, death or damage was caused by the sole negligence of a party indemnified, then BUYER shall reimburse CONTRACTOR for the judgment and for reasonable defense costs incurred. BUYER shall have the right but not the duty to participate in the defense of any such claim or suit with attorneys of its own selection without relieving CONTRACTOR of any obligations hereunder. In no

event shall CONTRACTOR be liable hereunder for the concurrent or contributory negligence of a party indemnified in excess of $100,000 per occurrence.

3.2 BUYER'S PROPERTY AND THE ENVIRONMENT

To the maximum extent permitted by applicable law, CONTRACTOR shall defend, indemnify and hold harmless BUYER, its parent, affiliates and subsidiary companies, coventurers, and directors, employees and agents of such companies against any loss, damage, claim (including but not limited to any claims of any government agency), suit, liability, judgment and expense (including attorneys' fees and other costs of litigation), and any fines, penalties, and assessments, arising out of damage to or loss of BUYER's property (including BUYER's existing facilities) or the environment resulting from or in connection with the negligence or fault of the CONTRACTOR, its agents or subcontractors, to the extent and proportion caused by the sole, concurrent or contributory negligence or other fault of CONTRACTOR, its agents or subcontractors. The foregoing indemnity is to apply regardless of concurrent or contributory negligence or other fault, if any, of an indemnified party. In no event shall CONTRACTOR be liable for damage to or loss of BUYER's property or to the environment hereunder in excess of $1,000,000 per occurrence.

3.3 THIRD PARTIES

To the maximum extent permitted by applicable law, CONTRACTOR shall defend, indemnify and hold harmless BUYER, its parent, affiliates and subsidiary companies, coventurers, and directors, employees and agents of such companies against any loss, damage, claim (including but not limited to any claims of any government agency), suit, liability, judgment and expense (including attorneys' fees and other costs of litigation), and any fines, penalties and assessments, arising out of injury, disease or death of, or damage to or loss of property of, persons (except for CONTRACTOR's employees, its agents or subcontractors, and BUYER's property and the environment) resulting from or in connection with the negligence or fault of the CONTRACTOR, its agents or subcontractors (including but not limited to employment decisions or employee relations practices or

policies of the CONTRACTOR, its agents or subcontractors made or instituted in connection with performance of this Agreement), to the extent and proportion caused by the sole, concurrent or contributory negligence or other fault of CONTRACTOR, its agents or subcontractors. The foregoing indemnity is to apply regardless of concurrent or contributory negligence or other fault, if any, of an indemnified party.

3.4 BUYERS INDEMNITY

BUYER and CONTRACTOR recognize and agree that CONTRACTOR bears no responsibility whatsoever for the creation, existence or presence of any toxic, hazardous, radioactive, infectious or other dangerous substances existing at BUYER'S work site at the time CONTRACTOR commences performance of services at said site ("Pre-existing Conditions"). BUYER agrees to indemnify, save harmless and defend CONTRACTOR from and against any and all liabilities, demands, claims, penalties, damages, forfeitures, suits and the costs and expenses incident thereto (including costs of defense, settlement and reasonable attorneys fees) resulting from or in connection with the Pre-existing Conditions, except to the extent the same result from the negligence or fault of the CONTRACTOR, its employees, agents or subcontractors.

3.5 STRICT LIABILITY

In the event of unseaworthiness or any type of strict or absolute liability (excluding breach of warranty) attributed to a party, then each party shall, subject to the provisions in 3.1, 3.2, 3.3 and 3.4 above, defend, indemnify, and hold the other party harmless or contribute in the proportion that each party's negligence, fault or omission caused or contributed to the strict or absolute liability condition which resulted in personal injury, death or property loss or damage.

3.6 RELATION TO INSURANCE

The obligations, indemnities, and liabilities assumed by the CONTRACTOR under this Article 3 shall not be limited by any provisions or limits of insurance required elsewhere in this Agreement and shall survive the termination of

this Agreement.

If it is judicially determined that any of the indemnity obligations (which CONTRACTOR agrees shall be supported by insurance) under this Article 3 or insurance obligations as specified elsewhere in this Agreement are invalid, illegal or unenforceable in any respect, said obligations shall automatically be amended to conform to the maximum monetary limits and other provisions in the applicable law for so long as the law is in effect.

3.7 INDIRECT AND SPECIAL

Neither party shall be liable in any event for loss of anticipated profits, or any indirect, special, incidental or punitive damages from any cause whatsoever.

3.8 PARTICIPATION RIGHTS

Either party shall have the right at its option to participate at its sole expense in the defense of any claim or suit covered by Article 3 with an attorney of its choice without relieving the other of any of its obligations hereunder.

4.0 EMERGENCY POLLUTION CONTROL

Without relieving CONTRACTOR of any of its obligations, if the BUYER believes there is an emergency situation requiring immediate remedial action, it is agreed that BUYER may take part, to any degree it deems necessary, in the control and removal of any pollution or contamination which is the responsibility of CONTRACTOR under the foregoing provisions: CONTRACTOR shall reimburse BUYER for the cost thereof, subject to any limitation above provided, upon the receipt of billing from BUYER. Initiation of cleanup operations by either party shall not be construed as an admission or assumption of liability.

5.0 SAFETY AND HEALTH

5.1 PERSONNEL

CONTRACTOR shall place the highest priority on safety and health while conducting work under this Agreement. Insofar as CONTRACTOR's operations for work performed hereunder are concerned, it is the CONTRACTOR's responsibility to provide and maintain a safe working

environment for its personnel and to adequately protect the safety and health of BUYER's personnel, the public, and other third parties. Maintaining a safe work environment shall include, but not be limited to, the evaluation or monitoring for workplace exposures caused by CONTRACTOR's operations. All CONTRACTOR's tools, equipment, facilities, and other items used and practices employed by CONTRACTOR in accomplishing the work are considered to be part of the working environment.

CONTRACTOR shall be solely responsible to inform and monitor its personnel for compliance with any applicable laws, rules, and regulations concerning safety and health of operations to be performed by CONTRACTOR.

CONTRACTOR will obtain from BUYER a copy of the safety requirements associated with the particular work site or work to be performed. These requirements shall serve as minimum standards to be enforced by CONTRACTOR and do not in any way relieve CONTRACTOR of its obligations to comply with all applicable federal, state and local safety and health laws and regulations. CONTRACTOR will utilize appropriate methods or procedures and take appropriate precautions as necessary to adhere to requirements while conducting work. Specifically, CONTRACTOR will have in effect a written safety and health program that it deems appropriate. CONTRACTOR safety program shall include:

- Commitment to safety by management and supervisors.
- Safety orientation and training for new or inexperienced employees.
- Continuing safety training and safety awareness efforts.
- Safety performance reporting and monitoring.
- Assigned safety support responsibilities.
- Accident investigation and reporting.

CONTRACTOR shall be solely responsible for enforcing adherence of CONTRACTOR's employees to CONTRACTOR's safety program.

CONTRACTOR warrants that each of its personnel is capable of performing the assigned work and has been properly trained to perform the work under this Agreement in a safe manner and in the safe performance of all ordinary aspects of the work or situations encountered or anticipated in and around refining, chemical, marketing, pipeline and oil field operations and/or offshore platforms as applicable for services being provided.

CONTRACTOR will be solely responsible to provide and maintain any personal safety equipment (i.e., hearing protection, eye protection, respiratory protection, special clothing, etc.), tools, and equipment necessary for its personnel to perform the work required under this Agreement.

In the event of a work related accident, injury or illness to CONTRACTOR's personnel on BUYER's property, CONTRACTOR shall: a) immediately notify BUYER's representative of accident, and b) investigate and provide written report of accident to BUYER's representative within 24 hours of accident or as soon thereafter as possible. CONTRACTOR shall also be responsible for all required regulatory accident reporting and accident record updating (e.g., OSHA 200 Log).

5.2 DRUGS, ALCOHOL, AND FIREARMS

BUYER's policy on illegal drugs, alcohol, and firearms, as it relates to Contractors, is set forth below. CONTRACTOR agrees to communicate such policy to CONTRACTOR's personnel and agrees to cooperate with BUYER in implementing such policy on the jobsite(s) covered by this Agreement.

The use, possession, transportation, promotion, or sale of illegal drugs, drug paraphernalia, or otherwise legal but illicitly used substances by anyone while on BUYER's premises is absolutely prohibited. Except where specifically authorized, the use, possession, or transportation of alcoholic beverages, firearms, or weapons is also prohibited. CONTRACTOR's personnel who are found in violation of these prohibitions will not be allowed on BUYER's premises and may be referred to law enforcement agencies for their action.

The term "BUYER's premises" in this Article is

used in the broadest sense and includes all land, property, buildings, structures, installations, boats, planes, helicopters, cars, trucks, and all other means of conveyance owned by or leased to BUYER or otherwise being utilized in BUYER's business.

Entry onto BUYER's premises constitutes consent to and recognition of the right of BUYER and its authorized representatives to search the person, vehicle, and other property of individuals while on BUYER's premises. Such searches may be initiated by BUYER without prior announcement and will be conducted at such times and locations as deemed appropriate. CONTRACTOR's personnel who refuse to cooperate with a search will not be allowed on BUYER's premises.

Additionally, CONTRACTOR is required to take whatever steps CONTRACTOR deems necessary (including adopting its own drug control program if necessary) to ensure that involvement with drugs on the part of CONTRACTOR's personnel working on BUYER's premises or with BUYER's personnel does not create a presence of drug-related problems in the work place. CONTRACTOR may conduct contraband searches and drug testing of CONTRACTOR's employees on BUYER's premises in areas where CONTRACTOR is performing work. CONTRACTOR shall notify and obtain approval of BUYER's Superintendent prior to conducting such searches or testing.

5.3 CHEMICAL SAFETY AND HEALTH COMMUNICATIONS

Both parties agree to comply with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) 29 CFR 1910.1200 which requires employers to inform their workers of the presence, identity and hazards of workplace materials through a written hazard communication program, labels, substance lists, material safety data sheets (MSDS), and information and training. In addition, each party will disseminate appropriate health and safety information to their subcontractors and those who handle, use or may be exposed to such chemical substances.

CONTRACTOR shall furnish only chemical substances that are listed in the Toxic Substances Control Act (TSCA) chemical substances inventory maintained by the U.S. Environmental Protection Agency.

CONTRACTOR will have MSDS available at job site when chemical substances are being furnished. In the event CONTRACTOR leaves chemical substances in BUYER's possession, CONTRACTOR will provide or will have previously provided most current MSDS to BUYER's representative at that location or field office. The MSDS shall include, but not limited to, the following:

- The MSDS will contain health, safety, and other hazard communication information consistent with OSHA HCS.

- The MSDS will list the appropriate Chemical Abstract Service number (CAS) or the confidentiality thereof and the TSCA status for each chemical substance.

- The MSDS will list, for all chemical substances furnished, the amounts and percentages of all hazardous chemicals and the reportable quantities (RQ), as defined by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Superfund Reauthorization Act (SARA Title III).

- The MSDS will list, for all chemical substances furnished in the State of California's jurisdiction, all chemicals known by the State of California to cause cancer or reproductive toxicity as defined by California Proposition_65.

In the event CONTRACTOR deems any returned chemical substances unacceptable for credit, CONTRACTOR will segregate such substances and shall immediately arrange for their return to BUYER. Under no circumstances will CONTRACTOR dispose of such substances without the written permission of BUYER.

5.4 PARTICIPATION RIGHTS

BUYER will have the right, but not the obligation, to periodically review CONTRACTOR's operation for the purpose of monitoring CONTRACTOR's compliance with the health and safety requirements of this Agreement. Such reviews shall not relieve CONTRACTOR of its responsibility for protecting the safety and health of all personnel, nor shall they constitute an obligation on the part of BUYER to enforce compliance.

6.0 INSURANCE

6.1 TYPES AND LIMITS: At all times during the term of this Agreement, CONTRACTOR shall maintain, at CONTRACTOR's expense, insurance satisfactory to BUYER of the minimum types and limits as follows:

A. Insurance to cover any risk exposures under the workers' compensation, environmental, transportation, and any other applicable laws, ordinances and regulations providing statutory benefits covering employees of CONTRACTOR engaged in operations hereunder.

B. Employers' Liability with a limit of $1,000,000 each occurrence. (This coverage may be contained to some extent in other insurance listed below.)

C. Commercial General, including Completed Operations, Liability Insurance (including, but not limited to, contractual liability for CONTRACTOR's obligations hereunder to defend and indemnify BUYER) with limit of $5,000,000 each occurrence for bodily/personal injury and property damage combined.

D. Commercial Automobile Liability Insurance with limit of $1,000,000 each occurrence for bodily injury and property damage combined.

E. If watercraft are owned or chartered by CONTRACTOR, full-form Protection and Indemnity Insurance (including, but not limited to, repatriation expenses, wages, maintenance and cure) and Hull and Machinery insurances covering any such watercraft with limit of $5,000,000 each occurrence or the actual cash value of the highest valued vessel, whichever is greater. It shall specifically include, without limitation, coverage for any pollution or contamination, including cleanup expenses, resulting from or in any way related to the operation of any watercraft. (This coverage may be contained to some extent in other insurance listed elsewhere herein.) This insurance shall provide that any action in rem against a vessel owned or chartered by CONTRACTOR shall be considered to be an action against CONTRACTOR.

F. If aircraft are owned, leased, or hired by CONTRACTOR, Aircraft Liability Insurance (including passenger liability) with limit of $1,000,000 each occurrence.

G. Errors and Omissions Liability Insurance with limit of $1,000,000 each occurrence.

Any of the insurance required above shall be regarded as primary insurance underlying any other applicable insurance.

CONTRACTOR's obligations under this Article 6 shall not be limited in any way by the liability and indemnity provisions of Article 3 herein.

6.2 ADJUSTMENT OF LIMITS

If it is judicially determined that the monetary limits of the insurance required herein do not conform with applicable law, it is agreed that said insurance shall automatically be amended to conform to the maximum monetary limits and other provisions in such law.

6.3 ADDITIONAL INSUREDS AND SUBROGATION WAIVER

CONTRACTOR shall arrange for its insurance carriers to provide the following provisions as appropriate to maintain the maximum benefit to BUYER:

- Inclusion of BUYER as additional insured in CONTRACTOR's Commercial General Liability, Protection and Indemnity and all other applicable third party liability insurance to the extent of CONTRACTOR's liabilities under this Agreement.

- Waiver of subrogation in favor of BUYER in CONTRACTOR's Workers' Compensation, Employers' Liability, Hull and Machinery, and all other applicable property and liability insurance to the extent of CONTRACTOR's liabilities under this Agreement.

6.4 CANCELLATION NOTICE

All insurance required in Article 6 above shall be maintained by CONTRACTOR through insurance carriers acceptable to BUYER and shall not be cancelled or materially changed without thirty

(30) days prior written notice having been furnished to BUYER.

6.5 SELF-INSURANCE

In the event CONTRACTOR self-insures in part or in whole any risks for which insurance is herein required, notice of same must be in writing and approved by BUYER.

6.6 INSURANCE VERIFICATION

CONTRACTOR agrees to furnish BUYER, upon request, evidence of such insurance satisfactory to BUYER.

7.0 TAXES AND CLAIMS

7.1 TAXES

Unless otherwise provided herein or by law, CONTRACTOR shall pay all taxes, licenses and fees levied or assessed on CONTRACTOR in connection with or incidental to the performance of this Agreement by any governmental agency for unemployment compensation insurance, old age benefits, social security, or any other taxes upon the wages of CONTRACTOR, its agents, employees and representatives. In regard to the above, CONTRACTOR shall indemnify BUYER against any and all liability and expense and reasonable related costs.

7.2 BILLS AND LIENS

CONTRACTOR shall pay all indebtedness for all goods and services provided in the performance of this Agreement. CONTRACTOR shall not permit any lien or charge to attach to the work or the premises. In the event either is attached, CONTRACTOR shall promptly procure its release and indemnify BUYER against all related damage and expenses.

8.0 PATENTS, COPYRIGHTS, TRADEMARKS, AND CONFIDENTIALITY

8.1 INFRINGEMENT

CONTRACTOR shall defend and indemnify BUYER against all claims, suits, liabilities and expenses on account of alleged infringement of any patent, copyright or trademark, resulting from or arising in connection with the manufacture, sale, normal use or other disposition of any article, material or service

furnished hereunder. However, when the alleged infringement results from BUYER's imposed requirements, BUYER shall defend and indemnify CONTRACTOR.

The party to be indemnified pursuant to this section 8.1 shall give the other party: a) prompt written notice of the commencement or threat of commencement of any infringement and any suit in connection therewith, b) all cooperation necessary in connection with any such suit, and c) the right to control the defense of and any negotiations for settlement of such suit, as well as any appeals and any ancillary litigation deemed necessary by the other party.

8.2 CONFIDENTIALITY

CONTRACTOR shall not disclose any business (e.g., production volumes, etc.) or technical (e.g., processing information, etc.) information provided, obtained or inferred from any and all operations conducted in the performance of this Agreement without the express written consent of BUYER. The confidential status of such information shall not extend to any such information which can be shown by reasonable proof: a) to have been in the public domain at the time of receipt by CONTRACTOR hereunder, b) to have become generally known to the public without any fault of CONTRACTOR following its receipt by CONTRACTOR hereunder, c) to have been disclosed to CONTRACTOR by a third party as a matter of right and without any third-party restriction on CONTRACTOR as to further disclosures, or d) to have become known by CONTRACTOR without violation of existing law or other Agreement with BUYER prior to receipt hereunder.

9.0 USE OF BUYER'S PREMISES

CONTRACTOR will conduct its activities on BUYER's premises in such a manner to minimize interference with BUYER's operations and the operations of other contractors on the premises. CONTRACTOR will maintain the work site and any staging or storage areas used or occupied by CONTRACTOR on the premises reasonably clean and orderly and generally free of debris and scrap. Upon completion of the work, CONTRACTOR shall leave the premises clean and free of all equipment and rubbish.

10.0 AUDIT

10.1 FINANCIAL AUDIT

CONTRACTOR shall maintain during the course of the work, and retain for not less than four years after completion thereof, complete and accurate records in support of all CONTRACTOR's charges to BUYER under this Agreement; and BUYER shall have the right, at any reasonable time, to inspect and audit those records, at BUYER's expense, by authorized representatives of its own or any public accounting firm selected by it; provided that nothing contained herein shall be construed as obligating CONTRACTOR to change its current record-keeping practices or the records that it keeps in order to comply with BUYER's audit or inspection requirements, it being the intention of the parties that the records of CONTRACTOR pertaining to the work, which are kept in the normal course of CONTRACTOR's business, shall be made available to BUYER for the purpose of verifying the correctness and accuracy of charges and credits made or granted by CONTRACTOR to BUYER, and payments made by BUYER to CONTRACTOR, in relation to the work.

The records to be thus maintained and retained by CONTRACTOR shall include (without limitation): a) payroll records, as maintained at CONTRACTOR's service centers, accounting for total time distribution of CONTRACTOR's employees working full or part-time on the work; it is specifically agreed, however, that BUYER's right to inspect and audit does not extend to the monetary portion of CONTRACTOR's payroll records; b) invoices for purchases showing quality and quantity but excluding price, receiving and issuing documents, including loading tickets, all other unit inventory records for CONTRACTOR's store stock and returns for credit and all records pertaining to the handling, hauling, or disposal of hazardous materials or waste products; c) paid invoices and cancelled checks for materials purchased and for subcontractors' and for any other third-party charges; and d) accurate and auditable records of any and all gifts, entertainment, or other gratuities to individual BUYER personnel. CONTRACTOR shall have the right to exclude its trade secrets, patented formulae, or processes from such audit.

In the event that any of the aforementioned records reveal information about any customer of CONTRACTOR other than BUYER, CONTRACTOR shall

have the right to furnish machine copies of the records to BUYER and the further right to delete there from the information relating to any customer other than BUYER.

10.2 CONTRACTUAL AUDIT

BUYER shall have the right, but not the obligation, to periodically review CONTRACTOR's operations for the purpose of monitoring CONTRACTOR's compliance with the terms and conditions of this Agreement. Such reviews shall not relieve CONTRACTOR from its responsibilities to comply with all terms and conditions of this Agreement, nor shall they constitute an obligation on the part of BUYER to enforce compliance.

11.0 FORCE MAJEURE

Neither party shall be liable to the other for delays, damages, or any failure to act, due to, occasioned or caused by reason of federal or state laws, or the rules, regulations or orders of any public body or official exercising or purporting to exercise authority or control concerning the operations covered hereby, or due to, occasioned or caused by strikes, terrorists, riots, civil commotions, action of the elements or causes beyond the reasonable control of the parties affected hereby. Delays due to the above causes, or any of them, shall not be deemed to be a breach of or failure to perform under this Agreement. However, during the existence of such force majeure conditions, no payments shall be due by BUYER to CONTRACTOR when services are not being performed except payments for the provision of goods and services occurring prior to the existence of force majeure. Appropriate steps shall be promptly taken to remedy force majeure conditions except that no party shall be obligated to settle strikes or other labor disputes. Notice of force majeure occurrences and the details constituting them shall be given promptly to the other party in writing.

12.0 INDEPENDENT CONTRACTOR

CONTRACTOR is an independent contractor with respect to the performance of all work hereunder and neither CONTRACTOR nor anyone employed by CONTRACTOR shall be deemed for any purpose to be the employee, agent, servant or representative of BUYER in performance of any work or service hereunder. BUYER shall have no direction or control of CONTRACTOR or its employees and agents except in the results to be obtained. The work performed hereunder shall meet the approval of BUYER

and shall be subject to the general right of inspection provided herein for BUYER to secure the satisfactory completion thereof.

13.0 COMPLIANCE WITH LAWS, RULES, AND REGULATIONS

In performance hereunder and every activity connected therewith CONTRACTOR shall comply fully with all applicable laws, ordinances, rules and regulations and when requested, shall furnish evidence satisfactory to BUYER of such compliance. Without limiting the foregoing, CONTRACTOR warrants that all materials furnished shall be produced in compliance with the Fair Labor Standards Act of 1938, as amended. Further CONTRACTOR hereby certifies and confirms that CONTRACTOR is and will remain in compliance with all Executive Orders and laws and the regulations issued thereunder required of subcontractors under U.S. government contracts, including, but not limited to the following which, as applicable, are incorporated herein by reference:

- Equal Opportunity Compliance

  Executive Order 11246, as amended;

  Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended;

  Section 503 of the Rehabilitation Act of 1973, as amended;

  Executive Order 11625, as amended;

  Executive Order 12138, as amended;

  Small Business Act, as amended;

- Environmental Compliance

  Clean Air Act, as amended;

  Clean Water Act, as amended;

  Executive Order 11738, as amended;

- Anti-Kickback Enforcement Act of 1986;

- Drug-Free Workplace Act of 1988.

CONTRACTOR will promptly furnish such further certificates and assurance of compliance with the foregoing as may from time to time be requested.

14.0 UTILIZATION OF MINORITY AND WOMEN BUSINESS ENTERPRISES

BUYER has established an affirmative policy to provide the equal opportunity for minority and women's business enterprises to participate in the performance of contracts. CONTRACTOR agrees to support this policy in the award of subcontracts.

A minority or women-owned business enterprise is defined as a business that has at least 51% ownership by minority or women members and whose management and daily business operations are controlled and operated by one or more of such individuals. Minority group members include: Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans. CONTRACTOR acting in good faith may rely on written representations from subcontractors and suppliers as to their minority or women-owned qualifications.

CONTRACTOR agrees to furnish a list of all expenditures made with minority and women-owned firms under this Agreement if requested by BUYER.

15.0 DEFENSE AUTHORIZATION ACT: UNLAWFUL COMPENSATION

BUYER is prohibited, as a defense contractor under Section 2397 of Title 10, United States Code, from compensating certain former employees of components of the United States Department of Defense within two years after leaving service. If CONTRACTOR, or anyone who will be performing services for BUYER under this Agreement, is a former officer or employee of the Department of Defense who held a position for which the rate of pay was a grade GS-13 or above, or is a former or retired member of the armed forces (excluding the Coast Guard) who held a position at pay grade 0-4 or above, then CONTRACTOR agrees to inform BUYER of this background, and furnish information necessary: a) to determine whether BUYER may lawfully compensate CONTRACTOR under the above law, and b) to comply with the reporting requirements of the law.

16.0 ASSIGNMENT

Neither this Agreement, nor any claim or performance obligation arising in connection with performance on this Agreement, may be assigned by either party without the prior written consent of the other party. Assignment is permitted to a parent or wholly-owned subsidiary as defined under the security and exchange laws of the United States. In such a case, written notice of such assignment shall be given to the other party.

17.0 SUBCONTRACTING

A subcontractor is an organization having a contract with the CONTRACTOR to perform or furnish a part of the work. The requirements in this Agreement with respect to subcontractors and subcontracts shall also apply to each succeeding tier of subcontractors and subcontracts.

CONTRACTOR will not subcontract any portion of the work without first obtaining BUYER's written consent, which will not be unreasonably withheld. BUYER and CONTRACTOR will mutually agree on which portions, if any, of the work that are to be subcontracted.

If permitted to subcontract, BUYER reserves the right of approval of all subcontractors which approval will not be unreasonably withheld. Approval of any subcontractor by BUYER shall not constitute a waiver of any right of BUYER to reject defective work or work not in conformance with this Agreement.

CONTRACTOR will be fully responsible for all acts and omissions of its subcontractors. Nothing in this Agreement will be construed to create any contractual relationship between BUYER and any subcontractor, nor any obligation on the part of BUYER to pay or to see to the payment of any money due any subcontractor, except as may otherwise be required by law.

18.0 TERMINATION

18.1 TERMINATION FOR CONVENIENCE

BUYER, for any reason, may terminate this Agreement or any Order by giving CONTRACTOR sixty (60) days written notification of termination.

In the event of termination under this section 18.1, BUYER will pay CONTRACTOR, as full satisfaction of its obligations to CONTRACTOR, CONTRACTOR's costs, determined in accordance with its usual accounting practices, incurred in the performance of this Agreement or an Order prior to the effective date of termination and other costs similarly determined pertaining to the work which CONTRACTOR will incur as a result of termination plus equitable fee for work performed less all monies paid by BUYER to CONTRACTOR hereunder.

18.2 TERMINATION FOR CONTRACTOR'S BREACH

If CONTRACTOR breaches any provision of this Agreement or any Order, BUYER shall have the right, in addition to any other rights it may have hereunder or by law, to terminate this Agreement or the Order by giving the CONTRACTOR written notice. Time is of the essence hereof, and BUYER's right to require strict performance by CONTRACTOR shall not be affected by any waiver, forbearance, or course of dealing.

19.0 CONTINUING OBLIGATIONS

All liability and indemnity and patent and confidentiality obligations and responsibilities assumed by the parties during this Agreement shall survive the Agreement termination.

20.0 GOVERNING LAW

This Agreement shall be construed in accordance with and governed by the laws of the state in which the CONTRACTOR's operations are performed.

21.0 NOTICES

All notices, requests, demands and other communication hereunder shall be in writing by letter and/or by telephone or facsimile machine. If by telephone or facsimile machine, such notice shall be confirmed in writing. All written notices shall be deemed delivered if mailed, first class, postage prepaid to the address set forth below until some other address (or individual for attention) is designated:

If to CONTRACTOR:

If to BUYER:

22.0 ENTIRETY

This Agreement and any executed Addenda, including exhibits, comprises the entire Agreement between BUYER and CONTRACTOR and there are no agreements, under standings, promises, or conditions oral or written, expressed or implied, concerning the subject matter or in consideration hereof that are not merged herein or superseded hereby. This Agreement shall not be modified except by written instrument signed by authorized representatives of the parties hereto.

IN WITNESS WHEREOF, the Parties have executed duplicate originals of this Agreement.

CONTRACTOR

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: _____

DATE:_____ _____

BUYER

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: Shell Oil Company

DATE:_____

VERSION 1.2

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ADDENDUM 1
WASTE DISPOSAL/WASTE TREATMENT

ADDENDUM 1
WASTE DISPOSAL/WASTE TREATMENT

PURPOSE:

This Addendum 1 to Master Environmental Services Agreement No.:_____ establishes additional terms and conditions under which CONTRACTOR shall furnish BUYER with environmental services associated with treatment and disposal of Wastes.

For the purposes of this Addendum, the term "Waste" shall include any and all materials defined or identified as "solid waste" or "hazardous waste" under the Resource Conservation and Recovery Act of 1976, as amended, and any state or local laws and regulations, if applicable.

WHEREAS, BUYER has certain Waste materials and wishes the Wastes treated and the residues disposed of;

WHEREAS, CONTRACTOR is in the Waste treatment and disposal business and is willing to accept certain of BUYER's Wastes for treatment and disposal;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1.0.1 WASTES TO BE TREATED AND DISPOSED

CONTRACTOR shall treat and dispose of such quantities of Wastes profiled on a Waste Material Profile Sheet, Exhibit 1-A, and accepted by CONTRACTOR, as BUYER shall from time to time request during the term of this Agreement.

2.0.1 TRANSPORTATION

2.1.1 Unless otherwise agreed, CONTRACTOR shall be responsible for providing suitable means to transport the Wastes and BUYER shall be responsible for loading Wastes.

2.2.1 BUYER shall deliver to CONTRACTOR shipping papers, manifests, and labels with each shipment of Wastes in accordance with all applicable requirements of the United States Department of Transportation ("DOT") and the United States Environmental Protection Agency ("EPA") under the Toxic Substances Control Act ("TSCA"), the Resource Conservation and Recovery Act ("RCRA"), and all other statutes and regulations. Upon request CONTRACTOR will furnish to BUYER appropriate manifest forms in blank. The party

that arranges transportation shall comply with all DOT regulations.

2.3.1 Vehicles used for the transportation of Wastes shall be devoid of any residue from previous shipments. If Wastes are spilled during loading operations, the party responsible for such loading shall thoroughly clean up the spill.

2.4.1 The transporting party shall maintain in force and require all carriers it engages to carry vehicular liability insurance equivalent to that specified in section 7.0.1 of this Addendum and shall, upon request, provide the other party with certificates of insurance evidencing such coverages.

2.5.1 BUYER will provide satisfactory roadways and approaches to the point of loading. Unless otherwise agreed Wastes will be loaded at BUYER's place of business or received at CONTRACTOR's facilities during normal business hours, Monday through Friday, except holidays.

3.0.1 TITLE TO WASTES

3.1.1 Unless rejected as provided in section 3.2.1, title to Wastes passes from BUYER to CONTRACTOR:

(a) If CONTRACTOR arranges for transportation, at the time that a loaded vehicle leaves BUYER's premises;

(b) If transportation is arranged by BUYER, at the time the Wastes have been accepted at a CONTRACTOR facility to which they have been manifested.

(c) Wastes shall be "accepted" at a CONTRACTOR facility, once these materials are found to be materially conforming to their respective Waste Material Profile Sheets (Exhibit 1-A) and the manifest signed by CONTRACTOR.

3.2.1 At any time before the condition of Waste delivered hereunder has materially changed condition, CONTRACTOR may reject Waste which does not conform in all material respects to the description in its Uniform Waste Data Sheet. Rejection shall be made by telephone within 24 hours after CONTRACTOR discovers the nonconformance and confirmed in writing within five working days thereafter. BUYER shall have twenty (20) working days after receipt of initial notice in which to verify the

nonconformity and, if possible, make any corrections by which to bring the Waste into conformance. If testing establishes the Waste is in fact in conformance in all material respects or if corrections bring the Waste into conformance in all material respects, then CONTRACTOR's rejection shall be void and of no effect. Otherwise, BUYER shall arrange for removal and alternative treatment and/or disposal of the rejected Waste. BUYER shall be responsible for: (a)cost of transportation of the rejected Waste to CONTRACTOR's facility, if such transportation was performed by CONTRACTOR; and (b)all reasonable charges incurred by CONTRACTOR for hauling, loading, preparing, storing, and caring for the rejected Waste (including analytical work performed on behalf of BUYER and decontamination and cleaning of equipment).

3.3.1 Irrespective of when title passes, while the Wastes are in CONTRACTOR's possession, CONTRACTOR shall be responsible for its proper handling, storage, treatment, and disposal and for any bodily injury or damage to property which may thereafter be caused by the Wastes, unless such injury or damage is caused by breach of BUYER's warranties provided under sections 4.1.1, 4.4.1 or 4.5.1.

4.0.1 WARRANTIES

4.1.1 BUYER warrants that all Wastes which may be received by CONTRACTOR pursuant to this Agreement shall materially conform to the description of Wastes in the Waste Material Profile Sheets.

4.2.1 CONTRACTOR warrants that its services performed under this Agreement shall comply with all requirements of federal, state and local laws, regulations, and ordinances.

4.3.1 CONTRACTOR warrants that it has in effect and will use its best efforts to maintain all permits, licenses, and governmental authorizations and approvals required for treating, storing, or disposing the Wastes which are or may become the subject of this Agreement. Upon request CONTRACTOR will furnish to BUYER copies of permits, licenses, authorizations or approvals in effect relating to the Wastes to be treated, stored, or disposed of hereunder. If any change occurs to such permits, licenses,

authorizations or approvals which affect any right or obligation contained in this Agreement, CONTRACTOR shall notify BUYER in writing within seven (7) days.

4.4.1 The party arranging for transportation warrants that all permits, licenses, authorizations, and approvals required for transportation of the Wastes by federal, state and local laws, regulations, and ordinances shall be in effect at the time of transportation.

4.5.1 The party supplying containers for the transportation of Wastes warrants that the containers comply with all laws, regulations or ordinances which may be applicable to their packaging or transportation, including, but not limited to DOT regulations.

4.6.1 Invoices will be based upon the recorded weights unless otherwise provided in Order. Each vehicle containing liquid or solid Wastes in bulk shall be weighed upon receipt at the CONTRACTOR facility. After the bulk liquid or solid Wastes are off-loaded, the vehicle will again be weighed, and the difference between the gross weight (loaded tanker or trailer and tractor) and the tare weight (empty tanker or trailer and tractor) shall be the net weight of the liquid or solid Wastes to be used for invoice purposes.

5.0.1 INDEMNIFICATION

5.1.1 In addition to the indemnification provided each party under Article 3, LIABILITY-INDEMNITY, of the Master Environmental Services Agreement and subject to section 5.2.1 below, following transfer of title, BUYER shall be relieved of all responsibility and CONTRACTOR shall become responsible for any and all loss, damage or injury to persons or property, and CONTRACTOR shall indemnify and hold BUYER harmless from any and all liability, damages, costs, claims (including but not limited to any claims of government agencies), demands and expenses, of whatever type or nature arising out of the performance of this Agreement, including, but not limited to, attorney's fees, caused by or resulting from pollution or other damage, which shall be caused by, arise out of, or in any manner be connected with Waste, including violations by CONTRACTOR of statutes, regulations, rules and/or ordinances, except to the extent such fine, charge and/or assessment

is caused by or contributed to by BUYER, its officers, employees or agents.

5.2.1 BUYER agrees to indemnify CONTRACTOR against all such liability, cost, and expense which arise out of or in connection with the transportation, treatment and disposal, or handling of any Waste delivered by CONTRACTOR, if such liability results from the failure of the Waste to conform to the composition of Waste described in the Waste Material Profile Sheets.

6.0.1 CERTIFICATION OF TREATMENT AND DISPOSAL

CONTRACTOR shall provide BUYER with a certification of disposal verifying that designated Wastes accepted by it have been properly treated and disposed. CONTRACTOR shall also provide, upon request by BUYER, a list of landfill sites used by CONTRACTOR for ash disposal for incineration services.

7.0.1 ADDITIONAL INSURANCE

CONTRACTOR shall have in effect and shall maintain for the term of this Agreement the following insurance in addition to those in Article 6, INSURANCE, of the Master Environmental Services Agreement:

Automobile Liability (Covers all vehicles, including leased vehicles; covers release of pollutants during transportation.)	$5,000,000 single limit Bodily injury and property damage combined
Pollution Liability (Covers sudden and non-sudden pollution at CONTRACTOR's facilities)	$5,000,000 per occurrence $10,000,000 annual aggregate

IN WITNESS WHEREOF, the Parties have executed duplicate originals of this Addendum in the presence of the undersigned witnesses.

CONTRACTOR

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: _____

DATE:_____

BUYER

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: Shell Oil Company

DATE:_____

****

Exhibit 1-A
WASTE MATERIAL PROFILE SHEET

VERSION 1.2

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ADDENDUM 2
EMERGENCY SPILL RESPONSE

ADDENDUM 2
EMERGENCY SPILL RESPONSE

PURPOSE:

This Addendum 2 to Master Environmental Services Agreement No.:_____ establishes additional terms and conditions under which CONTRACTOR shall furnish BUYER with environmental services associated with the mitigation of environmental impact caused by hazardous substances spills.

For purposes of this Addendum, hazardous substances shall include: any and all substances defined or identified as hazardous substances or hazardous chemicals under the Resources Conservation and Recovery Act (RCRA), as amended, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, the Hazard Communication Standard (HAZCOM), the Hazardous Work Operations and Emergency Response Standard (HAZWOPER), and other applicable federal and state regulations as of the date of this Agreement; and petroleum (including crude oil and any of its fractions), but shall not include high level radioactive materials as defined by the Atomic Energy Act or materials or substances designed or produced for use as explosives.

Therefore, BUYER and CONTRACTOR agree as follows:

1.0.2 SERVICES

1.1.2 The services for the mitigation of environmental impact caused by hazardous substance shall include, but not be limited to the following:

- Containment, neutralization, decontamination, recovery, cleanup, and repackaging of materials;
- Site assessment and site restoration;
- Transportation, storage, treatment or disposal of waste;
- Engineering and technical services, including sampling, analysis, design, engineering, construction, or any other related services;
- Environmental consulting, preparedness evaluation, or any other related consulting services.

2.0.2 WARRANTIES, REPRESENTATIONS, AND OBLIGATIONS

2.1.2 CONTRACTOR's General Obligations

CONTRACTOR warrants and represents that it has the capability, experience, and means required to perform the services contemplated by this Addendum.

CONTRACTOR warrants and represents that its personnel (including its subcontractors) are fully trained and certified, in accordance with, but not limited to, the OSHA Respiratory Protection Standard (29 CFR 1910.134), Hazard Communication Standard (29 CFR 1910.1200), and Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120).

2.2.2 Personnel and Equipment

CONTRACTOR warrants and represents that it will maintain qualified personnel stationed on 24-hour call, in the cities listed in Exhibit 2-A (collectively known as "Expert Teams"). Each Expert Team will consist of individuals trained in current spill control and clean up technology and capable of administering response to spills of hazardous substances required by this Addendum.

CONTRACTOR warrants and represents that it will maintain fully equipped emergency spill control units ("Emergency Units") in the locations listed in the attached Exhibit 2-A.

2.3.2 General Spill Response

BUYER will request one of the following spill response services by a direct telephone call to Contractor at the closest CONTRACTOR location and emergency telephone number as listed in Exhibit 2-A.

1) Spill Response Dispatch - CONTRACTOR will, if available, dispatch Expert Team and Emergency Unit to the scene of the spill.

2) Spill Response Standby - CONTRACTOR will, if available, place Expert Team and Emergency Unit on standby until requested by BUYER to dispatch or to release from standby. If while on standby, CONTRACTOR receives other work, BUYER will be notified and shall either release or pay standby charges.

BUYER will promptly confirm all telephone requests to CONTRACTOR in writing or by facsimile machine by issuing a Spill Response Dispatch/Standby Confirmation (Exhibit 2-B).

Upon arrival at the spill site, BUYER and CONTRACTOR will agree on the services to be performed. CONTRACTOR shall perform services until such time that BUYER determines that services are no longer required. In the event that CONTRACTOR arrives at spill site prior to BUYER, CONTRACTOR will take all prudent actions that CONTRACTOR deems necessary and any liabilities incurred from such actions shall be governed by Article 3, LIABILITY-INDEMNITY, of the Master Environmental Services Agreement.

BUYER will provide CONTRACTOR with relevant information reasonably available concerning the composition, quantity, toxicity, and potentially hazardous properties of any materials known or believed to be present at site for which services are requested.

CONTRACTOR shall make its own determination as to the precautions appropriate for any material, but CONTRACTOR shall accept BUYER's determination in a given situation that a material is hazardous and handle it accordingly, whether or not the particular material involved meets the definition of hazardous waste under applicable laws and regulations.

CONTRACTOR shall maintain a copy of employee's training certifications/documentation for all personnel employed by the CONTRACTOR and its subcontractors employed to work under this Addendum prior to beginning work. These records shall be made available to BUYER upon request.

CONTRACTOR shall maintain daily logs of its personnel, equipment, and supplies used on the project, both for CONTRACTOR's employees and its subcontractors. These records shall be made available to BUYER upon request.

CONTRACTOR shall maintain documentation of their medical surveillance program and, consistent with confidentiality limitations, provide such documentation to BUYER's representative upon request.

2.4.2 CONTRACTOR's Emergency Response

For CONTRACTOR conducting "Emergency Response" under 29 CFR 1910.120, the requirements include but are not limited to:

A. Pre-emergency planning/coordination with outside agencies.

B. Developing, implementing, and documenting the incident command system for the project.

C. Identification of and training of Contractor's personnel regarding emergency recognition and prevention relative to the specific project.

D. Identifying safe distances and places of refuge relative to the specific project.

E. Establishing evacuation routes and procedures for the specific project in coordination with Buyer's representative.

F. Establishing site security and control procedures for the specific project in coordination with Buyer's representative.

G. Establishing decontamination procedures applicable to the project.

H. Identifying emergency medical treatment and first aid procedures.

I. Identifying emergency alerting and response procedures.

J. Establishing personal protective equipment and emergency equipment of the project.

K. Preparing and submitting to BUYER's on-site representative a post-emergency critique for the emergency response discussing CONTRACTOR's overall response efforts and possible improvements which could be made. This critique shall be submitted to BUYER's representative within 30 days after completion of all work related to the project.

2.5.2 CONTRACTOR's Post Emergency Response

For CONTRACTOR conducting "Post-Emergency Clean

Up" under 29 CFR 1910.120, requirements include but are not limited to:

A. CONTRACTOR should review and be familiar with BUYER's major oil spill safety and health program for post-emergency clean-up operation.

B. CONTRACTOR shall prepare a site characterization plan and analysis evaluation by a Certified Industrial Hygienist (CIH) or other qualified person mutually agreed upon by the BUYER and CONTRACTOR. BUYER may require a CIH for a major oil spill.

C. CONTRACTOR shall develop a site-specific safety & health plan for the project by the site safety and health supervisor, prior to beginning work.

D. CONTRACTOR shall implement site control procedures to prevent or control employee exposure to hazardous substances as identified in site safety and health plan.

E. CONTRACTOR shall develop, implement, and document the following on a project-specific basis as required to comply with 29 CFR 1910.120:

(1) Engineering controls and work practices to be used in the cleanup activities.

(2) Personal protective equipment requirements.

(3) Frequency and type of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring any sampling equipment to be used. Documentation shall be provided to BUYER's representative within 30 days of completion of CONTRACTOR's work on the post-emergency cleanup.

(4) Decontamination procedures to be used.

(5) Post-Emergency critique; discussing such items as the effectiveness of the cleanup and any recommended improvements shall be provided to BUYER's representative within 30 days of completion of CONTRACTOR's work on the post-emergency cleanup.

(6) Confined space entry procedures.

(7) A spill containment program for the cleanup.

(8) Work practices to be used in the cleanup activities.

2.6.2 CONTRACTOR's Waste Handling Obligations

CONTRACTOR shall not transport, store, or dispose of any hazardous waste without the written consent of the BUYER.

CONTRACTOR shall not use any alternative treatment, storage, or disposal facility without BUYER's approval and the approval of the appropriate governmental authorities.

As to all transportation services undertaken, CONTRACTOR warrants that it is duly licensed to receive the material subject to any agreed Order upon request for services, and that the drivers and trucks supplied by CONTRACTOR will be trained, authorized, equipped, and licensed to carry such material, in accordance with prudent safety precautions and applicable federal, state, or local laws and regulations. Trucks and other equipment used by CONTRACTOR for performance of the services shall be in first-class operating condition, shall be suitable for the particular services requested, and shall be periodically inspected and properly maintained.

2.7.2 BUYER's General Obligations

BUYER warrants that it holds clear title to or is custodian for all hazardous substances to be treated, stored, controlled, or disposed and is under no legal restraint or order which would prohibit the treatment, storage, or disposal of such hazardous substances by any transporter or disposal facility.

BUYER shall, if deemed necessary by CONTRACTOR, secure all necessary approvals, judicial, and/or

administrative orders necessary to ensure CONTRACTOR's legal access to the site. In the event the Work requires immediate response by CONTRACTOR prior to BUYER securing such approvals as set forth above, and if CONTRACTOR is nonetheless directed by BUYER to proceed with such response, then CONTRACTOR shall proceed with such response Work. For such instances, BUYER shall indemnify CONTRACTOR with respect to any related site access claims arising out of response work.

BUYER shall be responsible for repairs to all roadways and rights-of-way arising out of the normal wear and tear resulting from CONTRACTOR's use thereof by its equipment during the performance of the Work unless otherwise agreed to.

IN WITNESS WHEREOF, the Parties have executed duplicate originals of this Addendum.

CONTRACTOR

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: _____

DATE:_____

BUYER

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: Shell Oil Company

DATE:_____

****

EXHIBIT 2-A
LOCATION OF EQUIPMENT AND MANPOWER RESOURCES

****

EXHIBIT 2-B
SPILL RESPONSE DISPATCH/STANDBY CONFIRMATION
FAX CONFIRMATION FORM

++

TO: _____(CONTRACTOR name)_____

FOR THE ATTENTION OF: _____

==========

FROM: _____(BUYER requesting service)_____

DEPARTMENT:_____
PHONE NUMBER:_____
FAX NUMBER:_____

TOTAL PAGES INCLUDING THIS COVER SHEET:_____
##########

SUBJECT: RELEASE NOTICE/CONFIRMATION TO RESPOND

Gentleman:

In accordance with Master Environmental Services Agreement _____, including Addendum 2, between our companies and confirming BUYER's telephone notice to _____, it is requested that CONTRACTOR respond to a spill at:

_____

Agreed to response includes: (e.g. manpower and equipment needs, etc.):

_____

_____

The BUYER's representative to contact with regard to this response until further notice is:

_____

BUYER's contact telephone number :_____
BUYER's contact Fax number :_____
Signed: (BUYER's representative):_____

Date:_____ Time:_____

VERSION 1.1

TABLE OF CONTENTS
ADDENDUM 3
LABORATORY TESTING AND ANALYSIS

ADDENDUM 3
LABORATORY TESTING AND ANALYSIS

PURPOSE:

This Addendum 3 to Master Environmental Services Agreement No.:_____ establishes additional terms and conditions under which CONTRACTOR shall furnish BUYER with Laboratory Testing and Analysis services.

WHEREAS, BUYER is engaged in the business of producing, manufacturing, transporting, storing and marketing petroleum and chemical products;

WHEREAS, BUYER is required from time to time to analyze samples of petroleum and chemical products, including groundwater and soil potentially containing such products, by qualified environmental analytical laboratories and wishes to contract some of these laboratory analyses to an outside laboratory;

WHEREAS, CONTRACTOR represents that it is qualified to perform the aforementioned laboratory analyses and wishes to perform such laboratory analyses for BUYER;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1.0.3 DEFINITIONS

1.1.3 "Sample Delivery Schedule" means the number of samples, matrix type and dates that samples will be delivered to CONTRACTOR.

1.2.3 "Sample Delivery Acceptance" means the point in time at which CONTRACTOR has determined that it can proceed with defined work following receipt and inspection of samples and resolution of discrepancies as described in sections 2.2.3 and 2.3.3.

1.3.3 "Results" means either data generated by CONTRACTOR from the analysis of one or more samples or the work product generated by CONTRACTOR in the performance of consulting services.

1.4.3 "Preliminary Results" means any verbal, facsimile, or draft result that is provided to BUYER in advance of the final report.

expense.

3.0.3 CERTIFICATION OF DATA

3.1.3 Where applicable, CONTRACTOR will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), state agency, American Society for Testing Materials (ASTM), Association of Official Analytical Chemists (AOAC), Standard Methods for Examination of Water and Wastewater, or other recognized methodologies.

3.2.3 CONTRACTOR will maintain a comprehensive Quality Assurance Process including, but not limited to, control checks on bottle preparation, sample handling and holding, analytical quality control, certification of equipment used in analyzing samples and a QA/QC manual.

3.3.3 All testing and analytical services provided under this Agreement must be done at the CONTRACTOR facility where the samples are sent. Any exceptions to this requirement must be approved by BUYER representative requesting the analysis, documented in writing, and will only apply to the Order for which the exception was granted.

3.4.3 Preliminary Results may be given in advance of the written report of Results. Such Preliminary Results are tentative Results only, subject to confirmation or change based on final review.

4.0.3 WARRANTIES

4.1.3 CONTRACTOR warrants that its services will fulfill obligations set forth in sections 2.3.3, 3.1.3 and 3.2.3 hereof. The liability and obligations of CONTRACTOR and the remedies of BUYER in connection with any services performed by CONTRACTOR which do not fulfill obligations set forth in sections 2.3.3 and 3.1.3 hereof shall be limited to repeating the service performed by CONTRACTOR or refunding in full or in part fees paid by BUYER for such services. CONTRACTOR's obligation to repeat any services with respect to any sample will be contingent on the BUYER's providing, at the request of CONTRACTOR and at the expense of BUYER, additional sample(s) if necessary.

4.2.3 CONTRACTOR warrants that it possesses and maintains all licenses and certifications which are required to perform services under this

Agreement. CONTRACTOR will notify BUYER in writing within 7 days of any decertification or revocation of any license, or notice of either, which affects services provided under this Agreement.

4.3.3 BUYER represents and warrants that any sample delivered to CONTRACTOR will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by BUYER. BUYER further warrants that any sample containing any known or suspected hazardous substance which is delivered to CONTRACTOR's premises will be packaged, labeled, transported and delivered properly and in accordance with the applicable laws.

IN WITNESS WHEREOF, the Parties have executed duplicate originals of this Addendum.

CONTRACTOR

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: _____

DATE:_____

BUYER

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: Shell Oil Company

DATE:_____

VERSION 1.2

TABLE OF CONTENTS
ADDENDUM 4
WASTE HAULING

ADDENDUM 4
WASTE HAULING

PURPOSE:

This Addendum 4 to Master Environmental Services Agreement No.:_____ establishes additional terms and conditions under which CONTRACTOR shall furnish BUYER with Waste hauling services.

For the purposes of this Addendum, the term "Waste" shall include any and all materials defined or identified as "solid waste" or "hazardous waste" under the Resource Conservation and Recovery Act of 1976, as amended, and any state or local laws and regulations, if applicable.

1.0.4 TRANSPORTATION

Subject to the limitations and/or availability of CONTRACTOR's equipment and qualified drivers, CONTRACTOR shall transport all tonnage offered by BUYER from BUYER's designated origins to destinations designated by BUYER, as specified in the Order.

2.0.4 EQUIPMENT

CONTRACTOR shall provide all equipment necessary to perform the transportation required hereunder which shall (a) be suitable for the particular transportation required, (b) include any special equipment that is requested by BUYER and agreed to by CONTRACTOR when the shipping Order is placed, (c) comply with the specifications for equipment for such transportation prescribed by any applicable governmental regulations (including those of the U.S. Department of Transportation), and (d) be maintained by CONTRACTOR in good, safe and serviceable condition. BUYER shall have the right, but not the duty, to inspect any equipment tendered and to reject any equipment which does not, in BUYER's sole judgment, meet all of the above requirements.

3.0.4 DRIVERS

CONTRACTOR's drivers shall be courteous, fully qualified and product knowledgeable as required for safety, shall present a neat appearance, must be able to communicate with BUYER's personnel and shall comply with all reasonable operational procedures of BUYER and its customers.

When loading or unloading at origins or destinations,

CONTRACTOR's drivers shall comply with all plant procedures. CONTRACTOR's drivers shall promptly report all Waste spills, shortages, or accidents which occur in the course of performance hereunder in accordance with the procedure set forth in the Order or in section 5.2.4, as applicable.

4.0.4 DELIVERY

In the event delivery cannot be made as scheduled, CONTRACTOR shall so advise BUYER as soon as possible, utilizing the procedure(s) established in the Order. However, nothing in this section 4.0.4 shall be construed as relieving CONTRACTOR of its obligation under this Agreement to make on time deliveries and in a safe manner.

5.0.4 ENVIRONMENTAL INCIDENTS

5.1.4 RESPONSE

If, in the course of performance of this Agreement, there is any escape, release, spillage or other environmental incident involving Waste being hauled, CONTRACTOR shall promptly commence and carry out any necessary or required cleanup or other action to remedy or mitigate the consequences thereof, and shall bear, pay and discharge all costs and expenses associated therewith and shall hold BUYER harmless for such costs and expenses, except to the extent any such escape, release, spillage or incident is caused or contributed to by BUYER. CONTRACTOR shall immediately notify all appropriate governmental authorities and BUYER upon occurrence of any such escape, release, spillage or other environmental incident.

CONTRACTOR shall clean up any such escape, release, spillage or incident in accordance with all applicable statutes, ordinances, regulations, orders and rules and shall dispose of any hazardous Waste resulting from any such cleanup activity in accordance with such statutes, ordinances, regulations, orders and rules and under a plan and at a Waste site approved by BUYER. Should CONTRACTOR fail to promptly undertake necessary cleanup or other remedial action as required hereunder, BUYER may undertake any such cleanup or other remedial action, and, upon BUYER's demand, CONTRACTOR shall provide prompt reimbursement to BUYER of the costs and expenses of any such measures taken pursuant to this provision. In no event shall CONTRACTOR raise or plead as a defense to

a claim for reimbursement of expenses incurred by BUYER hereunder that BUYER, in undertaking or performing such measures, acted as a volunteer, and any such defense of "volunteer" is hereby waived by CONTRACTOR.

5.2.4 REPORTING

In addition to any other requirements herein, CONTRACTOR shall notify CHEMTREC in any event in which (1) any amount of BUYER's Waste in CONTRACTOR's custody is or potentially may be released to the environment (air, land or water); (2) BUYER's public image is or may be adversely affected; (3) BUYER's Waste are involved in any incident which causes any significant public inconvenience including, but not limited to, response by emergency response personnel.

In such cases, CONTRACTOR's requirement to notify BUYER will be satisfied by notifying CHEMTREC of the situation at 1-800-424-9300, and specifying a telephone number and contact person from whom BUYER can obtain additional information and provide technical assistance if required.

6.0.4 BILL OF LADING

Unless otherwise provided herein, the CONTRACTOR's Straight Bill of Lading, and federal regulations shall govern the rights and responsibilities of BUYER and CONTRACTOR in their performance hereunder. In the event of a conflict between the terms of the Bill of Lading and this Agreement, the terms of this Agreement shall govern.

7.0.4 ADDITIONAL INSURANCE

CONTRACTOR shall have in effect and shall maintain for the term of this Agreement the following insurance in addition to those in Article 6, INSURANCE, of the Master Environmental Services Agreement:

Automobile Liability (Covers all vehicles, including leased vehicles; covers release of pollutants during transportation.)	$5,000,000 single limit Bodily injury and property damage combined

IN WITNESS WHEREOF, the Parties have executed duplicate originals of this Addendum.

CONTRACTOR

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: _____

DATE:_____

BUYER

BY:_____
(Signature)

NAME: _____

TITLE: _____

COMPANY: Shell Oil Company

DATE:_____

Environmental and Safety Engineering Staff
Ford Motor Company

Suite 608
15201 Century Drive
Dearborn, Michigan 48120

September 13, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Department of Defense
The Pentagon Room 3E808
Washington, D.C. 20301-3000

Attention: Earl DeHart, ODUSD(ES)CL

Subject: Report to Congress on Environmental Contractor Indemnification

Dear Mr. DeHart:

I have been asked by Helen O. Petrauskas, Vice President, Environmental and Safety Engineering, to respond to your 8/3/93 letter on behalf of Ford Motor Company. I will answer each question attached to your letter in the order presented.

(1) Q. What portion (by dollar amount) does your firm perform environmental cleanup work by contract, through in-house work force, or through state or Federal agency?
A. Virtually all environmental remedial activities are performed by outside contractors and consultants. Our in-house environmental staff oversees and coordinates remedial design and constructional management activities. We engage consulting engineering firms to assist us by providing resident engineering services.

(2) Q. Please describe the nature of the environmental cleanup work which your firm has performed since 1980.
A. A wide variety of remedial work has been performed at Ford facilities and at off-site facilities. This would include landfill site closure, lagoon cleanup, sludge de-watering, ground water treatment, sediment dredging, asbestos encapsulation/ removal, PCB transformer replacements, UST replacements, etc.

(3) Q. May we have a list of contractors you have used for environmental cleanup work?
A. We do not have a list of contractors that we can share with you. We have used virtually all of the large national firms for this type of work as well as a myriad of

local contractors based on qualifications and typical competitive bidding practices coordinated by our Purchasing and Supply Staff.

(4) Q. Describe the phase of work performed by the cleanup contractor: preliminary assessment (PA), site inspection (SI), remedial investigation/feasibility study (RI/FS) or remedial design/remedial action (RD/RA). Please provide factual data on type of action, contractor name, location, type of pollutant being remediated, value of contract, and type of contract (fixed price, cost plus award fee or cost plus fixed fee).
A. Contracts for ***engineering and design*** (preliminary assessment, RI/FS, remedial design) are generally issued in response to a request for proposal from pre-screened applicants. These tasks are performed by consulting engineering firms. Costs are ordinarily based on standard professional rates by task with a not-to-exceed total cost. No mark-up is charged for outside services provided to the consultant by others.

Contracts for ***construction work*** (remedial action) are let after detailed construction specifications are developed by the engineer and are let after competitive bidding which takes place among prescreened contractors. Project costs are based on both unit prices and lump sum costs, depending on the specific work to be performed. This would include all types of activities and pollutants being remediated.

(5) Q. How many times have you indemnified your environmental cleanup contractor(s)?
A. Our contracts generally contain very limited indemnity provisions in which we indemnify our contractors only for damage resulting from our negligence during the course of the remediation. We know of no case in which an environmental contractor has brought a claim under this provision.

(6) Q. What circumstances (nature of the pollutant, magnitude of the job, type of activity, technology employed, etc.) led you to provide indemnification on those occasions that you did? Please give us examples of the indemnification clauses used.
A. Under no circumstances do we provide contract indemnification except as indicated in #5 above.

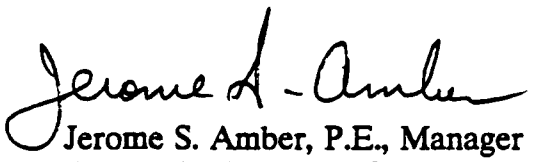
(7) Q. Have you made any payments, or incurred any costs as a result of contractors you indemnified having claims or litigation initiated against them? If so, please provide details.
A. No.

(8) Q. Have you used any other risk-sharing approaches with environmental cleanup contractors? If so, please describe the approach and provide examples of contract clauses.

A. There have been cases in which a PRP group of which we were a member has limited potential cleanup contractor obligations available to them by liability insurance policy limits, performance bond, or other instrument.

I hope that these responses assist the Department of Defense in preparing its report to Congress on this subject.

Sincerely,



Jerome S. Amber, P.E., Manager
Wastes & Hazardous Substances
Environmental Quality Office
(313) 322-4646

g:\amber.que

Texaco Inc
Environment
Health and Safety
Division

PO Box 509
Beacon NY 12508
914 831 2400

October 11, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Attention Earl DeHart, ODUSD(ES)CL

Dear Sir:

Enclosed please find Texaco Inc.'s response to your office's "QUESTIONS ON PRIVATE SECTOR PRACTICE ON INDEMNIFICATION OF ENVIRONMENTAL CLEANUP CONTRACTORS."

It is important to understand that there is no one central engineering group that handles all environmental clean-ups at Texaco. Texaco has many subsidiaries and divisions, each of which are responsible for environmental liabilities and clean-ups at their particular facilities and operations. The area within Texaco which is responding to the DOD's request is the Centralized Waste Site Management group (CWSM) which is part of the Environment, Health and Safety Division. CWSM is primarily responsible for managing environmental clean-up projects related to off-site multi-party waste sites which are usually a result of a CERCLA action. Due to the large number of contractors which are typically employed at each of these sites, the contractual arrangements with the environmental clean-up contractors vary widely.

We hope the enclosed information is responsive to your request.

Sincerely,

G. D. Meyer

GDM:

Enclosure

The numbered answers correspond to the numbers of the Questions in your request.

1) To date, CWSM has expended over 16 million dollars on environmental remediation projects of which 50% is directly attributable to site work. Approximately 75% of the sum was paid to environmental contractors doing the work directly for the PRP's at the sites. The balance was paid to agencies which arranged for the clean-up work to be performed prior to our involvement.

2) Texaco is involved in generally all stages of environmental clean-ups. This includes: Investigations, Risk Assessments, Feasibility Studies, and Remedial Implementation. Implementation includes extraction wells, slurry walls, incineration, etc.

3) Unfortunately, Texaco does not possess a control database of such information.

4) Typical projects in which Texaco has been part of consist of:

Location	Contractor	Type of Work	Value	Type of contract
Clinton, IA	Layne Western	Installing extraction wells	$2,100,000	time and materials w/ a not to exceed amount
Glenrock, WY	Western Water	Oil Separation and removal	$708,000	time and materials w/ a not to exceed amount
Criner, OK	Canonie	interceptor trench water treatment cap extraction wells	$16,000,000	time and materials w/ a not to exceed amount
Beacon, NY	OH Materials	excavation transportation and disposal of waste	$6,000,000	Fixed price not to exceed amount

5) Types and forms of indemnifications vary widely. Some form of an indemnification clause appears in nearly all our contracts.

6) The lack of sufficient qualified contractors or the concern for contractor to exacerbate site conditions. (See attached.)

In addition, it is common for the contractor to indemnify the companies from their acts of negligence, which in some instances may require the contractor to have insurance to cover *Engineer's Errors and Omissions* or require the contractor to acquire a *Performance Bond* to cover the cost of the project, in the event they cannot complete it.

7) Not to the best of my knowledge.

8) Contractor's pollution liability insurance, performance levels and hold harmless agreements all are types of allocating risk among parties.

ARTICLE 10 - LIABILITY AND INDEMNIFICATION.

(a) ReTeC shall indemnify, defend and save Companies harmless from and against all demands, suits, judgement, expenses, attorney's fees, and losses for or in connection with bodily injury (including death) to persons or damage to tangible property arising out of or in connection with the negligent performance of ReTeC, its agents, or employees under this Agreement.

(b) It is recognized that Companies may assert that certain third persons or parties may rightfully bear the ultimate legal responsibility for any and all hazardous materials, pollutants or contaminants which may currently be present on or have originated from the property.

It is further recognized that certain state and federal statutes related to hazardous waste work provide that individuals and firms may be held liable for damages and claims related to such work under a doctrine of joint and several strict liability. It is not the intention of this Agreement that ReTeC be exposed to any hazardous waste liability arising out of pre-contract site contamination, the activities of others, including Companies, or for any liabilities which may arise from the non-negligent performance by ReTeC of the Work hereunder. Accordingly, for purposes of this Agreement only, and except as provided under paragraph 10(a) above regarding the negligent performance of ReTeC, Companies shall reimburse ReTeC for or otherwise indemnify, defend and save ReTeC harmless from any and all demands, suits, judgement, expenses, attorney's fees, and losses arising out of or in connection with bodily injury (including death) to persons or damage to property which may arise from the presence or origination of hazardous substances, pollutants or contaminants on the property, irrespective of whether such materials were generated or introduced before or after execution of this Agreement and irrespective of whether Companies were aware of or directly involved in the generation or introduction of such materials; provided, however, that nothing hereinabove set forth is intended to shift any responsibility for employee claims that the parties may bear under the Worker's Compensation laws of the state in which the Work is to be performed.

(c) ReTeC shall under no circumstances be considered the generator of any hazardous substances, pollutants or contaminants encountered or handled in the performance of the Work. Without contradiction of any assertion by Companies or third party liability as described in paragraph 10(b) above and for purposes of this Agreement only, it is agreed that any hazardous wastes, pollutants or contaminants generated or encountered in the performance of the Work shall be the responsibility of Companies and shall be handled or disposed of by the Companies.

(d) Neither party shall have any liability to the other party for loss of product, loss of profit, loss of use, or any other indirect, incidental, special or consequential damages incurred by the other party, whether brought on an action for breach of contract warranty, tort, or strict liability, and irrespective of whether caused or allegedly caused by either party's negligence. Nothing in this provision is intended to affect liability arising from actions brought by third parties.

6.13 Indemnification

To the fullest extent permitted by laws and regulations, the CONTRACTOR shall indemnify, defend, and hold harmless Montgomery Watson Americas, Inc., ACC Chemical Company and Getty Chemical Company, Erler & Kalinowski, Inc., Texaco, Inc., Primerica Corporation, Quantum Chemical Company, Inc., Arcadian Corporation, and the City of Clinton, Iowa, and their officers, directors, agents, and employees, against and from all claims and liability arising under or by reason of any breach of the Contract or negligence, gross negligence or willful misconduct for the performance of the WORK, but not from the negligence or willful misconduct of the OWNER and/or the ENGINEER. Such indemnification by the CONTRACTOR shall include, but not be limited to, the following:

1. Any liabilities, losses, causes of action, suits, claims, costs, damages, judgments and demands, whatsoever, in law or equity, based upon, arising out of or in connection with any negligent or grossly negligent act or omission of CONTRACTOR, any subcontractor and their agents.

2. Liability or claims arising from bodily injury, occupational sickness or disease, exposure to toxic chemicals at the site, or death of the CONTRACTOR's or any subcontractor's own employees arising out of the WORK resulting in actions brought by or on behalf of such employees against the OWNER and/or the ENGINEER.

3. Liability or claims arising from or based on the violation of any law, ordinance, regulation, order, or decree, whether by the CONTRACTOR or its agents.

4. Liability or claims arising from the use or manufacture by the CONTRACTOR or its agents in the performance of this Contract of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article, or appliance, unless otherwise specifically stipulated in this Contract.

5. Liability or claims arising from the breach of any warranties, whether expressed or implied, made to the OWNER or any other parties by the CONTRACTOR or its agents.

6. Liabilities or claims arising from the willful misconduct of the CONTRACTOR or its agents.

7. Liabilities or claims arising from any breach of the obligations assumed herein by the CONTRACTOR.

The CONTRACTOR shall reimburse the OWNER and the ENGINEER for all costs and expenses (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court costs) incurred by said OWNER and the ENGINEER in enforcing the provisions of this written herein.

The indemnification obligation as specified herein shall not be limited in any way by any limitation of the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR or any such subcontractor or other person or organization under workers' compensation acts, disability benefit acts, or other employee benefit acts.

John C. (Jack) Carmody
Manager
Environmental Remediation

Rockwell International Corporation
World Headquarters
2201 Seal Beach Boulevard
P. O. Box 4250 - Mail Code 001-D58
Seal Beach, California 90740-8250

(310) 797-2413
FAX (310) 797-1500

Rockwell International

August 24, 1993

Sherri Wasserman Goodman
Deputy Under Secretary of Defense
(Environmental Security)
Office of the Under Secretary of Defense
Washington, D.C. 20301-3000

Dear Ms. Goodman:

We have received your letter dated August 3, 1993 with the questionnaire concerning "Private Sector Practice on Indemnification of Environmental Cleanup Contractors."

Due to the length of time allotted and the manpower that would be required to research these issues, Rockwell cannot give detailed answers to the questions posed. However, in general, Rockwell indemnifies its environmental contractors from damages caused by Rockwell's errors and omissions.

Rockwell's contractor indemnification in a recent contract reads as follows:

> "Rockwell shall indemnify, defend and hold harmless Contractor, its directors, officers and employees from and against any suits and costs and expenses of every character whatsoever incident thereto (including court costs, costs and expenses of defense, settlement, and reasonable attorney's fees) which it or they may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person (including employees of Contractor and employees of Rockwell), destruction or damage to any property, or adverse effects on the environment or any violation of governmental laws, regulations or orders, to the extent caused, in whole or in part, by, resulting from, arising out of, incidental to, or in any manner whatsoever connected with (i) Rockwell's breach of the terms or provisions of this Agreement; or, (ii) any negligent or willful act or omission of Rockwell or its employees in the performance of this Agreement; or (iii) the delivery to Contractor by Rockwell of Non-Conforming Waste Material."

Please contact me at (310) 797-2413 if I can be of further assistance in this matter.

Sincerely,

Jack Carmody

Jack Carmody, Manager
Environmental Remediation

slr

cc: W. Vetter

John C. (Jack) Carmody
Manager
Environmental Remediation

Rockwell International Corporation
World Headquarters
2201 Seal Beach Boulevard
P. O. Box 4250 - Mail Code 001-D58
Seal Beach, California 90740-8250

(310) 797-2413
FAX (310) 797-1500

Rockwell International

September 21, 1993

Mr. Earl DeHart
ODUSD (ES) CL
Department of Defense
The Pentagon
Room 3E808
Washington, D.C. 20301-3000

Dear Mr. DeHart:

I am sending this letter to revise and update my August 24, 1993 letter addressed to Sherri Wasserman Goodman concerning "Private Sector Practice on Indemnification of Environmental Cleanup Contractors."

Due to the length of time allotted and the manpower that would be required to research these issues, Rockwell cannot give detailed answers to the questions posed. However, in general, Rockwell does not indemnify its environmental contractors.

In some cases, however, Rockwell will offer very limited indemnification. A recent contract had the following language:

> "Rockwell shall indemnify, defend and hold harmless Contractor, its directors, officers and employees from and against any suits and costs and expenses of every character whatsoever incident thereto (including court costs, costs and expenses of defense, settlement, and reasonable attorney's fees) which it or they may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person (including employees of Contractor and employees of Rockwell), destruction or damage to any property, or adverse effects on the environment or any violation of governmental laws, regulations or orders, to the extent caused, in whole or in part, by, resulting from, arising out of, incidental to, or in any manner whatsoever connected with (i) Rockwell's breach of the terms or provisions of this Agreement; or, (ii) any negligent or willful act or omission of Rockwell or its employees in the performance of this Agreement; or (iii) the delivery to Contractor by Rockwell of Non-Conforming Waste Material."

Please contact me at (310) 797-2413 if I can be of further assistance in this matter.

Sincerely,

Jack Carmody

Jack Carmody, Manager
Environmental Remediation

cc: W. Vetter

Ciba-Geigy Corporation
444 Saw Mill River Road
Ardsley, New York 10502-2699
Telephone 914 479-5000

September 23, 1993

Via Federal Express
Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSCD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Re: **Indemnification of Environmental Cleanup Contractors**

Dear Mr. DeHart:

We are writing in response to your August 10, 1993 letter to Richard Barth requesting information on "Private Sector Practice on Indemnification of Environmental Cleanup Contractors".

While we have tried to respond to your request as fully as possible, we are involved in such extensive and diverse remediation efforts that this task has been difficult. Pursuant to a conversation you had with Julie Kane of our Legal Department, we have instead tried to respond with some specific information about our practices in this area that you will likely find helpful. Our responses follow:

Questions 1-4: CIBA-GEIGY Corporation ("Ciba") is actively involved in some 40-50 Superfund or other environmental remediation projects. We are currently spending approximately $40-$50 million per year on these projects. Ciba has already spent $300 million on environmental remediation, and ultimately expects to spend between $500 million and a billion dollars on environmental remediation projects. Two-thirds of this will be spent at Ciba owned facilities.

None of the actual remediation work is done in-house. Ciba retains contractors to perform all remediation work. Increasingly, however, we are finding benefit in being actively involved in the remedial design and engineering phases of these projects.

Ciba has used dozens of contractors on remediation projects. We have retained contractors to perform all phases of remediation work, but primarily for RI/FS's and RD/RA's, or their state equivalents.

Questions 5-8: We have indemnified our environmental contractors on several occasions. Again, because we have entered into so many of these contracts, it would be unduly burdensome to discuss all of the contractors and the indemnification provisions here. Instead, we will provide the requested information for a few contractors with whom we have or have had significant relationships.

1. BCM Engineers, Inc. BCM is the contractor who performed the RI/FS at the Ciba McIntosh Plant Superfund Site. It is currently performing the Remedial Design work on that same project.

Ciba has given BCM an indemnification for damages it suffers in performance of its work unless the damages arise out of BCM's negligence or wilful misconduct. The contractual language is attached (Attachment 1), and also includes the cross-indemnification of Ciba.

2. Environmental Resources Management, Inc. ("ERM") ERM is the contractor performing the on-site remediation work, among other things, at the Tyson's Lagoon Superfund Site on behalf of Ciba.

The indemnification provision of that contract are Attachment 2 to this letter.

3. OHM, formerly OH Materials OHM performed extensive work on RCRA closures at the Ciba McIntosh Plant in the mid-1980's. This work was done pursuant to a purchase order and contained no indemnities.

No claims have been made against the indemnification provisions listed above. To the best of my knowledge, we have not used any other risk-sharing approaches with our environmental contractors.

I hope this information is helpful. Do not hesitate to call me if you have any further questions.

Very truly yours,

George Muhlebach

Attachments

PROFESSIONAL SERVICES AGREEMENT

CONTRACT No. 93124

This Agreement, made effective the 11th day of June, 1993, between CIBA-GEIGY CORPORATION, whose address is P.O. Box 113, McIntosh, Alabama 36553 (hereinafter referred to as "Owner") and, BCM Engineers, Inc., whose address is P.O. Box 1784, Mobile, AL 36633 (hereinafter referred to as "Contractor")

SECTION 10.0 INDEMNIFICATION

Contractor shall defend, indemnify and hold harmless Owner and its officers, employees, servants, agents, successors and assigns from and against any and all liability, claims, demands, suits, actions, third party claims, penalties, fines, debts, accounts, damage, costs, expense, losses and attorney's fees (hereinafter referred to collectively as "Damages") which either directly or indirectly arise out of or result from (I) injury or death to persons, including employees of Owner or Contractor, or (II) damage to property of whatever kind and nature, or (III) failure to meet any schedule date set forth in the work plan or other failure of work performance hereunder to conform to the requirements of the work plan, if the injury or damage or failure is caused in whole or in part by any error or omission or negligent act or willful misconduct of Contractor or its employees, subcontractors, servants and agents in the performance of Contractor's work under this Agreement. The Owner shall give prompt notice to Contractor of any such suit, claim, demand or action relating thereto in order to provide Contractor with the earliest opportunity to defend against any actions or proceedings for Damages, but Contractor agrees, however, that any failure on the part of Owner to give such notice shall not be deemed a waiver, abrogation or limitation of Contractor's obligation to defend, indemnify and hold harmless Owner hereunder. Indemnification under this provision shall exclude any and all Damages to extent they arise out of or result from acts, errors or omissions of Owner or any of its officers, employees, servants, agents, consultants or other representatives.

SECTION 10.0 INDEMNIFICATION (continued)

Owner shall indemnify and hold harmless Contractor and its consultants, agents and employees from all Damages as defined above arising out of or resulting from the performance of Contractor's work under this Agreement or claims against Contractor arising from the of third parties in the study area, except in case of errors, omission, negligence, or willful misconduct of Contractor or its employees, subcontractors, servants and agents in the performance of Contractor's work under this Agreement. The obligation of this paragraph shall survive expiration or termination of this Agreement.

B. Any defective or improperly performed Work appearing within one hundred eighty (180) days after completion of such Work, whether performed by ERM, its employees, agents and/or subcontractors, shall be corrected or repaired by ERM at its expense as promptly as possible, but in no event later than thirty (30) days after such defect is discovered. In the event ERM fails to correct or repair such defects within the thirty (30) day period, or in an emergency where delay would cause serious risk, or loss or damage, CIBA-GEIGY shall have the right to contract with a third party to correct or repair such defects, and ERM shall reimburse CIBA-GEIGY for the costs incurred by CIBA-GEIGY in contracting with such third parties. ERM agrees to hold CIBA-GEIGY harmless from liability of any kind arising from damage due to any defects referred to in this Article.

C. The warranties set forth in this Article are intended to supplement and not to limit any other warranties given under this Agreement.

ARTICLE 9 INDEMNIFICATION

A. ERM has neither created nor contributed to the creation or the existence of any type of hazardous or toxic waste, material, chemical, compounds, or substance or any other type of environmental hazard or pollution, whether latent or patent, at the Site or in connection with the project with respect to which ERM has been engaged to provide professional

services, and the compensation to be paid to ERM for professional services rendered hereunder is in no way commensurate with, and has not been calculated by reference to, the potential risk of injury or loss which may be caused by the exposure of persons or property to such substances or conditions. CIBA-GEIGY shall defend, indemnify and hold ERM, its principals, officers, employees, agents, affiliates, subsidiaries and authorized subcontractors (for purposes of this Paragraph A collectively referred to as "ERM") harmless from and against any and all claims, lawsuits, liabilities, judgments, awards, damages, fines, penalties, forfeitures, costs of settlement, court costs and costs of defense, including, without limitation, reasonable attorney's fees, incurred by ERM or to which ERM may be subject in any civil or criminal action, claim, investigation or proceeding, whether brought under federal law or under the laws of any state or political subdivision thereof, by reason of, arising out of, or relating in any way to any actual or alleged personal injury, property damage, loss of profits, earnings or wages, or any other consequential, incidental or special damages suffered, directly or indirectly, by any person or company, including CIBA-GEIGY, its officers, principals, employees and agents, in connection with the management, clean-up and/or disposal of any type of hazardous or toxic waste, material, chemical, compound or substance, or any other type of environmental hazard or

pollution, or the exposure of any person or property thereto, in connection with the Site with respect to which ERM has been engaged to provide services under this Agreement; provided, however, that ERM shall

(a) remain liable for any injury, damage or loss of any kind or nature that is attributable to the negligent acts, errors or omissions of ERM or the breach of ERM's warranties hereunder, and

(b) defend, indemnify and hold CIBA-GEIGY, its principals, officers, employees, agents, affiliates, subsidiaries and subcontractors (collectively for purposes of this Paragraph A(b) referred to as "CIBA-GEIGY") harmless from and against any and all claims alleging such injury, damage, or loss specified under subparagraph (a) above (including any lawsuits, liabilities, judgments, awards, damages, fines, penalties, forfeitures, costs of settlement, court costs and costs of defense, including, without limitation, reasonable attorney's fees, incurred by CIBA-GEIGY or to which CIBA-GEIGY may be subject in any civil or criminal action, claim, investigation or proceeding, whether brought under federal law or under the laws of any state or political subdivision thereof, by reason of, arising out of, or relating in any way to any such injury, damage or loss).

C. Paragraph A of this Article shall not be interpreted or deemed to limit, in any way, any right of action that may be asserted by any party against publicly or privately created funds established for the purpose of satisfying, wholly or in part, claims asserted or perfected by persons referenced in that Paragraph.

D. In the event that any third party, inclusive of any governmental agency, asserts any claim, demand or cause of action against a party to this Agreement, and a party hereunder (the "Indemnified Party") intends to seek indemnification against another party or parties (the "Indemnifying Party") under the provisions of this Article in connection with the matter involved in such claim, the Indemnified Party shall promptly (but in no event later than ten (10) calendar days prior to the time at which an answer or other responsive pleading or notice with respect to the claim is required) notify the Indemnifying Party of such claim. The Indemnifying Party shall have the right at its election to take over the defense or settlement of such claim by giving prompt notice to the Indemnified Party that it will do so, such election to be made and notice given in any event at least twenty-four (24) hours prior to the time at which an answer or other responsive pleading or notice with respect thereto is required. If the Indemnifying Party makes such election, it may conduct the defense of such claim through counsel of its choosing (subject

to the Indemnified Party's approval, not to be unreasonably withheld), will be responsible for the expenses of such defense, and shall be bound by the result of its defense or settlement of the claim to the extent it produces damage or loss to the Indemnified Party. The Indemnifying Party shall not settle such claims without prior notice to and consultation with the Indemnified Party, and no such settlement involving any injunction or material and adverse effect on the Indemnified Party may be agreed to without its consent. So long as the Indemnifying Party is diligently contesting any such claim in good faith, the Indemnified Party shall not pay or settle any such claim. If the Indemnifying Party does not make such election, or having made such election does not proceed diligently to defend such claim prior to the time at which an answer or other responsive pleading or notice with respect thereto is required, or does not continue diligently to contest such claim, then the Indemnified Party may take over the defense and proceed to handle such claim in its exclusive discretion, and the Indemnifying Party shall be bound by any defense or settlement that the Indemnified Party may make in good faith with respect to such claim. The parties agree to cooperate in defending such third party claims, and the defending party shall have access to records, information and personnel in control of the other party which are pertinent to the defense thereof.

REYNOLDS METALS COMPANY

P.O. Box 27003 • Richmond, Virginia 23261-7003

24 August 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
ATTN: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, D. C. 20301-3000

Dear Sir:

Your letter of 3 August 1993 to our Chief Executive Officer has been referred to me for a response. We appreciate the opportunity to provide input to assist in your report to Congress.

Our specific responses to the eight questions listed in the attachment to your letter are as follows:

(1) Our major environmental clean-up work is almost exclusively done by outside contractors.

(2) Our company, like other major manufacturers, has been involved in various Superfund site clean-ups and with remediation programs at some operating locations.

(3) From time-to-time, we have used various contractors for environmental remediation including: Chemical Waste Management; Bechtel; ERM; OHM; and, Woodward Clyde.

(4) At various times, contractors have performed all the phases of work listed in your inquiry. The most common types of clean-ups we have encountered are for organic and PCB contamination of soil.

(5) To the best of my knowledge, we have never indemnified a clean-up contractor. Alternatively, our contract documents contain indemnification language to protect Reynolds.

(6) N/A

(7) No

(8) We have not used other risk sharing approaches to environmental clean-ups; However, we believe that there is potential, in the future, to team with environmental contractors to share the unknown risks of clean-ups in return for lower cost clean-ups.

If we can be of any further service, please feel free to contact us.

Very truly yours,

Lawrence C. Tropea, Jr, P. E.,DEE
Corporate Director, Environmental Quality

Allied Signal

Allied-Signal Inc.
P.O. Box 1057
Morristown, NJ 07962-1057

August 20, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Mr. DeHart:

We reviewed your communication sent under cover of Deputy Under Secretary of Defense, Sherri Wasserman Goodman's letter of August 3rd, as to indemnification processes to perform environmental clean-up. Although we have not framed this response to your specific outline, we hope this letter will be useful to you.

We do in fact do environmental clean-ups by use of contractors. We often do a preliminary assessment of clean-up (Phase I) ourselves and/or with the assistance of a consultant. RI/FS assessments require the assistance of a contractor. We award contracts through competitive bids based on a number of factors (nature of job, price, quality, location, etc.).

Relationships with contractors vary of course, although continuous and detailed supervision is always a part of our standard operating procedures. We have a waste management and remediation group within our structure which has responsibility for managing and overseeing most of these clean-ups. Protection of personal and public safety and health, and the environment are our primary concerns under our Corporate HS&E policy (enclosed). Relationship to state and federal (EPA) regulatory requirements is closely monitored, of course.

We do hope this brief response is of some use to you.

Very truly yours,

Jonathan Plaut, Director
Environmental Quality

enclosure

c:200

Allied Signal

Health, Safety and Environmental Policy

It is the worldwide policy of Allied-Signal Inc. to design, manufacture and distribute all its products and to handle and dispose of all materials without creating unacceptable health, safety or environmental risks. The corporation will:

- Establish and maintain programs to assure that laws and regulations applicable to its products and operations are known and obeyed;
- Adopt its own standards where laws or regulations may not exist or be adequately protective;
- Conserve resources and energy, minimize the use of hazardous materials and reduce wastes; and
- Stop the manufacture or distribution of any product or cease any operation if the health, safety or environmental risks or costs are unacceptable.

To carry out this policy, the corporation will:

1. Identify and control any health, safety or environmental hazards related to its operations and products;
2. Safeguard employees, customers and the public from injuries or health hazards, protect the corporation's assets and continuity of operations, and protect the environment by conducting programs for safety and loss prevention, product safety and integrity, occupational health, and pollution prevention and control, and by formally reviewing the effectiveness of such programs;
3. Conduct and support scientific research on the health, safety and environmental effects of materials and products handled and sold by the corporation; and
4. Share promptly with employees, the public, suppliers, customers, government agencies, the scientific community and others significant health, safety or environmental hazards of its products and operations.

Every employee is expected to adhere to the spirit as well as the letter of this policy. Managers have a special obligation to keep informed about health, safety and environmental risks and standards, so that they can operate safe and environmentally sound facilities, produce quality products and advise higher management promptly of any adverse situation which comes to their attention.

Alan Belzer
President
and Chief Operating Officer

Larry Bossidy
Chairman of the Board
and Chief Executive Officer

Revised April 1992

CYANAMID

American Cyanamid Company
One Cyanamid Plaza
Wayne, NJ 07470-8426

September 24, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Mr. DeHart:

Subject: Your Questionnaire on Indemnification
OMB No. 0704-0354

Enclosed is Cyanamid's response to the subject questionnaire. We have numbered our replies to correspond to the numbers of the questions.

If you have any questions, please call me at:

(201) 872-7926

Very truly yours,

Ted Harris
Environmental Specialist

TH:cc
THQUESON.LET
Enc.

cc: R. A. Dennis

Response to DOD Questionnaire on
Contractor Indemnification
OMB No. 0704-0354

Numbers correspond to numbers of questions in the questionnaire.

1. Almost all of our actual clean-up work (>95%) is done by contractors; none by governmental agencies to date.

   Oversight is almost all by company personnel.

2. We have engaged in all phases of environmental clean-up work since 1980. Some examples:

   Landfilling
   Dewatering
   Biotreatment
   Chemical treatment
   Fuel blending
   Materials recovery
   In-situ bioremediation
   Incineration

   Both on and off-site.

3. List not available at present.

4. Contractors have been used for all phases of remedial work. Pollutants are many, varied and site-specific. Details not available.

5. No contractor indemnification to date.

6. None

7. None

8. We have reciprocal indemnification clauses in our contracts. We indemnify contractors for our negligence. They indemnify us for their negligence.

TH:cc
THQUESON.LET
9/24/93

CHRYSLER CORPORATION

P R Gilezan
Director
Environmental and Energy Affairs

August 19, 1993

Office of the Deputy Under Secretary of Defense
(Environmental Security)
Attn: Earl DeHart, ODUSD(ES)CL
U.S. Department of Defense
The Pentagon Room 3E808
Washington, D.C. 20301-3000

Dear Mr. DeHart:

This responds to the letter from Sherri Wasserman Goodman dated August 3, 1993 in which she requested information describing indemnification practices in the private sector relating to environmental cleanup. We are able to provide the following information:

(1) Chrysler Corporation contracts for all environmental cleanup work.

(2) The environmental cleanup work managed by Chrysler Corporation typically addresses soil contamination. Since 1980, the following remedial measures have been employed: soil removal (and landfilling), soil vapor extraction, bio-remediation, incineration, and stabilization. In addition, we have pumped and treated groundwater.

(3) Chrysler does not publish its vendor list.

(4) We have contracted for preliminary assessments, site inspections, remedial investigation, feasibility studies, remedial design and remedial actions. In the context of a real estate transaction, Chrysler has contracted for Phase I and II investigations. We have also had considerable experience with the Underground Storage Tank programs in several states. The type of action varies according to our level of knowledge about the problem at the outset, the urgency of the potential risk posed by that problem and the scope of the problem ultimately identified.

Chrysler facilities are primarily located in the Great Lakes states with the exception of major automobile assembly plants in Delaware and Ontario.

The types of pollutants typically encountered are paint and cleaning solvents, petroleum products (ranging from heavy oils to gasoline) and metals.

Chrysler Corporation
800 Chrysler Drive East
Auburn Hills MI 48326-2757

Chrysler usually undertakes fixed price contracts although experience has taught us that the scope of work often changes as data is developed about a specific problem. The value of the work contracted has ranged from several thousand to several million dollars.

(5) Chrysler does not indemnify its environmental contractors. It is our view that such contractors are hired for their expertise in this field of work and with proper disclosure of all information Chrysler has in its possession, they are responsible for all health and safety issues. Such contractors are required to provide evidence of insurance and to indemnify Chrysler Corporation.

(6) N/A

(7) No.

(8) No.

I hope this information is useful to the Department of Defense in preparing its report to Congress. Please do not hesitate to contact me if there is additional information I may be in a position to provide.

Very truly yours,

pw:PRGlet38

BURLINGTON NORTHERN RAILROAD

M. L. BURDA
DIRECTOR ENVIRONMENTAL FIELD OPERATIONS
ENGINEERING DIVISION

9401 Indian Creek Parkway
P. O. Box 29136
Overland Park, KS 66201-9136
(913) 661-4439

August 27, 1993

Office of the Deputy Under Secretary
of Defense (Environmental Security)
Attention: Earl DeHart
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Sir:

Burlington Northern Railroad is writing this letter in response to your office's request for comments concerning the indemnification of environmental contractors. Burlington Northern has been involved in Superfund activities in the federal and state programs since 1982. I will respond to your questions in order and to the extent appropriate for a letter of this type.

Question No. 1. Burlington Northern Railroad spends between $20 million and $25 million per year in line with environmental cleanup work under contract, through both in-house work forces and contracted work forces. These activities are involved both in state and federal agency regulated activities.

Question No. 2. Most of these activities deal with site investigations associated with past activities of the railroad and activities by third parties on properties owned and controlled by the railroad.

Question No. 3. Because of the large number of projects, Burlington Northern Railroad works with a large number of environmental contractors across the United States.

Question No. 4. Burlington Northern is involved in all phase aspects, from preliminary assessments to full conduct of remedial designs/remedial activities.

Question No. 5. Burlington Northern has never indemnified environmental cleanup contractors, nor does it intend to do so anytime in the future.

Question No. 6. Not applicable.

Question No. 7. The only litigated costs that Burlington Northern has incurred is in pursuing costs and damages that Burlington Northern believes were caused by contracting firms under contract to the federal government in association with one of BN's projects.

Question No. 8. Burlington Northern Railroad requires its contractors, no matter the size, to indemnify the railroad for its activities and engineering judgment. If they use inappropriate judgment, or if the systems that are installed in line with their engineering specifications fail or do not perform up to standard or actually worsen the environmental scenario, they are liable to correct all problems and are responsible for the costs associated with the failure to perform.

I realize this is a short letter in responding to a large area of concern within the federal agencies at this time. However, this is the approach that most industries I deal with have taken.

If you have any further questions, please feel free to contact me at my above address.

Sincerely yours,

Melvin L. Burda

OLP:mlb93827mlw02

cc: Messrs. B. T. Noonan
Peter Luedtke

Waste Management, Inc.
Government Affairs Department
1155 Connecticut Avenue, N.W. Suite 300
Washington, D.C. 20036

September 1, 1993

Mr. Earl DeHart, ODUSD(ES)CL
Officer of the Deputy Under
Secretary of Defense
(Environmental Security)
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Mr. DeHart:

Enclosed is the response of WMX Technologies, Inc. to your questionnaire regarding private sector practice on indemnification of environmental cleanup contractors. We particularly appreciate the extension of time you gave us to provide this response.

Our primary response is on behalf of RUST Environment and Infrastructure (RUST E&I), the member of the WMX family of companies that primarily provides environmental investigation and design work. The response of RUST E&I shows the need to recognize the constraints on the investigation and design contractor's control of the conditions of its work.

In addition, we have enclosed standard indemnification clauses and additional information from other members of the WMX Technologies companies:

Waste Management, Inc., the solid waste management company which hires Response Action Contractors (RACs) to perform cleanup at sites where WMI is a PRP.

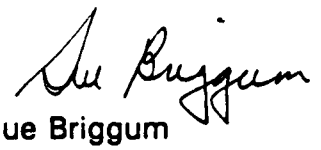
RUST Remedial Services, which performs on-site remedial services for the federal government and the private sector;

Chemical Waste Management, Inc., which provides hazardous waste treatment and disposal services at commercial facilities owned by CWM.

202 467-4480 · Twx: 710-822-9280

Please feel free to call me at (202) 467-4480 if any additional information would be useful.

Sincerely yours,



Sue Briggum
Director of Government Affairs
WMX Technologies and Services.

/kw

Enclosures

Answers to Questions on Private Sector Practice on Indemnification of Environmental Cleanup Contracts by Rust Environment and Infrastructure

(1) For the phases of clean-up work noted in the answer to question 4, Rust E&I's 1992 revenues included $62 million (32.2%), and projections for 1993 include $75 million (38.8%). Rust E&I provides these services for both family and third party, and for both industrial and government clients.

(2) See question 4.

(3) Not applicable. (Rust E&I is not an owner/operator but performs the work referenced).

(4) Rust E&I provides preliminary assessment, site inspection, remedial investigation/feasibility study, remedial design and construction oversight for remedial action. Rust E&I provides services ranging from preliminary assessment of a single small site costing thousands of dollars to projects including all phases noted above lasting several years and costing millions of dollars. Our contract vehicles include all three compensation arrangements referred to.

(5) Not applicable. (See 3 above)

(6) Not applicable. (See 3 above)

(7) Not applicable. (See 3 above)

(8) It is Rust E&I's policy to limit its exposure to claims based on actual or threatened damages arising out of hazardous waste. Rust E&I is not an owner/operator of hazardous waste sites nor does it engage in transportation, disposal, or storage of such wastes. Its services are directed to providing solutions for parties who do have title to hazardous wastes.

Rust E&I's policy is based on a balancing of risks and rewards among the parties to a cleanup project and a belief that responsibility should be assigned to the party in the best position to control it.

With respect to risk/reward, the fees for "front-end" (assessment through design) services for such a project are typically a minor component of the total cleanup costs. There must be some relationship between the compensation derived from a contract and the degree of risk the contractor assumes.

With respect to control, the engineer provides professional services for determining appropriate cleanup solutions, but control of the means, methods, techniques, and sequences of construction -- that is, control of the site itself -- are in the hands of others. These very significant restrictions on the engineer's control of the project must be recognized.

In addition, cleanup technology is constantly evolving, and there is pressure from both the public and private sectors to develop innovative solutions to remediation challenges. There must be some means to achieve these policy objectives without imposing the risks of failure on the contractor.

Base on all of the above, Rust E&I believes that it is unfair to subject engineers to the enormous risks posed by joint and several liability, and, in the worst case, strict liability, for damages alleged to be caused by remediation projects. There must be a relationship between compensation and control and the level of risks assumed.

Rust E&I's Standard Terms and Conditions contain the following provisions on risk allocation. These terms of course are negotiable on a project basis.

> Standard of Care. Services shall be performed in accordance with the standard of professional practice ordinarily exercised by the applicable profession at the time and within the locality where the Services are performed. Professional services are not subject to, and Rust E&I cannot provide, any warranty or guarantee, express or implied, including warranties or guarantees contained in any uniform commercial code. Any such warranties or guarantees contained in any purchase orders, requisitions or notices to proceed issued by Client are specifically objected to.
>
> Indemnities. To the fullest extent permitted by law, Client shall defend, indemnify, and save harmless RUST E&I, its agents, employees, and representatives from and against loss, liability, and damages (including reasonable litigation costs) arising from or relating to claims for injury or death to persons, damages to tangible property, or other losses, alleged to be caused by any of the following: (a) any substance, condition, element, or material or any combination of the foregoing (i) produced, emitted or released from the Project (ii) tested by RUST E&I under this Agreement, or (iii) used or incorporated by RUST E&I in the Services; or (b) operation or management of the Project. Client also agrees to require its construction contractor, if any, to include RUST E&I

as an indemnitee under any indemnification obligation to Client.

Limitations of Liability. No employee or agent of RUST E&I shall have individual liability to Client.

Client agrees that, to the fullest extent permitted by law, RUST E&I's total liability to Client for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to the Project or this Agreement from any causes including, but not limited to, RUST E&I's negligence, errors, omissions, strict liability, or breach of contract shall not exceed the total compensation received by RUST E&I under this Agreement. If Client desires a limit of liability greater than that provided above, Client and RUST E&I shall include in Part III of this Agreement the amount of such limit and the additional compensation to be paid to RUST E&I for assumption of such additional risk.

IN NO EVENT AND UNDER NO CIRCUMSTANCES SHALL RUST E&I BE LIABLE TO CLIENT FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES.

Answers to Questions on Private Sector Practice
on Indemnification of Environmental Cleanup Contracts
by
Waste Management, Inc.

(1) and (2) Since approximately 1987, our firm has been involved in conducting remedial investigation/feasibility studies, remedial design/remedial actions and interim remedial measures at sites at which we are identified as a PRP. We perform work in-house, and use contractors.

(3) Our firm has used contractors such as Golder and Associates, P.E. LaMoreaux, RUST Environmental and Infrastructure, Warzyn, Rust Remedial Service,s GZA, GeoEnvironment, Wehran Engineering Corp., Geosyntech.

(4)

CONTRACTOR	SITE	WORK	CONTRACT
Warzyn	Muskego Landfill Muskego, WI	RI/FS	Cost reimb. not to exceed
P.E. LaMoreaux	City Disposal Dunn, WI	RI/FS	Cost reimb. not to exceed
Warzyn	Boundary Road Menomonee Falls, WI	RI/FS	Lump sum
RUST E&I	Indian Hills Topeka, KS	RD	Lump sum
Terra Engineering	Reclamation LF	RA	Lump Sum
Wehran Engineering	Hunt Road		
Golder Associates	Cinnamonson	RA	Cost reimb. not to exceed

(5) To the best of our knowledge, we have indemnified a contractor only once.

(6) During conduct of an RI/FS, the contractor was required to determine the depth of clay beneath a landfill which required drilling into the clay liner.

(7) No.

(8) See attached.

WMI Standard Customer Indemnity Forms

Indemnification. The Company and the Customers shall indemnify and save WMI and the Contractors harmless from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs and attorneys' fees (collectively, the "Liabilities") resulting from a breach of any of the Company's representations and warranties in this Agreement and any willful or negligent act or omission of the Company or any Customer, their officers, agents, servants or employees; provided, however, the Company and the Customer shall not be liable for any Liabilities arising out of a willful or negligent act or omission of any Contractor, its officers, agents, servants or employees.

or

Indemnification.

(a) WMI agrees to indemnify and save harmless the Company, its present and future officers, directors, employees and successors from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, and costs and expenses incidental thereto (including cost of defense, settlement and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death) to any person, damage to any property (public or private), contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, orders, rules or regulations of any governmental entity or agency, to the extent such are caused by or arise out of any negligent act, negligent omission or willful misconduct of WMI, the Contractors or their employees relating to (i) the transportation of Waste Products, or (ii) the treatment, disposal or recycling of any Waste Products in a WMI Facility; provided, however, the obligation of WMI to indemnify the Company shall not apply to events or occurrences involving non-conforming waste Products nor to the Company's consequential, incidental or punitive damages.

(b) The Company and the Customers, jointly and severally, agree to indemnify and save harmless WMI, the Contractors and their present and future officers, directors, employees and successors, from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, and costs and expenses incidental thereto (including cost of defense, settlement and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death) to any person, damage to any property (public or private), contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, orders, rules or regulations of any governmental entity or agency, to the extent such are

caused by or arise out of breach of any representations or warranties of the Company contained in this Agreement or any negligent act, negligent omission or willful misconduct of the Company, the Customers, their employees or agents (including transporters of Waste Products other than Contractors) in the performance of this Agreement; provided, however, the obligation of the Company and Customers to indemnify WMI and the Contractors shall not apply to the consequential, incidental or punitive damages of WMI or the Contractors.

Rust Remedial Services
Standard Customer Indemnity Form

Article XII - Indemnification. Rust agrees to indemnify and save harmless the Owner, its present and future officers or directors (or officials), employees and agents, from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, and costs and expenses incidental thereto, (including cost of defense, settlement, and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death) to any person, damage (including loss of use) to any property (public or private), contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, orders, rules or regulations of any governmental entity or agency, to the proportional extent such are shown to be caused by the breach of any warranties by Rust, or any negligent or willful act or omission of Rust, its employees or subcontractors in the performance of this Agreement.

The Owner agrees to indemnify and save harmless Rust, its present and future officers, directors, employees, agents, subcontractors and assignees, from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, and costs and expenses incidental thereto, (including cost of defense, settlement, and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death) to any person, damage (including loss of use) to any property (public or private), contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, orders, rules or regulations of any governmental entity or agency, to the proportional extent such are shown to be caused by the breach of any warranties by the Owner, or any negligent or willful act or omission of Owner, its employees or agents in the performance of this Agreement.

Chemical Waste Management, Inc.
Standard Customer Indemnity Form

CWM agrees to indemnify and save harmless Customer and its officers, directors, employees, agents and contractors from and against any and all liabilities, losses, penalties, fines, claims, costs and expenses incidental thereto (including costs of defense, settlement, and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death), property damage, contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, laws, orders, rules or regulations, (a) to the extent caused by CWM's breach of the Agreement, or by any negligent act, negligent omission or willful misconduct of CWM or its employees, agents or contractors in the performance of this Agreement, or (b) arising out of the performance of Work with respect to Customer's waste materials which conform to the description and specifications stated in the corresponding Profile Sheet after CWM removes such waste materials from Customer's premises.

Customer agrees to indemnify and save harmless CWM and its officers, directors, employees, agents and contractors from and against any and all liabilities, losses, penalties, fines, claims, costs and expenses incidental thereto (including costs of defense, settlement, and reasonable attorneys' fees), which any or all of them may hereafter suffer, incur, be responsible for or pay out as a result of bodily injuries (including death), property damage, contamination of or adverse effects on the environment, or any violation or alleged violation of statutes, ordinances, laws, orders, rules or regulations, to the extent caused by Customer's breach of this Agreement or by any negligent act, negligent omission or willful misconduct of Customer or its employees, agents or contractors in the performance of this Agreement.

In no event shall either party be responsible to the other of consequential damages.

Reichhold Chemicals, Inc.
Corporate Headquarters
P.O. Box 13582
Research Triangle Park, NC 27709-3582

REICHHOLD

September 20, 1993

Mr. Earl DeHart
Office of the Deputy Under Secretary of Defense
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Mr. DeHart:

Following are the answers to your questionnaire about private sector practice on indemnification of environmental cleanup contractors.

Sincerely,

Albert F. Vickers, Ph.D., P.E.
Director - Environment, Health and Safety

AFV/mmr

Enclosures

tel. (919) 990-7500
Fax (919) 990 7711

Question #1:

What portion (by dollar amount) does your firm perform environmental cleanup work by contract, through in-house work force, or through state or Federal agency?

Answer:

100% of contract dollars. Remediation costs were approximately $20,000,000 last year.

Question #2:

Please describe the nature of the environmental cleanup work which your firm has performed since 1980.

Answer:

Superfund cleanup at own and third party sites. RCRA corrective action at company site. Underground storage tank removal and demolition at sites.

Question #3:

May we have a list of contractors you have used for environmental cleanup work?

Answer:

Primary Engineering Contractors:

Clean Sites, Inc.
CH2M Hill
Malcolm Pirnie, Inc.
ERM
Brown and Caldwell
Black and Veatch
Golder Associates
O'Brien and Gere
Rezzo and Associates

Primary Construction Contractors:

OHM
Chem Waste Management
Laidlaw

Question # 4 Time & Material Eng Fix price Construction

Verbal 20 Se 104

Question #5:

How many times have you indemnified your environmental cleanup contractor(s)?

Answer: No for cleanup contractors

We have only indemnified the non profit operators of Clean Sites. Other indemnifications were for non-related law suits where the contractor exercised the industry standard of care and the indemnification was very limited.

Question #6:

What circumstances (nature of pollutant, magnitude of the job, type of activity, technology employed, etc.) led you to provide indemnification on those occasions that you did? Please give us examples of the indemnification clauses used.

Answer:

These are business confidential information.

Question #7:

Have you made any payments, or incurred any costs as a result of contractors you indemnified having claims or litigation initiated against them? If so, please provide details.

Answer:

No

Question #8:

Have you used any other risk-sharing approaches with environmental cleanup contractors? If so, please describe these approaches and provide examples of contract clauses.

Answer:

Limited contractor liability to twice contract value in some instances.

GRACE

W. R. Grace & Co.
One Town Center Road
Boca Raton, FL 33486-1010

(407) 362-2000

September 9, 1993

Mr. Earl DeHart, ODUSD(ES)CL
Office of the Deputy Under Secretary of Defense
(Environmental Security)
Department of Defense
The Pentagon Room 3E808
Washington, DC 20301-3000

Dear Mr. DeHart:

Enclosed please find W.R. Grace's response to your request for information concerning indemnification of environmental clean-up contractors. The answers provided were compiled by the Remediation Management Department of W.R. Grace, who are responsible for managing the majority of W.R. Grace's environmental site work.

If I may be of further assistance, please do not hesitate to contact me at (407) 362-1512.

Maura Heffernan
Manager, EHS Information

The following are answers to the Department of Defense request relating to Remediation Management Department of W.R. Grace & Co.

Answer to Question 1:

Grace environmental cleanup work (by dollar amount) reported in this memorandum is portioned as follows:

a. Contract - $15.6 million

b. In-House - None

c. State or Federal Agency - None

Answer to Question 2:

Grace environmental cleanup work performed included capping contaminated soil, and the removal and disposal of contaminated soil.

Answer to Question 3:

Grace contractors are as follows:

a. Canonie Environmental Services

b. John Mathes & Associates

c. CWM/ENRAC - South, Inc.

Answer to Question 4:

Details of Grace environmental cleanup are on the attached schedule.

Answer to Question 5:

Grace contracts with environmental cleanup contractors include clauses on indemnification.

Answer to Question 6:

Grace contracts with environmental cleanup contractors include indemnification clauses due to the nature of pollutants and reciprocity. Contractors are requiring Grace indemnification

because Grace requires indemnification by them. The following is an example of an indemnification clause used by Grace:

To the fullest extent permitted by law, Client shall indemnify, defend and hold harmless Contractor and its subcontractors, consultants, agents, officers, directors, and employees from and against all claims, damages, losses and expenses, (excluding indirect or consequential damages) including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from any claims against Contractor which arise from the acts, omissions or work of others over which Client has contractual or direct control. Without limiting the generality of the foregoing, the above indemnification provision extends to claims against Contractor which arise out of, are related to, or are based upon, the actual or threatened dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant, or pollutant in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface of any (a) soil, (b) water or water-courses, (c) objects, or (d) any tangible or intangible matter, whether sudden or not so long as Contractor is not in violation of any statute, regulation, or law while performing the work or as a result of such performance. Such indemnification shall not apply to claims, damages, losses or expenses which are finally determined to result from willful or reckless disregard by Contractor of its obligations under this Agreement or Contractor's gross negligence.

because Grace requires indemnification by them. The following is an example of an indemnification clause used by Grace:

To the fullest extent permitted by law, Client shall indemnify, defend and hold harmless Contractor and its subcontractors, consultants, agents, officers, directors, and employees from and against all claims, damages, losses and expenses, (excluding indirect or consequential damages) including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from any claims against Contractor which arise from the acts, omissions or work of others over which Client has contractual or direct control. Without limiting the generality of the foregoing, the above indemnification provision extends to claims against Contractor which arise out of, are related to, or are based upon, the actual or threatened dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant, or pollutant in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface of any (a) soil, (b) water or water-courses, (c) objects, or (d) any tangible or intangible matter, whether sudden or not so long as Contractor is not in violation of any statute, regulation, or law while performing the work or as a result of such performance. Such indemnification shall not apply to claims, damages, losses or expenses which are finally determined to result from willful or reckless disregard by Contractor of its obligations under this Agreement or Contractor's gross negligence.

W R. GRACE & CO.
ENVIRONMENTAL, HEALTH, SAFETY
REMEDIATION MANAGEMENT DEPARTMENT
DEPARTMENT OF DEFENSE SURVEY
QUESTION - 4

LINE NO	(1) LOCATION	(2) TYPE OF ACTION	(3) POLLUTANTS	(4) TYPE OF CONTRACT	(5) CONTRACTOR	(6) PHASE PERFORMED
(1)	HENRY IL - LAND	SOIL REMOVAL AND DISPOSAL	PESTICIDES, PCBs, TRANSITE, PETROLEUM PRODUCTS	FIXED FIXED + VARIABLE	JOHN MATHES & ASSOCIATES CANONIE ENVIRONMENTAL SERVICES	SI, RI, & RD RA
(2)	JOPLIN, MO - GYPSUM	CLAY CAP	LOW Ph, FLOURIDES, METALS, PHOSPHATE	FIXED + VARIABLE	CANONIE ENVIRONMENTAL SERVICES	RI, FS, RD & RA
(3)	MEMPHIS - LAND	SOIL REMOVAL AND DISPOSAL	VOLATILE ORPGANIC COMPOUNDS (PERCHLOROETHLENE AND TRICHLOROETHYLENE), POLYCHLORINATED BIPHENYLS HYDROCARBONS	FIXED + VARIABLE FIXED + VARIABLE	CANONIE ENVIRONMENTAL SERVICES CWM/ENRAC - SOUTH, INC.	RI, RD & RA RA
(4)	WALPOLE, MA	CLAY CAP	ASBESTOS, VIOLATILE AND SEMI-VOLATILE ORGANICS, METALS (LEAD, COPPER, ZINC), AND HIGH Ph	FIXED + VARIABLE	CANONIE ENVIRONMENTAL SERVICES	RA
(5)	TOTAL COST ON ABOVE PROJECTS		$15,621,000			

08/23/93