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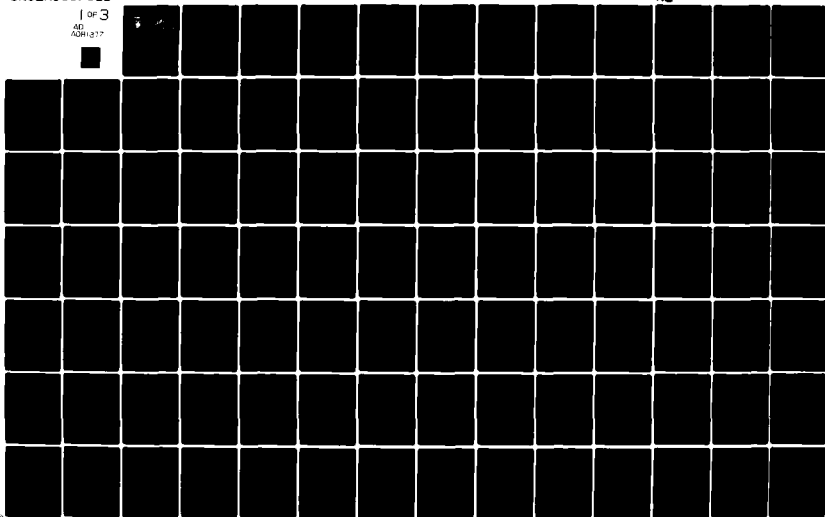
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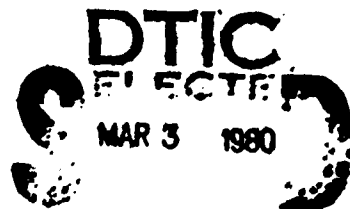
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DEFENSE LOGISTICS AGENCY



LEVEL II



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**LOGISTICS
STUDY --
SHELTER
STOCKAGE**

**DEFENSE LOGISTICS AGENCY
CIVIL PREPAREDNESS OFFICE
RICHMOND, VIRGINIA 23297**

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FINAL REPORT NOVEMBER 1979
WORK ORDER DCPA-01-78-C-0177
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LOGISTICS STUDY -- SHELTER STOCKAGE

FINAL REPORT

BY

DEFENSE LOGISTICS AGENCY
CIVIL PREPAREDNESS OFFICE
RICHMOND, VIRGINIA 23297

FOR

FEDERAL EMERGENCY MANAGEMENT AGENCY
WASHINGTON, D.C. 20472

UNDER

WORK ORDER NO. DCPA-01-78-C-0177
WORK UNIT 1423F

FEMA REVIEW NOTICE

This report has been reviewed in the Federal Emergency Management Agency and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Federal Emergency Management Agency.

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Collapsible, Water

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Fiberboard, Folding

Appendix C - Purchase Description: Bag, Commode,
Polyethylene

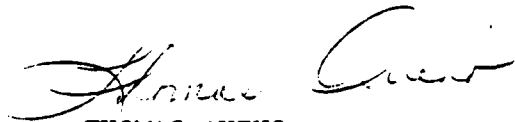
Appendix D - Purchase Description: Tie-Wire, Bag Closure

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FOREWORD

This report was prepared by the Defense Logistics Agency Civil Preparedness Office, for the Department of Defense Civil Preparedness Agency under Work Order DCPA-01-78-C-0177, Requisition Number 318-19. It covers work performed between August 1978 and October 1979.

The Defense Logistics Agency (DLA) is responsible for providing logistics support contingent to the National Civil Defense Program. It has provided the procurement, warehousing, accounting, and distribution functions for Civil Defense materiel since its inception.



THOMAS AVINO
Chief
DLA Civil Preparedness Office

ABSTRACT

Civil Defense planning includes the provision of stocking survival supplies for fallout shelters in local and/or regional storage facilities for distribution to designated shelters only when the need arises. Requirements include water containers, commodes, and sanitation supplies. This report describes the research, rationale, and recommendations for selection of water containers, commodes, and sanitation kits.

It has been expanded to include the logistics of requirements computation, procurement, storage, and distribution.

Design specifications and purchase descriptions are included as a part of the report.

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INTRODUCTION

The Civil Defense Survival Plan is based on the concept that a calculated nuclear attack by any of the nuclear powers is extremely remote. This concept also employs the logic that any contingency leading to a nuclear confrontation would involve a substantial period of escalating international tension, evolving in a crisis build-up period. If the latter situation should arise, Crisis Relocation Plans would be implemented.

Crisis Relocation Planning presupposes that the crisis build-up period will provide an interval of time in which the population of High Risk Areas can be alerted, prepared, and relocated to adjacent counties where the degree of risk is greatly reduced. Based on this premise it must be assumed that relocation planning has, in addition to designating host areas, designated shelters, locations, and shelter capacity.

Concurrent with the implementation of relocation plans, stocking of shelters with survival supplies must begin. Provisions must be made for potable water, articles required to maintain sanitation standards, and for collection and disposal of human waste. This study portrays research, discussion, and recommendations for assuring this capability. It has been expanded to include the logistics of procurement, stockage, accounting and distribution.

For the development of requirements methodology, the population figures of Urbanized Areas as depicted in DCPA Planning Document TR-82, dated April 1975, were used as a data base. Crisis Relocation Planning will dictate the use of more current population data, and wider Risk Area considerations. The latter considerations must include population evacuation and Host Area census figures which, when finalized, must be utilized for Materiel and Logistics Planning.

SHELTER SUPPLIES

Under current Civil Defense planning concepts the populous would take best available shelter near their location in the event of a short warning situation; or in the event of a crisis build-up period would move out of high risk areas into areas threatened only by fallout radiation. In order for these programs to be effective, provisions must be made for stocking shelters with potable water and provide for human waste collection and disposal.

The provision for potable water is the most important factor in stocking for shelter survival.¹ Permanent storage of water is not feasible due to storage space required, and the possible need for relocation. Conversely, the problems associated with the storage, handling, transportation and filling of large quantities of containers are staggering when reaction times are compressed to a matter of hours.

The collection and disposal of human waste, and maintenance of adequate sanitation standards will be a major problem in fallout shelter facilities. In facilities that have not been affected by damages from nuclear detonation, regular restroom facilities can be utilized if normal water supplies are still available. This is an ideal situation and would remain so until fallout contamination of the water source occurs. However, during and after a nuclear attack we cannot hope for any ideal

situation. Therefore, provisions must be made for alternative methods of collection and disposal. The health and well being of shelter occupants will depend on extreme care and attention to the cleanliness and sanitation of the facility. Supplies such as paper cups, toilet tissue, sanitary napkins, commode chemicals, etc., must be provided.

WATER REQUIREMENTS

Potable water and its availability to shelter inhabitants is the most important commodity for human survival in the event of a nuclear attack. Life can be sustained for long periods of time without food, but cannot exist more than a few days without water.¹ Therefore, it is imperative that provisions be made to insure that adequate supplies of potable water are available for survival.

Municipal water supplies are highly vulnerable to power failures, blast effects of a nuclear detonation, and contamination from fallout, thereby eliminating the normal source and flow capability. It is these circumstances that dictate the need for planned alternatives to assure the availability of potable water. The responsibility for pre-planning actions and determining the availability and source of sufficient supplies of potable water rests with local Civil Defense agencies based upon on-site characteristics of individual shelters, such as:

- (1) Water trapped in the building water supply system, water heaters, storage tanks, boilers, etc.
- (2) Existing wells in proximity to the shelter.
- (3) Municipal water systems designed for supply by gravity flow.

Guidance promulgated by the Civil Preparedness Agency for emergency fallout shelter stocking depicts sources and quantity

of water normally trapped and available from plumbing systems of buildings.¹ Civil Defense planning guidance¹ has established a minimum of 3½ gallons per person. This guidance also states that, "...Shelterees should bring their own water, preferably in plastic containers..." It is highly doubtful that in the confusion of gathering foodstuffs, blankets, and other personal paraphernalia for a possible two-week shelter stay, that individuals could carry 3½ gallons with a weight of thirty pounds.

The use of containers for storage of potable water is a very simple and positive method of assuring that potable water will be available to occupants of a shelter during a nuclear attack. Even if water is initially available from above mentioned sources during site surveys, conditions at the time of an emergency declaration may dictate the need for container storage. In fact, container storage is the only positive means of assuring adequate supplies of potable water to shelter inhabitants during and after a nuclear attack.

There are many and varied types of containers available on the commercial market which are capable of storing potable water, and could be utilized in shelters. However, under the concept of bulk storage of shelter supplies until an emergency situation is declared, the development of prerequisites to assure that containers and packing will conform to the logistics

concept is required. Basically these specifications are:

- (1) Containers must supply the needs of shelters.
- (2) Must be easily deployed and filled.
- (3) Must be within easy handling weight limits.
- (4) Must be able to withstand long term storage conditions.
- (5) Must be within the capabilities of present design, manufacturing processes, and production capability.

Research of the design and availability of articles on the commercial market resulted in the selection of five articles for consideration and evaluation:

- (1) Nestable containers.
- (2) Self-supporting polyethylene drums.
- (3) Collapsible water tanks.
- (4) Pillow tanks.
- (5) Collapsible "Pool" type reservoirs.

Several nestable container models are available openly and can be readily produced in any desired quantity. These containers generally are manufactured from high density, virgin polyethylene resins, the ingredients of which meet Food and Drug Administration (FDA) standards for food product packaging and storage. They can be procured in any capacity desired. One nestable container which is available in one quart to ten gallon capacity would be outstanding for dormant storage, as they are packed in compressed cubes. However, use of this

type container would pose problems since air pressure is required for inflation back to original shape, filling time is increased, and filled containers are unstackable without outer cartons. Self-supporting polyethylene containers were screened and evaluated; however, cost implications, increased storage space, transportation, and handling requirements show them to be impractical.

An alternate source for shelter water supplies is packaged water. At present the Department of the Navy and the Coast Guard both utilize canned water for emergency use at sea, and in life rafts. Canned water comes in ten ounce (10 oz.) cans, packed twenty-four (24) cans per case. Cost is \$7.30 per case, \$0.31 per can.

Bottled water is abundantly available throughout the United States. Sales and consumption of bottled water experienced a constant increase from 2,500,000 gallons in 1975 to 21,000,000 gallons in 1978.² Bottled water is available in grocery stores, chain stores, and through home delivery. It is also dispensed from vending machines into home use containers. Bottled water container packaging companies are located in or adjacent to every major city in the country. These companies distribute water in various size containers, including a one gallon plastic throw-away container at a cost ranging from \$0.59 to \$0.75 a gallon.

The use of a reservoir type container is not new. It was originally proposed in 1971. The General American Research Division (GARD)³ and the Gaynes Laboratory tested PVC materials and found them to meet all test specifications. PVC materials currently used by manufacturers are far superior to those originally tested.

Small capacity, 250-350 gallon, pillow tanks are available and make excellent storage units. Cost of the pillow tank ranges between one hundred seventy-five dollars (\$175.00) to two hundred fifty dollars (\$250.00). The use of small capacity type reservoirs was surveyed; this unit appeared to meet all the characteristics and requirements.

Although this reservoir type of storage provides the most desirous capability from an economical standpoint, its use does present some ramifications:

(1) For example, the weight of water is 8.3453 pounds per gallon; the weight for three hundred fifty gallons totals out to two thousand, nine hundred and twenty-one (2,921) pounds, or eighty-eight pounds per square foot. Alone this would appear rather insignificant, but when the combined weight of one hundred people plus other essentials is added, floor load capacities could very easily be exceeded. Also, floors in older structures must be checked for weakening prior to placing this concentrated weight load on wooden or combination floors.

(2) Determinations must be made that an adequate water source is available for filling.

(3) Location of the reservoir must be pre-planned, as reservoir cannot be moved when filled.

The Muskin Corporation, Wilkes-Barre, Pennsylvania, furnished a small collapsible splash pool for observation. This unit was deployed and tested; after testing, further discussions were held with the Muskin Corporation on development and selection of a reservoir to meet shelter requirements. In reviewing the available designs, materials, and manufacturing processes, two types were chosen for evaluation. Both units are cylindrical and are available in either six or seven foot diameters. One is manufactured with a corrugated steel support wall, the other with a plastic support wall. A six foot diameter unit was deployed and filled with potable water, the cover was put in place and unit left sitting for twenty days. When checked, there had been no loss due to evaporation or leakage, water was clear, and no apparent change in taste quality. The liner of this unit was made of polyvinyl chloride, samples of which were folded, placed in plastic bags and stored, one in normal environment and one in a refrigerator freezer. After six months there has been no apparent deterioration of the material. After the freezer sample reached room temperature, it was as flexible and handled as if it had never been in the freezer.

Polyvinyl Chloride is non-flammable, practically insoluble

in many solvents at ordinary temperatures, moisture resistant, non-toxic, odorless, and tasteless. In its final form it is resistant to light, weathering, flexing, and to most chemicals.

Based on the costs of collapsible water containers investigated, their adaptability to bulk storage and handling methods, ease in assembly, and fast deployment and filling capability, the plastic wall container is recommended for fallout shelter use. This unit, seven foot in diameter, fifteen inches deep (7' x 15") has a capacity of three hundred and fifty gallons (350); cost with cover is \$22.50 each, per 10,000 units procured. Packaging is four units per carton, weight 38 lbs, cube 2 cu ft. Filling of this container is accomplished through a regular, uncontaminated garden hose. Filling time is approximately thirty minutes. Water would be dispensed with an eight ounce plastic dipper, included in the sanitation kit.

The Muskin Corporation production schedule under regular operation would produce 1200 per shift, or 3600 per day. There are numerous other manufacturers capable of producing if accelerated programs were required.

Utilizing this reservoir to support one hundred spaces for a fourteen day period would reflect a cost of \$0.016 per space per day.

SANITATION KITS

Former Civil Defense Shelter Programs recognized the need for items of personal sanitation and realized that in order to maintain a healthy environment, a packaged kit was needed. Two kits were developed, an SK-III for the support of twenty-five persons, and an SK-IV for the support of fifty persons. The kits consisted of the items and quantities in Table #1.

All of the items were packed in the fiber drum container, which was converted to a chemical toilet after removal of the supplies. Items contained in the Kit were procured in bulk and kits assembled by the National Industries for the Blind, then shipped to storage sites.

The maintenance of adequate sanitation standards will continue to be a major problem in shelter environments, and conceptual planning must include the means by which a healthy sanitary environment can be maintained. The sanitation kits of the sixties provided personal use items of hygienic application, and based on shelter habitation studies, proved to be very effective. Therefore, it is recommended that the provision for a sanitation kit be continued. Recommend that the sanitation kit make-up include the items listed in Table #1 and designated as SK-V. This new designation is necessary as there are large quantities of the former Kits still in existence.

In areas where water supply sources have not been affected

by blast damage or shock overpressures, restrooms and sanitary facilities may be utilized. Once the water source is lost, alternative methods must be implemented.

A survey of the commercial market revealed many and varied types of portable toilets and human waste deposit systems. They are primarily of the water recirculation type, and have a unit contained water tank; or the electrical incineration type which would require a power source for operation.

Portable holding tank toilets are available in major metropolitan areas and are rented to construction sites, parks, and recreation areas. These units have an average capacity of sixty gallons, they are of the chemical type, and are odor free for up to ten days. These units could be utilized in shelters with extra wide doors; however, they are extremely bulky and cumbersome to move. Two types of small portable toilets are commercially available. They are designed primarily for recreational vehicle and camping use. One has a detachable 5½ gallon waste holding tank, a clear water flushing system, and will render up to fifty flushes. The detachable holding tank must be emptied when full. This unit sells for \$104.00. The other is collapsible, tripod leg type with seat; it requires the attachment of a plastic bag for each use. Bags are then sealed and disposed of. The unit retails for between \$9.00 and \$12.00, depending on manufacturer. There is also a hassock type unit available; it uses a 3-gallon capacity plastic pail insert. When full the

pail is removed and emptied. Pails may be purchased with snap-on sealing lids when short term storage is required. The hassock unit costs \$18.00; pails with lids costs \$0.55 each.

During the late sixties a collapsible commode was developed for shelter use and manufactured by Hollinger Corporation, Arlington, Virginia. This unit was categorized as an experimental item which, due to the demise of the Shelter Stocking Program, was never fully evaluated. Several units were located and assembled for test and evaluation. One unit which had been in storage since the late sixties was assembled and checked for possible damage; it was then filled with water on 3 November 1978. Another unit was assembled, checked, and two hundred pounds of weight placed on the top for fifteen (15) days. The second unit was then filled with water and placed atop the first. Units were rechecked the first week in December; there had been no leakage of water, nor any significant weakening from the weight.

Material composition consists of wax resin impregnated, weather resistant, high compression strength (200 psi) corrugated cardboard. The commode is constructed from two pieces, die cut, scored, and slotted for assembly; with a polyethylene bag liner, and polyethylene outer bag. The commode units are packed flat, ten units to a box, which also is wax resin impregnated, and weather resistant. Each unit has a waste capacity of fourteen gallons; two packages (20 units) will support one hundred spaces for fourteen days.

Cost estimate provided by the Hollinger Corporation, based on a procurement quantity of 50,000 units, would be \$5,236.11 per thousand, FOB Arlington, Virginia (\$5.24 each).

The quaternary commode chemical which is manufactured by the Unit Chemical Company, Los Angeles, California, is presently being utilized by federal agencies and is available from Federal Supply Schedule. All other items are standard federally stocked items currently volume purchased by the General Services Administration. The cost of supplies based on current GSA Stores Stock Catalog total \$7.51. These costs could be reduced approximately 15% by negotiating contracts divorced from the GSA stock category.

The National Industries for the Blind has reviewed the assembly and packaging requirements and indicated that assembly could be accomplished at a cost of \$1.50 per kit. Assembly could be accomplished at workshops located throughout the country, and production schedules geared to meet program requirements.

We recommend that these collapsible commodes be procured and utilized for both water storage containers and shipping and storage containers for the Sanitation Kit supplies designated SK-V.

The collapsible commodes could be shipped directly from the manufacturer to selected National Industries for the Blind workshops and kits assembled at these points.

PACKAGED VENTILATION KIT

The Packaged Ventilation Kit (PVK) which is designed to circulate and move stale air from shelter environments is presently undergoing design study and change. The work is being conducted by the General American Research Division, Inc., Chicago, Illinois. Requirements and storage data must be included when the redesign is complete.

TABLE #1
FORMER AND PROPOSED SANITATION KITS

ITEM	UI	SK-III	SK-IV	SK-V
Container	ea	1	1	1 *
Toilet Tissue	ro	5	10	10
Can Opener	ea	1	1	-
Sanitary Napkins	ea	36	60	60
Water Purification Tablets	btl	1	2	-
Gloves Polyethylene	pr	1	1	1
Syphon Spout	ea	1	1	-
Tie Wire	ea	1	1	1 *
Plastic Dipper	ea	-	-	1
Commode Seat	ea	1	1	-
Cups w/lids	ea	35	70	70
Commode Chemical	pkt	10	10	10
Commode Liner	ea	1	1	2 *
Fiberboard Boxes	ea	1	1	-
Instruction Sheet	ea	1	1	1 *

* Part of Collapsible Commode.

TABLE #2
SANITATION KIT SIZE AND COST

KIT	SPACES	OUTSIDE DIMENSION (Inches)	CUBE (cu ft)	WEIGHT (lbs)	CONTAINER COST	KIT COST
SK-III	25	16-1/4x21-3/4	3.3	18	\$ 1.31	\$ 5.99
SK-IV	50	16-1/2x21-3/4	3.3	22	\$ 1.31	\$ 7.32
SK-V	50	18 x 14 x 14	2.2	17		\$ 7.51

TABLE #3
COST ESTIMATES

SANITATION KIT SUPPLIES

ITEMS	UI	COST	QTY	TOTAL COST
Paper, Toilet	roll	.20	10	\$ 2.00
Pad, Sanitary	dozen	.34	2	.68
Pad, Sanitary, Heavy	dozen	.57	3	1.71
Cups/Lids	each	.03	70	2.10
Commode Chemical	pkg	.70	1	.70
Dipper, Plastic	each	.16	1	.16
Gloves, Polyethylene	pair	.16	1	.16
TOTAL				\$ 7.51
ASSEMBLY				<u>1.50</u>
TOTAL				\$ 9.01
COMMODE/SK-V				\$ 5.24
COLLAPSIBLE WATER CONTAINER				\$ 22.50

STORAGE

The logistics associated with the warehousing, accounting, control, and distribution of shelter supplies is a major program. The compression of time and events preceding a nuclear attack mandate that shelter survival requirements be stored within or in reasonable proximity of targeted areas throughout the United States. In addition to providing the warehouse space, the storage facility must possess the capability for in and out handling of all materiel on an expedited basis. Contingency and emergency planning must provide a Quick Reaction Capability for distribution of survival supplies to shelter locations.

The Defense Logistics Agency (DLA), as the Logistics Support Activity, has an inherent responsibility to acquire and provide required storage space and handling capability for all commodities assigned to that agency for support. However, if space requirements exist in areas where the Department of Defense (DoD) has no facilities, other federal or commercial sources must be considered.

The acquisition and/or use of General Services Administration (GSA) controlled and commercial storage space is extremely costly. Agencies utilizing space in GSA controlled buildings pay a rental rate which GSA assesses Federal agencies. This assessment is known as "Standard Level User Charges (SLUC)."

The SLUC charge is a composite of three elements:

- a. The Fair Annual Rental Rate, which is based on comparable commercial appraisal.
- b. An escalation factor (percentage add on).
- c. A charge for Standard Protection. Additional costs and charges for additional services incurred by the user are added. GSA charges and commercial rates are comparable.

The Defense Logistics Agency, as the Logistics Support Activity, can furnish warehouse space, handling, housekeeping, security, inventory control. If other DoD component facilities are utilized, they are furnished on a common service basis.

Attachments 1 through 8 hereto depict storage space requirements by state and region. Space requirements are based on the Population At Risk, as portrayed in the Defense Civil Preparedness Planning Document, TR-82, dated April 1975. The space requirements are for stockpile storage of Water Containers, Collapsible Commodes, and Sanitation Kits only. The data on the Packaged Ventilation Kit, which is undergoing redesign, must be added when available.

Also identified are DoD Major Storage Sites and component bases, camps and stations of the military services within or in reasonable proximity to targeted areas which could possibly

be utilized to provide space and support requirements. The DLA must locate an available space and coordinate with service for approval.

Crisis Relocation Planning concepts which direct the evacuation of the populous from high risk targeted areas to surrounding counties where hazard could be greatly reduced must be an integral part of the storage decision. The movement of supplies from storage to areas within a seventy-five mile radius of a major storage site could be accomplished within three to four hours. However, if localized storage sites could be located in areas designated to host evacuees, the dispersement and deployment time could be greatly reduced.

In addition to storage sites mentioned prior, there are numerous localized activities which could possibly provide storage in host areas. Activities which should be considered are Army National Guard facilities, Air National Guard Bases, Air Force Bases, inactive military installations, etc.

Twenty cities were selected and Crisis Relocation Planning factors applied. The projected number of evacuees were combined with the census of the Host Area Census, and supplies and space requirements computed (see attachments 9 through 28). Three of these cities and allied host areas were subjected to extensive research to determine availability of DoD and DoD associated activities which could possibly be utilized.

Rome, New York. Major Storage Site - Rome Air Force Depot, Griffiss Air Force Base, located within the city limits of Rome. This facility is capable of handling the full storage and distribution requirement; it is located within a twenty mile radius of host areas. In addition, the National Guard Armory at Utica has an area of 62,921 sq. ft., and the Armory in Rome has an area of 26,305 sq. ft.

Pittsburgh, Pennsylvania. Allegheny County. Greater Pittsburgh Airport located 18 miles West, hosts an Air Force Reserve Base and an Air National Guard Flying Unit; both activities have storage facilities. The National Guard Armory (Hunt) has an area of 38,110 sq. ft. and the Crane Armory has an area of 17,573 sq. ft. In addition, there are armories located in Host counties of Armstrong, Beaver, Butler, Fayette, Mercer, Indiana, Lawrence, Washington, and Westmoreland.

Miami, Florida. Homestead Air Force Base, located twenty-one miles South in Dade County hosts an Air Force flying organization and has a large storage capability. The National Guard Armory in Miami has an area of 42,852 sq. ft. The Armory in North Miami has an area of 15,985 sq. ft. In addition, armories are located in Host counties of Polk, Manatee, and Palm Beach.

TABLE #4

REQUIREMENTS METHODOLOGY

TABLE #5

SPECIFICATIONSWATER CONTAINER

Required: 3.5 Gallons per space	TYPE: Box
A = Number of Spaces	UNIT PACK: 4 Each
B = Gallons Required (3.5)	DIMENSIONS: 14½"Lx14½"Wx16½"H
C = Container Capacity (350)	WEIGHT: 28 pounds
*D = Containers Required	CUBE: 2.0 cu ft
FORMULA: $\frac{A \times B}{C} = D$	CAPACITY: 350 gallons

COMMUNE

Required: 2.5 Gallons per space	TYPE: Box
A = Number of Spaces	UNIT PACK: 10 Each
B = Gallons of Waste (2.5)	DIMENSIONS: 35"L x 32"W x 10"H
C = Commode Capacity (11)	WEIGHT: 30 pounds
D = Commodes Required	CUBE: 6.5 cu ft
FORMULA: $\frac{A \times B}{C} = D$	CAPACITY: 11 gallons *14 gallons

SANITATION KIT

Required: 1 per 50 spaces	TYPE: Box
A = Number of Spaces	UNIT PACK: 1 Each
B = Kit Size (50)	DIMENSIONS: 18"H x 14"D x 14"W
C = Kits Required	WEIGHT: 17 pounds
FORMULA: $\frac{A}{B} = C$	CUBE: 2.04 cu ft
	CAPACITY: 14 gallons

*Commode containers may also be used for water storage.

*If used for water storage.

TABLE #6
SPACE DATA WORK SHEET

WATER CONTAINERS

4 PER CARTON 9 CARTONS/LAYER 4 LAYERS HIGH
4 LAYERS (x) 9 CARTONS/LAYER = 36 PER PALLET
 REQUIRED ÷ 36 PER PALLET = PALLETS
3 PALLETS/STACK = TOTAL STACKS
 STACKS @ 15.5 SQ FT = TOTAL SQUARE FEET
PALLET SIZE 40" x 48" SQUARE FEET 15.5

SANITATION KITS

1 PER CARTON 9 CARTONS/LAYER 3 LAYERS HIGH
3 LAYERS (x) 9 CARTONS/LAYER = 27 PER PALLET
 REQUIRED ÷ 27 PER PALLET = PALLETS
3 PALLETS/STACK = TOTAL STACKS
 STACKS @ 15.5 SQ FT = TOTAL SQUARE FEET
PALLET SIZE 40" x 48" SQUARE FEET 15.5

COMMUNES

10 PER CARTON 1 CARTONS/LAYER 6 LAYERS HIGH
6 LAYERS (x) 1 CARTONS/LAYER = 6 PER PALLET
 REQUIRED ÷ 6 PER PALLET = PALLETS
3 PALLETS/STACK = TOTAL STACKS
 STACKS @ 10.5 SQ FT = TOTAL SQUARE FEET
PALLET SIZE 36" x 40" SQUARE FEET 10.5

SPACE AND COST COMPARISONS

Under the previous concept of one water drum for each five persons, one sanitation kit for each 50 persons, the cubic footage required to stock a 50-man shelter was 37 cubic feet.

Utilizing the recommended procurement units, one collapsible pool, 10 collapsible commodes, and one filled sanitation kit, the cubic footage required for a 50-man shelter would be 9.04 cubic feet, thus affecting a tremendous saving in both storage space and transportation costs.

To replace the original SK-IV Sanitation Kits and furnish metal water drums and liners for this same 50-man shelter at today's inflated prices would amount to \$2.07 per space. The newly recommended items would amount to only \$1.68 per space and all shelters under 100 spaces would derive the benefit of enough drinking water for a shelter of that size.

It follows that, since there is only one-third the cubage per person and the new items are essentially rectangular and easier to stack and haul, there will also be a substantial savings in transportation.

COMPARISON COST DATA

ESTIMATED 1979 REPLACEMENT COST (1964 Procurement)

50 SPACES

SK-IV

\$ 16.04

17½ Water Drum & Liner

87.50

\$103.54

1979 NEW PROCUREMENT COST

SK-V

\$ 9.01

Collapsible Commode

52.40

Collapsible Water Container

22.50 (100
Spaces)

\$ 83.91

DISTRIBUTION

The Defense Logistics Agency and DoD military components operate an integrated distribution system which is designed for quick reaction and response to emergency situations. The distribution of shelter supplies will be handled through this system if the DLA is the Logistics Support Activity. However, planning actions must include provisions for designating destination points for drop-off of supplies. Planning actions must also provide for the enlistment of local freight and transportation companies when an emergency situation is declared.

REQUIREMENTS AND SPACE COMPUTATIONS

The requirements and space computations reflected in Attachments 1 through 8 are based on the Population at Risk of Urbanized Areas as portrayed in Civil Preparedness Planning Document, TR-82, dated April 1975. The formulas shown in Table #4 were used for computations. The column headed "Storage Site/Miles" is for future use, when storage site is selected. The space requirement is in cubic feet and the weight is pounds. The Space Data Worksheet, Table #6, was utilized to compute space requirements.

The formulas and worksheets also apply to attachments 9 through 28. The population figures are based on Crisis Relocation Planning concepts.

Shown are requirements by commodity for each state and county by DCPA region. This is followed by a summary of square footage by state and storage sites located in each state.

Attachments 9 through 28 reflect the computations for the selected twenty cities under the crisis relocation planning. Attachment 29 reflects storage sites for the selected twenty cities.

ATTACHMENTS 1 THROUGH 8

STATE AND COUNTY REQUIREMENTS

STATE: CONNECTICUT		WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
BRIDGEPORT	413,366	4,133 1,033	39,263 2,066	85,679 8,567	257,037 55,691	8,267	140,539 16,864		436,839 74,621
FAIRFIELD NEW HAVEN	319,085 94,281								
DANBURY	66,651	666 66	6,327 333	13,814 1,381	41,442 8,979	1,333	22,661 2,719		70,430 12,031
FAIRFIELD	66,651								
NORWALK	106,707	1,067 266	10,136 533	22,117 2,211	66,351 14,376	2,134	36,278 4,353		112,765 19,262
FAIRFIELD	106,707								
STAMFORD	184,898	1,849 462	17,565 924	38,324 3,822	114,972 24,910	3,698	62,866 7,543		195,403 33,377
FAIRFIELD	184,898								
BRISTOL	71,732	713 178	6,773 356	14,867 1,486	44,601 9,663	1,435	24,395 2,927		127,143 12,946
HARTFORD LITCHFIELD NEW HAVEN	61,209 9,571 952								
HARTFORD	465,001	4,650 1,162	44,175 2,325	96,382 9,638	289,146 62,648	9,300	158,100 18,972		491,421 83,945
HARTFORD TOLLAND MIDDLESEX	435,382 24,876 4,743								
ATTACHMENT 1				1-1					

STATE: CONNECTICUT (Continued)			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NEW BRITAIN		131,349	1,313 328	12,473 656	27,225 2,722	81,675 17,696	2,627	44,659 5,359		138,807 23,711
HARTFORD	131,349									
MERIDEN		98,454	984 246	9,348 492	20,407 2,040	61,221 13,264	1,969	33,473 4,016		10,042 17,772
NEW HAVEN MIDDLESEX HARTFORD	55,959 41,653 842									
NEW HAVEN		348,341	3,483 870	33,088 1,741	65,201 6,520	195,603 42,380	6,967	118,436 14,211		347,127 58,333
NEW HAVEN	348,341									
WATERBURY		156,986	1,570 392	14,915 785	32,538 3,253	97,614 21,149	3,140	53,380 6,405		165,909 28,339
NEW HAVEN LITCHFIELD	142,697 14,289									
NON-URBANIZED AREAS										
FAIRFIELD		79,454								
*HARTFORD		129,782								
LITCHFIELD		70,410								
*MIDDLESEX		68,622								
*NEW HAVEN		102,718								
*NEW LONDON		230,654								
*TOLLAND		78,564								
*WINDHAM		84,515								

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE MASSACHUSETTS.

STATE: MAINE		POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	QUANTITY CASES			WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
URBANIZED AREA											
LEWISTON-AUBURN			65,212	652 163	6,194 326	13,517 1,351	40,551 8,786	1,304	22,168 2,660		68,913 11,772
ANDROSCOGGIN		65,212									
PORTLAND			106,599	1,066 266	10,127 533	22,095 2,209	66,285 14,361	2,132	36,244 4,349		112,656 19,243
CUMBERLAND		106,599									
NON-URBANIZED AREAS											
ANDROSCOGGIN			6,907								
ARROSTOOK			10,013								
CUMBERLAND			46,367								
HANCOCK			1,173								
PENOBSCOT			53,795								
SAGadahoc			15,725								
YORK			23,703								
1-3											

STATE: MASSACHUSETTS			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA										
PITTSFIELD		62,872	629 157	5,975 314	13,032 1,303	39,096 8,470	1,257 21,369 2,564	66,440 11,348		
BERKSHIRE	62,872									
FALL RIVER		139,392	1,394 348	13,243 697	28,892 2,889	86,676 18,779	2,788 47,396 5,687	147,315 25,163		
BRISTOL NEWPORT, RI	123,491 15,901									
NEW BEDFORD		133,667	1,337 334	12,701 668	27,705 2,770	83,115 18,008	2,673 46,971 5,636	142,787 24,313		
BRISTOL	133,667									
LAWRENCE-HAVERHILL		200,280	2,003 500	19,028 1,001	41,512 4,151	124,536 26,982	4,006 68,102 8,172	211,666 36,155		
ESSEX ROCKINGHAM, NH	182,438 17,842									
SPRINGFIELD-CHICOPEE-HOLYOKE		514,308	5,143 1,285	48,858 2,571	153,057 15,305	459,171 99,487	10,286 174,862 20,983	682,891 123,041		
HAMPDEN HARTFORD, CONN HAMPSHIRE	400,125 58,173 56,010									
BOSTON		2,652,575	26,525 6,631	251,987 13,262	549,806 54,980	1,649,418 357,373	53,051 901,867 108,224	2803,272 378,859		
MIDDLESEX SUFFOLK	1,041,673 735,190									
			1-4							

STATE: MASSACHUSETTS (Continued)			WATER CONTAINERS		COMMODITIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
BOSTON (Continued)										
NORFOLK	476,711									
ESSEX	352,802									
PLYMOUTH	44,725									
WORCESTER	1,474									
LOWELL		182,731	1,827	17,356	37,874	113,622	3,655	62,135		193,113
			456	913	3,787	24,618		7,456		32,987
MIDDLESEX	182,731									
BROCKTON		148,844	1,488	14,136	30,860	92,580	2,977	50,609		157,325
			372	744	3,086	20,059		6,073		26,876
PLYMOUTH	116,385									
NORFOLK	25,912									
BRISTOL	6,547									
FITCHBURG-LEMINSTER		78,053	780	7,410	16,178	48,534	1,561	26,537		82,481
			195	390	1,617	10,515		3,184		14,089
WORCESTER	78,053									
WORCESTER		247,416	2,474	23,503	51,282	153,846	4,948	84,116		261,465
			610	1,237	5,128	33,333		10,093		44,663
WORCESTER	247,416									

STATE: MASSACHUSETTS (Continued)

COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	WEIGHT CUBE
NON-URBANIZED AREAS										
BARNSTABLE		19,163								
BERKSHIRE		17,565								
*BRISTOL		127,533								
*DUKES		6,117								
*ESSEX		102,647								
HAMPDEN		55,934								
HAMPSHIRE		24,950								
*MIDDLESEX		172,864								
NANTUCKET		3,774								
*NORFOLK		94,584								
*PLYMOUTH		172,204								
*WORCESTER		305,959								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE RHODE ISLAND.										

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FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE RHODE ISLAND.

STATE: NEW HAMPSHIRE			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT CUBE	CUBE
URBANIZED AREA											
MANCHESTER		95,140	951 237	9,034 475	19,719 1,971	59,157 12,817	1,903	32,351 3,882		100,542 17,174	
HILLSBOROUGH MERRIMACK ROCKINGHAM	93,962 926 252										
NASHUA		60,961	609 152	5,785 304	12,635 1,263	37,905 8,212	1,219	20,723 2,486		64,413 11,002	
HILLSBOROUGH 60,961											
NON-URBANIZED AREAS											
*HILLSBOROUGH MERRIMACK *ROCKINGHAM STRAFFORD		69,018 4,638 120,857 32,696									
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE MASSACHUSETTS.											
										1-7	

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE MASSACHUSETTS.

STATE: VERMONT		POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
NON-URBANIZED AREAS											
CHITTENDEN, VERMONT		83,093	830 207	7,885 415	17,222 1,722	51,666 11,194	1,662	28,254 3,390			87,805 14,999

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STATE: NEW JERSEY			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA										
ATLANTIC CITY		101,934	1,019 254	9,680 509	21,128 2,112	63,384 13,733	2,038	34,646 4,157		107,710 18,399
ATLANTIC CAPE MAY	122,842 11,174									
VINELAND-MILLVILLE		73,579	735 183	6,982 367	15,251 1,525	45,753 9,913	1,471	25,007 3,000		77,742 13,280
CUMBERLAND ATLANTIC GLOUCESTER SALEM	68,502 3,283 1,487 307									
TRENTON		274,148	2,741 685	26,039 1,370	56,823 5,682	170,469 36,934	5,483	93,211 11,185		209,719 49,489
MERCER BUCKS, PENN BURLINGTON	232,122 31,475 10,551									
NON-URBANIZED AREAS										
*ATLANTIC		47,334								
*DUMONT		2,933								
*BURLINGTON		114,900								
*CAMDEN		18,599								
*CAPE MAY		48,380								
*CUMBERLAND		52,872								
*GLOUCESTER		62,522								
HUNTERDOOM		18,788								
MERCER		71,846								

STATE: NEW JERSEY (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE				
NON-URBANIZED AREAS (Continued)												
*MIDDLESEX		34,172										
*MONMOUTH		99,668										
*MORRIS		80,223										
*OCEAN		156,264										
*PASSAIC		17,501										
*SALEM		38,446										
*SOMERSET		46,610										
SUSSEX		23,798										
WARREN		8,195										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE NEW YORK,
DELAWARE AND PENNSYLVANIA.

STATE: NEW YORK		POPULATION AT RISK	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES		WITHIN COUNTY		QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
ALBANY-SCHENECTADY-TROY				485,401							
ALBANY		240,438		4,954	46,113	100,610	301,830	9,708	165,036		512,979
SCHENECTADY		143,071		1,213	2,427	10,061	65,396		19,804		87,627
RENSSELAER		93,229									
SARATOGA		9,787									
BINGHAMTON				167,224							
BROOME		162,088		1,672	15,884	35,460	106,380	3,344	56,848		179,112
TIOGA		5,136		418	836	3,546	23,049		6,821		30,706
BUFFALO				1,086,581							
ERIE		944,670		10,865	103,217	225,219	675,657	21,731	369,427		1,148,301
NIAGARA		141,924		2,716	5,432	22,521	146,392		44,331		347,976
NEW YORK-NEW JERSEY				16,072,252							
KINGS		2,602,012		160,722	1,526,359	333,133	9,994,017	321,445	5,464,565		16,984,941
QUEENS		1,986,473		40,180	80,361	333,133	2,165,370		655,747		2,901,478
NEW YORK		1,539,233									
BRONX		1,471,701									
NASSAU		1,424,277									
SUFFOLK		975,895									
ESSEX, NJ		929,986									
BERGEN, NJ		895,079									
WESTCHESTER		839,443									
MUDSON, NJ		609,266									
MIDDLESEX, NJ		549,641									
				1-11							

STATE: NEW YORK (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NEW YORK-NEW JERSEY (Continued)									
UNION, NJ	543,116								
PASSAIC, NJ	443,281								
MONMOUTH, NJ	359,711								
MORRIS, NJ	303,231								
RICHMOND	295,443								
ROCKLAND	221,847								
SOMERSET, NJ	151,762								
OCEAN, NJ	52,192								
PUTNAM	13,252								
ROCHESTER	601,361	6,013 1,503	57,114 3,006	124,646 12,465	373,950 81,023	12,027	204,459 24,535		635,523 108,564
MONROE	601,361								
UTICA-ROME	180,355	1,803 451	17,138 902	37,383 3,738	112,140 24,297	3,607	61,319 7,358		190,597 32,557
ONEIDA HERKIMER	180,038 317								
SYRACUSE	376,169	3,761 940	35,720 1,880	77,970 7,797	233,910 50,681	7,523	127,891 15,347		397,521 67,908
ONONDAGA	376,169								
NON-URBANIZED AREAS									
ALBANY	38,675								
BROOME	21,093								
CLINTON	44,981								
ERIE	64,337								
FRANKLIN	1,536								
HERKIMER	10,514								
MADISON	29,421								
1-12									

STATE: NEW YORK (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
MONROE		57,256								
*NASSAU		3,802								
NIAGARA		19,008								
ONEIDA		38,925								
ONONDAGA		96,577								
OSWEGO		19,277								
RENSSELAER		35,469								
*ROCKLAND		8,056								
ST. LAWRENCE		25,859								
SARATOGA		27,684								
SCHENECTADY		14,108								
*SUFFOLK		146,614								
WARREN		5,743								
*WESTCHESTER		52,496								

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REGION I

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
CONNECTICUT	33,443	0	2
MASSACHUSETTS	107,440	0	2
NEW HAMPSHIRE	2,538	0	2
NEW JERSEY	7,316	0	5
NEW YORK	308,805	2	3
RHODE ISLAND	12,963	1	0
VERMONT	-----	0	1
MAINE	5,574	0	2

<u>REGION 1 STORAGE SITES</u>				<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	
<u>CONNECTICUT</u>				
A. BRADLEY FIELD	WINDSOR LOCKS	HARTFORD	AIR NATIONAL GUARD	
B. NAVAL BASE	NEW LONDON	NEW LONDON	NAVY	
<u>MAINE</u>				
C. DOW AIR FORCE BASE	BANGOR	PENOBSCOT	AIR NATIONAL GUARD	
D. LORING AIR FORCE BASE	LIMESTONE	AROOSTOCK	AIR FORCE	
<u>MASSACHUSETTS</u>				
E. OTIS AIR FORCE BASE	FALMOUTH	BARNSTABLE	AIR NATIONAL GUARD	
F. WESTOVER AIR FORCE BASE	CHICOPEE	HAMPDEN	AIR NATIONAL GUARD	
G. FORT DEVENS	AYER	MIDDLESEX	ARMY NATIONAL GUARD	
<u>NEW HAMPSHIRE</u>				
H. PEASE AIR FORCE BASE	PORTSMOUTH	ROCKINGHAM	AIR FORCE/GUARD	
I. NAVAL SHIPYARD	PORTSMOUTH	ROCKINGHAM	NAVY	
<u>NEW JERSEY</u>				
J. MCGUIRE AIR FORCE BASE	WRIGHTSTOWN	BURLINGTON	AIR FORCE	
K. FORT DIX	WRIGHTSTOWN	BURLINGTON	ARMY	
L. PICATINNY ARSENAL	DOVER	MORRIS	NAVY	

<u>REGION I STORAGE SITES (Continued)</u>				<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	
<u>NEW JERSEY (Continued)</u>				
M. FORT MONMOUTH	RED BANK	MONMOUTH	ARMY	
N. NAVAL AIR STATION	LAKEHURST	OCEAN	NAVY	
<u>NEW YORK</u>				
O. GRIFFISS AIR FORCE BASE	ROSE	ONEIDA	AIR FORCE	
P. HANCOCK AIR FORCE BASE	SYRACUSE	ONANDAGO	AIR NATIONAL GUARD	
Q. STEWART SUB-BASE	NEWBURGH	ORANGE	ARMY	
R. FORT HAMILTON	BROOKLYN	QUEENS	ARMY	
S. SENECA ARMY DEPOT	ROMULUS	SENECA	ARMY	
<u>RHODE ISLAND</u>				
T. CONSTRUCTION BATTALION CENTER	DAVISVILLE	KENT	NAVY	
<u>VERMONT</u>				
U. BURLINGTON AIR STATION	BURLINGTON	CHITTENDEN	AIR NATIONAL GUARD	

STATE: DELAWARE	POPULATION AT RISK		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
	COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
	URBANIZED AREA									
	WILMINGTON	371,267	3,712	35,264	76,953	230,859	7,425	126,225		392,348
	NEW CASTLE SALEM, NJ	349,674 21,593	928	1,856	7,695	50,019		15,147		67,022
	NON-URBANIZED AREAS									
	*KENT *NEW CASTLE	81,892 36,182								

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ATTACHMENT 2

STATE: MARYLAND		POPULATION AT RISK		WATER CONTAINERS		CONMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK		QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			WEIGHT	CUBE
URBANIZED AREA													
BALTIMORE		1,579,781		15,797 3,949	150,071 7,898	327,446 32,744	982,338 212,839	31,595	537,115 64,453			1,669,524 285,190	
BALTIMORE CITY	905,759												
BALTIMORE	528,534												
ANNE ARUNDEL	132,439												
HOWARD	13,049												
NON-URBANIZED AREAS													
ALLEGANY		40,001											
*ANNE ARUNDEL		165,100											
*BALTIMORE		92,014											
*CALVERT		20,682											
*CAROLINE		19,781											
*CECIL		53,291											
*CHARLES		47,678											
*DORCHESTER		29,405											
FREDERICK		27,251											
*HARFORD		115,378											
*HOWARD		48,862											
*KENT		16,146											
*MONTGOMERY		29,202											
*PRINCE GEORGES		115,036											
*QUEEN ANNES		18,422											
*ST. MARYS		47,388											
*TALBOT		23,682											
WASHINGTON		93,611											

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE DISTRICT OF COLUMBIA.

STATE: VIRGINIA				WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES		POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
LYNCHBURG			70,842	708 177	6,726 354	14,684 1,468	44,052 9,544	1,416	24,072 2,888		74,850 12,786
LYNCHBURG CITY		54,083									
CAMPBELL		8,479									
AMHERST		7,758									
BEDFORD		522									
NEWPORT NEWS-HAMPTON			268,263	2,682 670	25,479 1,341	55,604 5,560	166,812 36,142	5,364	91,188 10,942		283,479 48,425
NEWPORT NEWS CITY		138,177									
HAMPTON CITY		120,779									
YORK		7,907									
JAMES CITY		1,400									
NORFOLK-PORTSMOUTH			668,259	6,682 1,670	63,479 3,341	138,513 13,851	415,539 90,033	13,364	227,188 27,262		706,206 50,425
NORFOLK CITY		307,951									
VIRGINIA BEACH CITY		166,729									
PORTSMOUTH CITY		110,963									
CHESAPEAKE CITY		82,616									
PETERSBURG-COLONIAL HEIGHTS			100,617	1,006 251	9,557 503	20,853 2,085	62,565 13,555	2,012	34,204 4,104		106,326 18,162
PETERSBURG CITY		36,103									
HOPEWELL CITY		23,471									
COLONIAL HTS CITY		15,097									
PRINCE GEORGE		12,435									
DINWIDDIE		9,516									
CHESTERFIELD		3,995									

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STATE: VIRGINIA (Continued)		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	
RICHMOND		416,563	4,165 1,041	39,567 2,082	86,343 8,634	259,029 56,122	8,330	141,610 16,993	440,206 75,197
RICHMOND CITY	249,621								
HENRICO	129,327								
CHESTERFIELD	32,255								
HANOVER	5,360								
ROANOKE		156,621	1,566 391	14,877 783	32,463 3,246	97,389 21,100	3,132	53,244 6,389	165,510 28,272
ROANOKE CITY	92,115								
ROANOKE	42,524								
SALEM CITY	21,982								
NON-URBANIZED AREAS									
ACCOMACK		9,722							
AMHERST		9,294							
BOTETOURT		6,714							
CAMPBELL		20,569							
CHARLES CITY		2,933							
CHESTERFIELD		29,677							
DINWIDDIE		10,969							
*FAIRFAX		57,144							
FAUQUIER		6,475							
GLOUCESTER		8,599							
HENRICO		13,987							
ISLE OF WIGHT		7,884							
JAMES CITY		10,989							
LOUDOUN		13,983							
MONTGOMERY		5,883							
PRINCE GEORGE		14,038							
PRINCE WILLIAM		24,818							
PULASKI		18,587							

STATE: VIRGINIA (Continued)		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
NON-URBANIZED AREAS (Continued)											
ROANOKE		24,815									
SCOTT		5,298									
STAFFORD		4,109									
WASHINGTON		25,800									
YORK		24,907									
*BRISTOL CITY		14,857									
CHESAPEAKE CITY		6,964									
RADFORD CITY		11,596									
VIRGINIA BEACH CITY		5,377									
WILLIAMSBURG CITY		9,069									

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE DISTRICT OF
COLUMBIA.

STATE: WEST VIRGINIA		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
HUNTINGTON-ASHLAND	252,600	2,526 631	23,997 1,263	52,357 5,235	157,071 34,032	5,052	85,884 10,306		266,952 45,601
CABELL BOYD, KY LAWRENCE, OH GREENUP, KY WAYNE	71,693 37,853 29,250 15,463 13,324								
CHARLESTON	315,324	3,153 788	29,953 1,576	65,358 6,535	196,074 42,482	6,306	107,202 12,864		333,229 56,922
KANAWHA PUTNAM	156,346 1,316								
WHEELING	153,649	1,536 384	14,592 768	31,848 3,184	95,544 20,701	3,072	52,224 6,266		162,360 27,735
OHIO BELMONT, OH MARSHALL	55,061 32,239 5,644								
NON-URBANIZED AREAS									
BROOKE CABELL HANCOCK KANAWHA MARSHALL MINERAL OHIO PUTNAM WAYNE	14,905 25,992 7,741 61,407 24,631 7,440 6,548 10,689 6,104								

STATE: PENNSYLVANIA		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
PITTSBURGH	1,846,042	18,460 4,615	175,370 9,230	382,634 38,263	1,147,902 248,712	36,921	627,657 75,318		1950,929 333,260
ALLEGHENY WESTMORELAND BEAVER BUTLER LAURENCE WASHINGTON	1,520,138 152,909 150,443 42,113 12,262 10,290								
READING	167,932	1,679 419	15,950 839	34,807 3,480	104,421 22,624	3,359	57,103 6,852		177,474 30,315
BERKS	167,932								
ALTOONA	81,795	817 204	7,761 408	16,954 1,695	50,862 11,020	1,635	27,795 3,335		86,418 14,763
BLAIR	81,795								
JOHNSTOWN	96,146	961 240	9,129 480	19,928 1,992	59,784 12,953	1,923	32,691 3,922		101,604 17,355
CAMBRIA SOMERSET	88,581 7,565								
HARRISBURG	240,751	2,407 601	22,866 1,203	49,901 4,990	149,703 32,435	4,815	81,855 9,822		254,424 43,460
DAUPHIN CUMBERLAND YORK PERRY	154,870 77,593 5,960 2,328								

STATE: PENNSYLVANIA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT	CUBE
ERIE		175,263	1,752 438	16,644 876	36,327 3,632	108,981 23,612	3,505	59,585 7,150		185,210 31,638	
ERIE	175,263										
SCRANTON		204,205	2,042 510	19,399 1,021	50,508 5,050	151,524 32,830	4,084	69,428 8,331		240,351 42,182	
LACKAWANNA	204,205										
PHILADELPHIA		4,021,066	40,210 10,052	381,995 20,105	833,457 83,345	250,371 541,747	80,421	1,367,157 164,058		1,999,523 725,910	
PHILADELPHIA	1,948,609										
DELAWARE	580,678										
MONTGOMERY	441,043										
CAMDEN, NJ	437,692										
BUCKS	260,364										
BURLINGTON, NJ	197,681										
GLOUCESTER, NJ	108,672										
CHESTER	46,327										
YORK		123,106	1,231 307	11,694 615	36,708 3,670	110,124 23,860	2,462	41,854 5,022		163,672 29,497	
YORK	123,106										
LANCASTER		117,097	1,170 292	11,115 585	24,271 2,427	72,813 15,776	2,341 2,341	39,797 4,775		123,725 21,136	
LANCASTER	117,097										

STATE: PENNSYLVANIA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
ALLENTOWN-BETHLEHEM-EASTON		363,517	3,633 908	34,532 1,817	75,347 7,534	226,041 48,975	7,270	123,590 14,830		384,163 65,622	
LEHIGH NORTHAMPTON WARREN, NJ	199,072 139,244 25,201										
WILKES-BARRE		222,830	2,228 557	21,166 1,114	46,187 4,168	138,561 30,021	4,456	75,752 9,090		235,479 40,225	
LUZERNE	222,830										
NON-URBANIZED AREAS											
ADAMS		16,555									
*ALLEGHENY		84,878									
*ARMSTRONG		75,590									
BEAVER		31,783									
BERKS		24,210									
BLAIR		23,053									
*BUCKS		123,217									
*BUTLER		85,828									
CAMBRIA		32,650									
CHESTER		6,592									
CUMBERLAND		17,456									
DAUPHIN		33,611									
*DELAWARE		19,357									
ERIE		30,704									
FRANKLIN		85,902									
INDIANA		5,340									
LACKAWANNA		27,421									
LANCASTER		114,515									
LAWRENCE		8,260									
LEHIGH		7,629									

STATE: PENNSYLVANIA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	MILES		WEIGHT	CUBE
NON-URBANIZED AREAS (Continued)												
LUZERNE		30,860										
MONROE		3,494										
MONTGOMERY		66,965										
NORTHAMPTON		42,316										
SOMERSET		8,429										
WASHINGTON		88,000										
WAYNE		5,254										
*WESTMORELAND		224,026										
WYOMING		12,815										
*YORK		143,537										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE NEW JERSEY.

REGION II

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
DISTRICT OF COLUMBIA	41,765	0	3
DELAWARE	6,042	0	2
MARYLAND	25,713	0	7
PENNSYLVANIA	125,540	3	3
VIRGINIA	27,360	5	3
WEST VIRGINIA	11,741	0	0

<u>REGION II STORAGE SITES</u>			<u>HOST</u>	<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>		
<u>DISTRICT OF COLUMBIA</u>				
A. BOLLING AIR FORCE BASE	WASHINGTON	D.C.	AIR FORCE	
B. FORT McNAIR	WASHINGTON	D.C.	ARMY	
C. NAVAL SHIPYARD	WASHINGTON	D.C.	NAVY	
<u>DELAWARE</u>				
D. DOVER AIR FORCE BASE	DOVER	KENT	AIR FORCE	
E. WILMINGTON AIR STATION	NEW CASTLE	NEW CASTLE	AIR NATIONAL GUARD	
<u>MARYLAND</u>				
F. ANDREWS AIR FORCE BASE	CAMP SPRINGS	PRINCE GEORGES	AIR FORCE	
G. GLENN L. MARTIN STATE AIRPORT	BALTIMORE	BALTIMORE	AIR NATIONAL GUARD	
H. FORT MEADE	LAUREL	ANNE ARUNDEL	ARMY	
I. FORT DETRICK	FREDERICK	FREDERICK	ARMY	
J. FORT RITCHIE	CASCADE	WASHINGTON	ARMY	
K. ANNAPOLIS NAVAL STATION	ANNAPOLIS	ANNE ARUNDEL	NAVY	
L. PATUXENT AIR STATION	PATUXENT	ST. MARYS	NAVY	
<u>PENNSYLVANIA</u>				
M. GREATER PITTSBURGH AIRPORT	CORAPOLIS	ALLEGHENY	AIR NATIONAL GUARD	

*MAJOR STORAGE ACTIVITIES

<u>REGION II STORAGE SITES (Continued)</u>		<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>PENNSYLVANIA (Continued)</u>					
N.	WILLOW GROVE AIR STATION	WILLOW GROVE	PHILADELPHIA	NAVY	
O.	NAVAL SHIPYARD	PHILADELPHIA	PHILADELPHIA	*NAVY	
P.	DEFENSE PERSONNEL SUPPORT CENTER	PHILADELPHIA	PHILADELPHIA	*DEFENSE LOGISTICS AGENCY	
Q.	MIDDLETOWN AIRPORT	MIDDLETOWN	CUMBERLAND	AIR NATIONAL GUARD	
R.	LETTERKENNY ARMY DEPOT	CHAMBERSBURG	FRANKLIN	*ARMY	
<u>VIRGINIA</u>					
S.	DEFENSE GENERAL SUPPLY CENTER	RICHMOND	CHESTERFIELD	*DEFENSE LOGISTICS AGENCY	
T.	NAVY SUPPLY CENTER	NORFOLK	NANSEMOND	*NAVY	
U.	WEAPONS STATION	YORKTOWN	YORK	*NAVY	
V.	WEAPONS STATION ANNEX	CHESAPEAKE	CHESAPEAKE	*NAVY	
W.	SUPPLY CENTER	PORTSMOUTH	PORTSMOUTH	*NAVY	

STATE: ALABAMA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
GADSDEN	67,706	677 169	6,431 338	14,033 1,403	42,099 9,121	1,354	23,018 2,762		71,548 12,221
ETOWAH ST. CLAIR	67,698 8								
BIRMINGHAM	558,099	5,581 1,395	53,019 2,790	115,678 1,156	347,034 75,190	11,162	189,754 22,770		589,807 100,750
JEFFERSON	558,099								
HUNTSVILLE	146,565	1,465 366	13,917 732	30,379 3,037	91,137 19,746	2,931	49,827 5,979		154,881 26,457
MADISON	146,565								
MOBILE	257,816	2,578 644	24,491 1,289	53,438 5,343	160,314 34,734	5,156	87,652 10,518		272,457 46,541
MOBILE	257,816								
MONTGOMERY	138,983	1,389 347	13,195 694	28,706 2,870	86,118 18,658	2,881	48,977 5,877		148,290 25,229
MONTGOMERY	138,983								
TUSCALOOSA	85,875	858 214	8,151 429	17,800 1,780	53,400 11,570	1,717	29,189 3,502		90,740 15,501
TUSCALOOSA	85,875								

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STATE: ALABAMA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS										
AUTAUGA		17,434								
CALHOUN		44,590								
COLBERT		29,538								
COOSA		2,954								
DALLAS		39,641								
ELMORE		8,907								
ETOWAH		9,483								
JEFFERSON		46,029								
LAUDERDALE		37,362								
LIVESTONE		3,511								
*MADISON		39,975								
MARSHALL		3,576								
MOBILE		7,980								
MONTGOMERY		17,761								
MORGAN		13,241								
SHELBY		14,676								
TALLADEGA		55,090								
TUSCALOOSA		12,940								

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STATE: GEORGIA		POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
URBANIZED AREA													
MACON		128,065	1,280	12,160	640	26,544	79,632		2,561	43,537		135,329	23,117
			320			2,654	17,253			3,224			
BIBB JONES	126,154 1,911												
SAVANNAH		163,758	1,637	15,551	818	33,941	101,823		3,275	55,675		173,049	29,560
			409			3,394	22,061			6,681			
CHATHAM	163,753												
ALBANY		76,512	765	7,267	382	15,858	47,574		1,530	26,010		80,851	13,810
			191			1,585	10,307			3,121			
DOUGHERTY	76,512												
ATLANTA		1,172,778	11,727	111,406		243,085	729,255		23,455	398,735		1239,396	211,716
			2,931	5,863		24,308	158,005			47,848			
FULTON	554,789												
DE KALB	389,303												
COBB	135,522												
CLAYTON	79,716												
WINNETT	9,472												
DOUGLAS	3,976												
COLUMBUS		208,616	2,086	19,817		43,240	129,720		4,172	70,924		220,461	37,662
			521	1,043		4,324	28,109			8,510			
MUSCOGEE	164,548												
RUSSELL, AL	25,281												
CHATTAHOOCHEE	18,787												

STATE: GEORGIA (Continued)

COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
			QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
AUGUSTA		148,953	1,489	14,145	30,873	92,619	2,979	50,643		157,407
			372	744	3,087	20,067		6,077		26,888
RICHMOND	126,770									
AIKEN, SC	22,183									
NON-URBANIZED AREAS										
BIBB		11,162								
BRYAN		1,803								
CATOOSA		934								
*CHATHAM		24,014								
CLAYTON		18,327								
COBB		43,814								
DE KALB		26,084								
DOUGHERTY		13,127								
DOUGLAS		12,117								
EFFINGHAM		6,193								
FAYETTE		6,435								
FULTON		29,501								
GLYNN		50,528								
WINNETT		19,889								
HENRY		6,922								
HOUSTON		49,581								
LOWNDES		7,294								
MUSCOGEE		1,024								
RICHMOND		14,921								
OKALOOSA		24,605								
ORANGE		23,935								
PALM BEACH		18,838								
PINELLAS		5,567								
SANTA ROSA		9,447								
SARASOTA		17,545								
VOLUSTA		98,865								

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE TENNESSEE.

STATE: FLORIDA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
GAINESVILLE	69,329	693 173	6,583 346	14,370 1,437	43,110 9,340	1,386	23,562 2,827		73,255 12,513
ALACHUA	69,329								
FORT LAUDERDALE-HOLLYWOOD	613,797	6,137 1,534	58,301 3,068	127,223 12,722	381,669 82,694	12,276	208,692 25,043		648,662 110,805
BROWARD	613,797								
MIAMI	1,219,661	12,196 3,049	115,862 6,098	252,882 25,288	758,646 164,373	24,393	414,681 49,761		1289,189 220,232
DADE	1,219,661								
JACKSONVILLE	529,585	5,295 1,323	50,302 2,647	109,769 10,976	329,304 71,349	10,591	180,047 21,605		559,653 95,601
DIVAL CLAY	518,131 11,454								
PENSACOLA	166,619	1,666 416	15,827 833	34,536 3,453	103,608 22,448	3,332	56,644 6,797		176,079 30,078
ESCAMBIA	166,619								
TAMPA	368,742	3,687 921	35,026 1,843	76,431 7,643	229,243 49,680	7,374	125,358 15,042		389,677 66,565
HILLSBOROUGH	368,742								

STATE: FLORIDA (Continued)		WATER CONTAINERS		COMPOUNDS		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	
TALLAHASSEE		77,851	778 194	7,391 389	16,136 1,613	48,393 10,485	1,557 26,469 3,176	82,253 14,050	
LEON	77,851								
ORLANDO		305,479	3,054 763	29,013 1,527	63,318 6,331	189,354 41,156	6,109 103,853 12,462	322,220 55,145	
ORANGE SEMINOLE	270,889 34,590								
WEST PALM BEACH		287,561	2,875 718	27,312 1,437	59,603 5,960	178,809 38,741	5,751 97,767 11,732	303,888 52,628	
PALM BEACH	287,561								
ST. PETERSBURG		495,159	4,951 1,237	47,034 2,475	102,633 10,263	307,899 66,711	9,903 168,351 20,202	523,284 89,388	
PINELLAS	495,159								
NON-URBANIZED AREAS									
ALACHUA		13,131							
BAY		21,951							
BREVARD		159,313							
BROWARD		6,303							
DADE		41,872							
DUVAL		10,734							
ESCAMBIA		14,889							
GULF		6,934							
*HILLSBOROUGH		119,805							
LEE		85,347							
LEON		8,529							
MONROE		39,664							

STATE: KENTUCKY				WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
URBANIZED AREA											
OMENSBORO		53,133	531 132	5,044 265	11,012 1,101	33,036 7,157	1,063	18,071 2,168			56,151 9,590
DAVIESS	53,133										
LEXINGTON		159,538	1,595 398	15,152 797	33,068 3,306	99,204 21,494	3,190	54,230 6,507			168,586 28,798
FAYETTE	159,538										
LOUISVILLE		739,396	7,393 1,848	70,233 3,696	153,257 15,325	459,771 99,617	14,787	251,379 30,165			367,383 133,478
JEFFERSON CLARK, IN FLOYD, IN											
NON-URBANIZED AREAS											
BOONE											
BOURBON											
BOYD											
BULLITT											
CAMPBELL											
DAVIESS											
FAYETTE											
GREENUP											
HENDERSON											
JEFFERSON											
JESSAMINE											
KENTON											
MC CRACKEN											
MADISON											
OLDHAM											

STATE: MISSISSIPPI		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
BILOXI-GULFPORT	121,601	1,216 304	11,552 608	25,204 2,520	75,612 16,382	2,432	41,344 4,961		128,508 21,951
HARRISON JACKSON	105,514 16,087								
JACKSON	190,060	1,900 475	18,050 950	39,394 3,939	118,182 25,606	3,801	64,617 7,754		200,849 34,310
HINDS RANKIN	180,421 9,639								
NON-URBANIZED AREAS									
*DE SOTO	26,954								
HARRISON	29,068								
HINDS	22,024								
JACKSON	53,309								
LAUDERDALE	52,401								
LOWNDES	9,124								
RANKIN	17,622								

STATE: NORTH CAROLINA			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA										
ASHEVILLE		72,451	724 181	6,878 362	15,017 1,501	45,051 9,761	1,449	24,633 2,955		76,562 13,078
BUNCOMBE	72,451									
FAYETTEVILLE		161,370	1,613 403	15,323 806	48,118 4,811	144,354 31,276	3,227	54,859 6,583		230,859 38,665
CUMBERLAND	161,370									
DURHAM		100,764	1,007 251	9,566 503	20,886 2,088	62,658 13,575	2,015	34,255 4,110		106,479 18,188
DURHAM	100,764									
WINSTON-SALEM		142,584	1,425 356	13,537 712	29,554 2,955	88,662 19,210	2,851	48,467 5,816		150,666 25,738
FORSYTH	142,584									
GREENSBORO		152,252	1,522 380	14,459 761	31,557 3,155	94,671 20,512	3,045	51,765 6,211		160,895 27,484
GUILFORD	152,252									
HIGHPOINT		93,547	935 235	8,882 467	19,390 1,939	58,170 12,603	1,870	31,790 3,814		98,842 16,884
GUILFORD	67,875									
DAVIDSON	18,245									
RANDOLPH	7,427									

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COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	WEIGHT CUBE
CHARLOTTE		277,649	2,776	26,372	57,549	172,647	5,553	94,401		293,420
MECKLENBURG	279,530		694	1,388	5,754	37,406		11,328		50,122
WILMINGTON		57,645	576	5,472	11,948	35,844	1,153	19,601		60,917
NEW HANOVER	57,645		144	288	1,194	7,766		2,352		10,406
RALEIGH		152,289	1,522	14,459	31,565	94,695	3,046	51,782		160,936
WAKE	152,289		380	761	3,156	20,517		6,213		27,491
NON-URBANIZED AREAS										
ALAMANCE		81,269								
BRUNSWICK		8,571								
BUNCOMBE		32,533								
CAMDEN		1,848								
CARTERET		3,926								
CAVEN		22,845								
CUMBERLAND		34,817								
DAVIDSON		20,378								
DURHAM		29,095								
FORSYTH		40,294								
GUILFORD		68,463								
HENDERSON		7,878								
MECKLENBURG		45,468								
NEW HANOVER		25,351								
ON SLOW		90,009								
PASQUOTANK		22,082								
RANDOLPH		17,724								
ROCKINGHAM		5,580								
WAKE		24,342								
WAYNE		49,982								

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STATE: SOUTH CAROLINA		POPULATION AT RISK		TOTAL POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY					QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			WEIGHT	CUBE
URBANIZED AREA															
CHARLESTON				228,399		2,284 571	21,698 1,142	47,340 4,734	142,020 30,771	4,568	77,656 9,318			241,374 41,231	
CHARLESTON BERKELEY	202,654 25,745														
GREENVILLE				157,073		1,570 392	14,915 785	32,557 3,255	97,671 21,162	3,141	53,397 6,407			165,983 28,354	
GREENVILLE SPARTANBURG	155,722 1,351														
COLUMBIA				241,781		2,417 604	22,961 1,208	50,115 5,011	150,345 32,574	4,835	82,195 9,863			256,221 43,645	
RICHLAND LEXINGTON	198,161 43,620														
NON-URBANIZED AREAS															
AIXEN				44,917											
BEAUFORT				48,606											
BERKELEY				6,608											
CHARLESTON				28,269											
GREENVILLE				42,358											
HORRY				21,211											
JASPER				3,434											
LEXINGTON				20,239											
RICHLAND				17,174											
SPARTANBURG				21,692											
SUMTER				49,777											

STATE: TENNESSEE		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE			
URBANIZED AREA											
NASHVILLE-DAVIDSON		448,318	4,483 1,120	42,588 2,241		99,924 9,992	299,772 64,950			494,782 85,481	
DAVIDSON SUMNER	436,170 12,274					8,966	152,422 18,290				
CHATTANOOGA		223,580	2,235 558	21,232 1,117		46,342 4,634	139,026 30,122			236,265 40,359	
HAMILTON WALKER, GA CATOOSA, GA	194,633 15,778 13,169										
KNOXVILLE		190,502	1,905 476	18,097 952		39,485 3,948	118,455 25,665			201,322 34,389	
KNOX	190,502										
MEMPHIS		663,976	6,639 1,659	63,070 3,319		137,624 13,762	412,872 89,455			701,685 119,863	
SHELBY DE SOTO, MS	655,045 8,931										
NON-URBANIZED AREAS											
BLOUNT		49,319									
CARTER		26,712									
DAVIDSON		11,833									
HAMILTON		32,052									
JOHNSON		2,998									
KNOX		20,041									
SHELBY		55,660									
SULLIVAN		64,368									
WASHINGTON		12,372									
3-12											

REGION III

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
ALABAMA	14,365	2	4
FLORIDA	67,283	1	5
GEORGIA	30,901	2	3
KENTUCKY	15,495	1	2
MISSISSIPPI	5,071	1	1
NORTH CAROLINA	20,556	1	1
SOUTH CAROLINA	10,208	1	2
TENNESSEE	25,251	1	1

REGION III STORAGE SITES

REMARKS

HOST

COUNTY

CITY

SITE

ALABAMA

A. SUMPTER SMITH AIR BASE	BIRMINGHAM	JEFFERSON	AIR NATIONAL GUARD
B. DONNELLY AIR BASE	MONTGOMERY	MONTGOMERY	AIR NATIONAL GUARD
C. ANNISTON ARMY DEPOT	ANNISTON	CALHOUN	*ARMY
D. FORT MCCLELLAN	ANNISTON	CALHOUN	ARMY
E. REDSTONE ARSENAL	HUNTSVILLE	MADISON	*ARMY
F. FORT RUCKER	OZARK	DALE	ARMY

FLORIDA

G. AIR STATION	JACKSONVILLE	DUVAL	*NAVY
H. EGLIN AIR FORCE BASE	VALPARISO	OKALOOSA	AIR FORCE
I. NAVAL TRAINING CENTER	ORLANDO	ORANGE	NAVY
J. MAC DILL AIR FORCE BASE	TAMPA	HILLSBORO	AIR FORCE
K. AIR STATION	PENSACOLA	SANTA ROSA	NAVY
L. TYNDALL AIR FORCE BASE	PANAMA CITY	BAY	AIR FORCE

GEORGIA

M. ROBINS AIR FORCE BASE	WARNER ROBBINS	HOUSTON	*AIR FORCE
N. SUPPLY SUPPORT CENTER	ALBANY	DOUGHERTY	*MARINE CORPS
O. FORT STEWART	SAVANNAH	CHATHAM	ARMY

*MAJOR STORAGE ACTIVITIES

REGION III STORAGE SITES (Continued)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>GEORGIA (Continued)</u>				
P. FORT BENNING	COLUMBUS	MUSCOGEE	ARMY	
Q. FORT McPHERSON	ATLANTA	FULTON	ARMY	
<u>KENTUCKY</u>				
R. FORT CAMPBELL	HOPKINSVILLE	MONTGOMERY	ARMY	
S. BLUE GRASS DEPOT	LEXINGTON	FAYETTE	*ARMY	
T. SHEPHERD AIR BASE	LOUISVILLE	JEFFERSON	AIR NATIONAL GUARD	
<u>MISSISSIPPI</u>				
U. CONSTRUCTION BATTALION CENTER	GULFPORT	HARRISON	*NAVY	
V. COLUMBUS AIR FORCE BASE	COLUMBUS	LOWNDES	AIR FORCE	
<u>NORTH CAROLINA</u>				
W. AIR STATION	CHERRY POINT	PAMLICO	*MARINE CORPS	
X. FORT BRAGG	FAYETTEVILLE	HOKE	ARMY	
<u>SOUTH CAROLINA</u>				
Y. NAVAL SUPPLY CENTER	CHARLESTON	CHARLESTON	*NAVY	
Z. FORT JACKSON	COLUMBIA	RICHLAND	ARMY	

REGION III STORAGE SITES (Continued)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>TENNESSEE</u>				
AA. McGUIRE-TYSON AIR BASE	KNOXVILLE	KNOX	AIR NATIONAL GUARD	
AB. DEFENSE DEPOT	MEMPHIS	SHELBY	*DEFENSE LOGISTICS AGENCY	

STATE: ILLINOIS		POPULATION		TOTAL		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	POPULATION AT RISK	POPULATION AT RISK	POPULATION AT RISK	POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	STORAGE SITE/ MILES	WEIGHT CUBE	WEIGHT CUBE
URBANIZED AREA															
CHAMPAIGN-URBANA				100,417		1,004 251	9,538 502	20,814 2,081	62,430 13,527	2,008	34,136 4,096			106,104 18,125	
CHAMPAIGN		100,417													
CHICAGO ILL-NORTHWESTERN IND				6,714,578		67,145 16,786	637,868 33,572	1,391,749 139,175	4,175,250 904,638	134,291	2,282,947 273,954			7096,065 1,212,164	
COOK LAKE, IN DU PAGE LAKE PORTER, IN WILL		5,461,540 493,716 468,983 241,188 35,706 13,445													
AURORA-ELGIN				232,917		2,329 582	22,116 1,164	48,277 4,828	144,840 31,382	4,658	79,186 9,502			246,142 42,048	
KANE KENDALL COOK		219,571 7,999 5,347													
BLOOMINGTON-NORMAL				69,392		693 173	6,574 346	14,383 1,438	43,140 9,347	1,387	23,579 2,829			73,293 12,522	
MC LEAN		69,392													
DECATUR				99,693		996 249	9,462 498	20,663 2,066	61,980 13,429	1,994	33,898 4,068			105,340 17,995	
MACON		99,693													
ATTACHMENT 4															

STATE: ILLINOIS (Continued)		WATER CONTAINERS		CONMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
PEORIA	247,121	2,471	23,484 1,236	51,222 5,122	153,660 33,293	4,942	84,014 10,082		261,158 44,611
PEORIA TAZEWELL	157,907 89,214								
DAVENPORT-ROCK ISLAND-MOLINE	266,119	2,661	25,270 1,330	55,159 5,516	165,480 35,854	5,322	90,474 10,857		281,224 48,041
ROCK ISLAND SCOTT, IA	139,824 126,295								
SPRINGFIELD	120,794	1,207	11,476 604	25,038 2,504	75,120 16,276	2,415	41,055 4,927		127,651 21,807
SANGAMON	120,794								
JOLIET	155,500	1,555	14,782 778	32,231 3,223	96,690 20,950	3,110	52,870 6,344		164,342 28,072
WILL	155,500								
ROCKFORD	206,084	2,060	19,570 1,030	42,716 4,272	128,160 27,768	4,121	70,057 8,407		217,787 37,205
WINNEBAGO	206,084								
NON-URBANIZED AREAS									
CHAMPAIGN	43,772								
*COOK	25,482								
*DU PAGE	22,899								
GRUNDY	20,104								
HENDERSON	1,474								
HENRY	6,939								
*JERSEY	18,492								

STATE: ILLINOIS (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
JO DAVIESS		985								
KANE		18,735								
KANKAKEE		696								
KENDALL		9,950								
*LAKE		141,450								
MC LEAN		6,965								
MACON		15,986								
*MACOUPIN		44,557								
*MADISON		161,505								
MASSAC		4,824								
*MONROE		14,613								
OGLE		936								
PEORIA		13,959								
ROCK ISLAND		20,692								
*ST. CLAIR		64,347								
SANGAMON		17,096								
STEPHENSON		38,886								
TAZEWELL		16,065								
*WILL		80,553								
WINNEBAGO		12,908								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE IOWA, MISSOURI.										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE IOWA,
MISSOURI.

STATE: INDIANA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
FORT WAYNE	225,184	2,251 563	21,394 1,126	46,675 4,668	140,040 30,342	4,503	76,551 9,186		237,985 40,654
ALLEN	225,184								
MUNCIE	90,427	904 226	8,588 452	18,743 1,874	56,220 12,181	1,808	30,736 3,688		95,544 16,321
DELAWARE	90,427								
ANDERSON	80,704	807 202	7,676 404	16,727 1,673	50,190 10,875	1,614	27,438 3,293		85,304 14,572
MADISON	80,704								
INDIANAPOLIS	820,259	8,202 2,051	77,938 4,102	170,017 17,002	510,060 110,513	16,405	278,885 33,466		866,883 148,081
MARION	790,830								
HAMILTON	14,335								
JOHNSON	14,319								
HANCOCK	479								
HENDRICKS	296								
SOUTH BEND									
ST. JOSEPH	207,207	2,885 721	27,398 1,442	59,813 5,981	179,430 38,877	5,771	98,107 11,773		304,935 52,092
ELKHART	57,941								
BERRIEN, MI	21,091								
CASS, MI	2,333								

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STATE: INDIANA (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	
LAFAYETTE-NORTH LAFAYETTE		79,117	791	7,524	396	1,582	26,894	3,227	83,618
TIPPECANOE	79,117		198						14,283
EVANSVILLE		142,476	1,424	13,528	712	2,849	48,433	5,812	150,551
VANDERBURGH	142,476		356						25,719
TERRE HAUTE		80,908	809	7,676	404	1,618	27,506	3,301	85,492
VIGO	80,908		202						14,606
NON-URBANIZED AREAS									
ALLEN		15,862							
BOONE		5,331							
CASS		5,856							
CLARK		23,842							
CLAY		3,311							
DAVIESS		3,695							
DEARBORN		12,861							
DELAWARE		28,249							
ELKHART		28,900							
FLOYD		17,220							
GIBSON		6,437							
GREENE		2,120							
HAMILTON		27,586							
HANCOCK		29,332							
HARRISON		5,554							
HENDRICKS		34,518							
HENRY		4,412							

STATE: INDIANA (Continued)			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
JOHNSON		18,689								
*LAKE		52,537								
MADISON		28,553								
*MARION		1,469								
MARTIN		714								
MIAMI		11,017								
MORGAN		3,950								
PORTER		4,084								
POSEY		19,348								
ST. JOSEPH		23,321								
SHELBY		7,583								
SPENCER		4,512								
TIPPECANOE		21,812								
VANDERBURGH		26,296								
VIGO		27,484								
WARRICK		24,122								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE KENTUCKY, ILLINOIS.										

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FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE KENTUCKY,
ILLINOIS.

STATE: MICHIGAN		POPULATION AT RISK		WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
URBANIZED AREA											
BAY CITY		78,097	780	7,410	16,187	48,570	1,562	26,554			82,534
			195	390	1,619	10,524		3,186			14,100
BAY	78,097										
FLINT		330,128	3,301	31,350	68,427	205,290	6,602	112,234			348,874
			825	1,650	6,843	44,480		13,460			60,415
GENESEE	330,128										
LANSING		229,518	2,295	21,812	47,573	142,710	4,590	78,030			242,552
			574	1,148	4,757	30,921		9,364			41,433
INGHAM EATON CLINTON	215,634 10,218 3,666										
JACKSON		78,572	785	7,448	16,286	48,870	1,571	26,707			83,025
			196	392	1,629	10,589		3,205			14,186
JACKSON	78,572										
KALAWAZOO		152,083	1,520	14,440	31,523	94,560	3,041	51,697			160,697
			380	760	3,152	20,488		6,204			27,452
KALAWAZOO	152,083										
GRAND RAPIDS		352,703	3,527	33,516	73,105	219,330	7,054	119,918			372,764
			882	1,764	7,311	47,522		14,390			63,676
KENT OTTAWA	336,099 16,604										
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STATE: MICHIGAN (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
MUSKEGON-MUSKEGON HEIGHTS		105,716	1,057 264	10,032 528	21,912 2,191	65,730 14,242	2,114 35,938 4,313			111,700 19,083
MUSKEGON	105,716									
SAGINAW		147,552	1,475 369	14,022 738	30,583 3,058	91,740 19,877	2,951 50,167 6,020			155,929 26,635
SAGINAW	147,552									
ANN ARBOR		178,605	1,786 447	16,986 894	37,020 3,702	111,060 24,063	3,572 60,724 7,287			188,770 32,244
WASHTENAW WAYNE	169,056 9,549									
DETROIT		3,919,332	39,193 9,798	372,324 19,596	812,451 81,245	2,437,350 528,093	78,306 3,331,202 159,744			6140,876 707,433
WAYNE	2,609,864									
OAKLAND	792,632									
MACOMB	566,189									
MONROE	1,899									
NON-URBANIZED AREAS										
ALPENA		25,721								
*BAY		39,242								
BERRIEN		83,797								
CALHOUN		85,090								
CASS		6,743								
CHIPPENAW		26,126								
CLINTON		16,050								
DELTA		28,630								
EATON		12,853								

STATE: MICHIGAN (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
GENESEE		56,071								
INGHAM		13,486								
IOSCO		13,634								
JACKSON		22,411								
KALAMAZOO		34,896								
KENT		37,173								
*MACOMB		59,120								
MARQUETTE		12,324								
MIDLAND		48,874								
MONROE		83,358								
MUSKEGON		33,619								
*OAKLAND		115,239								
OTTAWA		11,613								
SAGINAW		35,206								
*ST. CLAIR		120,175								
WASHTENAW		27,352								
*WAYNE		47,338								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE INDIANA AND OHIO.										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE INDIANA AND
OHIO.

STATE: MINNESOTA		POPULATION AT RISK		TOTAL POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY					QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE				
URBANIZED AREA															
MINNEAPOLIS-ST. PAUL		1,704,423				17,044	161,918	353,280	1,059,840	34,088	579,496			1,801,254	307,694
	944,514														
HENNEPIN	474,816														
RAMSEY	133,175														
ANOKA	103,102														
DAKOTA	40,366														
WASHINGTON	4,839														
CARVER	3,611														
SCOTT															
ROCHESTER	56,604					566	5,396	11,732	35,190	1,132	19,244			59,830	10,218
						142	284	1,173	7,625		2,309				
OLMSTED	56,604														
DULUTH-SUPERIOR		138,352				1,383	13,148	28,676	86,040	2,767	47,039			146,277	24,979
						346	692	2,868	18,642		5,645				
ST. LOUIS DOUGLAS, WI	105,639														
	32,713														
NON-URBANIZED AREAS															
ANOKA		13,780													
CARLTON		3,322													
CLAY		2,218													
*DAKOTA		36,706													
*HENNEPIN		15,566													
HOUSTON		1,486													
*KITSON		6,853													
*MARSHALL		13,060													
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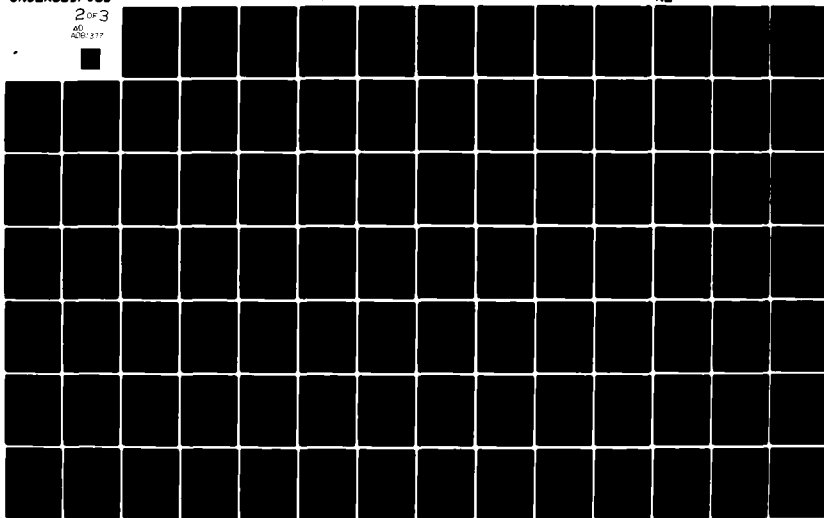
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STATE: MINNESOTA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
OLMSTED		8,981								
*RAMSEY		1,439								
ST. LOUIS		12,679								
SCOTT		9,091								
*WASHINGTON		42,582								
WINONA		712								
WRIGHT		48								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE WISCONSIN, NORTH DAKOTA.										

STATE: OHIO		POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
LIMA	70,295	702 176	6,688 352	14,571 1,457	43,710 9,471	1,405	23,885 2,866				74,283 12,689
ALLEN AUGLAIZE	69,192 1,103										
HAMILTON	90,912	909 227	8,626 454	18,843 1,884	56,520 12,246	1,818	30,906 3,709				96,052 16,409
BUTLER	90,912										
SPRINGFIELD	93,653	935 234	8,892 468	19,411 1,941	58,230 12,617	1,873	31,841 3,821				98,963 16,906
CLARK	93,653										
CLEVELAND	1,959,880	19,599 4,900	186,200 9,800	406,230 40,623	1,218,690 264,050	39,197	666,349 79,962				2071,230 353,812
CUYAHOGA LAKE SUMMIT LORAIN MEDINA PORTAGE GEAUGA	1,714,886 168,964 27,867 20,347 16,077 6,549 5,190										
COLUMBUS	790,019	7,900 1,975	75,050 3,950	163,749 16,375	491,250 106,438	15,800	268,600 32,232				834,900 142,620
FRANKLIN LICKING DELAWARE	789,815 154 50										
4-12											

STATE: OHIO (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
CINCINNATI	1,110,574	11,105 2,776	105,488 5,552	230,192 23,019	690,570 149,624	22,211	377,587 45,310		1,173,645 200,486
HAMILTON KENTON, KY CAMPBELL, KY CLERMONT BOONE, KY BUTLER WARREN	883,587 111,464 73,218 26,166 12,296 3,739 44								
STUEBENVILLE-WEIRTON	122,722	1,227 307	11,666 614	25,437 2,544	76,320 16,536	2,454	41,208 4,945		129,194 22,095
JEFFERSON HANCOCK, WV BROOKE, WV	48,262 22,450 14,780								
LORAIN-ELYRIA	192,265	1,922 481	18,278 962	39,851 3,985	119,550 25,903	3,845	65,365 7,844		203,193 34,709
LORAIN ERIE	186,765 5,500								
TOLEDO	487,789	4,877 1,219	46,322 2,438	101,106 10,111	303,330 65,722	9,755	165,835 19,900		515,487 88,060
LUCAS WOOD MONROE, MI	453,068 22,860 11,861								
YOUNGSTOWN-WARREN	395,540	3,955 989	37,582 1,978	81,985 8,199	245,970 53,294	7,910	134,470 16,136		418,022 71,408
MAHONING TRUMBULL	244,923 150,617								
				4-13					

STATE: OHIO (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
DAYTON		685,942	6,859 1,715	65,170 3,430	142,177 14,218	426,540 92,417	13,718 233,206 27,985			724,916 123,832
MONTGOMERY GREENE BUTLER WARREN	545,727 60,822 59,900 19,493									
MANSFIELD		77,599	776 194	7,372 388	16,084 1,608	48,240 10,452	1,552 26,384 3,166			81,996 14,006
RICHLAND	77,559									
CANTON		244,279	2,442 611	23,218 1,222	50,632 5,063	151,890 32,910	4,885 83,045 9,965			258,153 44,097
STARK	244,279									
AKRON		542,772	5,427 1,357	51,566 2,714	112,502 11,250	337,500 73,125	10,855 184,535 22,144			573,601 97,983
SUMMIT PORTAGE MEDINA WAYNE	468,436 57,727 13,947 2,665									
NON-URBANIZED AREAS										
ALLEN ASHLAND AUGLAIZE BELMONT BUTLER CLARK CLERMONT		24,754 2,851 1,476 16,686 13,785 20,365 9,460								

STATE: OHIO (Continued)			WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
*CUYAHOGA		6,414								
DELAWARE		9,100								
ERIE		7,572								
FAIRFIELD		15,288								
FRANKLIN		43,434								
FULTON		5,241								
*GEAUGA		57,787								
GREENE		15,036								
HAMILTON		30,057								
HURON		1,786								
JEFFERSON		28,654								
*LAKE		28,236								
LAWRENCE		22,337								
LICKING		12,384								
*LORAIN		49,731								
LUCAS		24,529								
MADISON		7,957								
*MAHONING		58,501								
MEDINA		36,908								
MIAMI		13,454								
MONTGOMERY		33,438								
OTTAWA		2,829								
PICKAWAY		16,118								
*PORTAGE		61,592								
RICHLAND		31,386								
*STARK		127,931								
*SUMMIT		57,068								
*TRUMBULL		81,962								
WARREN		14,523								
WAYNE		18,071								
WOOD		9,756								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE WEST VIRGINIA.										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE WEST VIRGINIA.

STATE: WISCONSIN			WATER CONTAINERS		COMMODS		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA										
GREEN BAY		129,105	1,291 323	12,274 646	26,760 2,676	80,280 17,394	2,582	43,894 5,267		136,448 23,307
BROWN	129,105									
MADISON		205,457	2,054 514	19,532 1,028	42,585 4,259	127,770 27,684	4,109	69,853 8,382		217,155 37,094
DANE	205,457									
KENOSHA		84,262	842 211	8,018 422	17,465 1,747	52,410 11,356	1,685	28,645 3,437		89,073 15,215
KENOSHA	84,262									
LA CROSSE		63,373	633 158	6,004 316	13,136 1,313	39,420 8,541	1,267	21,539 2,585		66,963 11,442
LA CROSSE HOUSTON, MN	60,231 3,142									
MILWAUKEE		1,252,656	12,526 3,132	119,016 6,264	259,641 25,964	778,920 168,766	25,053	425,901 51,108		1,323,837 226,138
MILWAUKEE	1,054,063									
WAUKESHA	160,980									
OZAUKEE	27,978									
WASHINGTON	6,974									
RACINE	2,462									
			4-16							

STATE: WISCONSIN (Continued)			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
APPLETON		129,532	1,295	12,312	648	26,849	80,550		2,590	44,030			136,892
OUTAGAMIE	80,511					2,685	17,453			5,284			23,385
WINNEBAGO	45,617												
CALUMET	3,404												
RACINE		117,408	1,174	11,172	588	24,335	73,020		2,348	39,916			124,108
RACINE	117,408		294			2,434	15,821			4,790			21,199
OSHKOSH		55,480	554	5,282	278	11,500	34,500		1,109	18,853			21,199
WINNEBAGO	55,480		139			1,150	7,475			2,262			10,015
NON-URBANIZED AREAS													
BROWN		18,618											
CALUMET		13,848											
CHIPPENAW		19,142											
DANE		24,125											
DOUGLAS		3,476											
EAU CLAIRE		56,978											
GRANT		3,030											
KENOSHA		15,576											
LA CROSSE		6,424											
*OUTAGAMIE		38,845											
*OZAUKEE		26,443											
*RACINE		50,968											
WASHINGTON		6,339											
WAUKESHA		29,822											
WAUPACA		5,315											
WINNEBAGO		21,668											

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FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE MINNESOTA.

REGION IV
STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
ILLINOIS	133,673	1	5
INDIANA	29,420	1	3
MICHIGAN	90,689	0	5
MINNESOTA	30,916	0	0
OHIO	113,476	3	1
WISCONSIN	33,114	0	3

REGION IV STORAGE SITES

REMARKS

HOST

COUNTY

CITY

SITE

ILLINOIS

A. SAVANNAH DEPOT	SAVANNAH	CARROLL	*ARMY
B. CHAMUTE AIR FORCE BASE	RANTOUL	CHAMPAIGN	AIR FORCE
C. SCOTT AIR FORCE BASE	BELVILLE	ST. CLAIR	AIR FORCE
D. FORT SHERIDAN	HIGHLAND PARK	LAKE	ARMY
E. NAVAL TRAINING CENTER	GREAT LAKES	LAKE	NAVY
F. O'HARE AIRPORT (AIRBASE)	CHICAGO	COOK	AIR NATIONAL GUARD

INDIANA

G. WEAPONS SUPPORT CENTER	CRANE	MARTIN	*NAVY
H. HULMAN AIR BASE	TERRE HAUTE	VIGO	AIR NATIONAL GUARD
I. BAER AIR BASE	FT. WAYNE	ALLEN	AIR NATIONAL GUARD
J. FORT BENJAMIN HARRISON	INDIANAPOLIS	MARION	ARMY

MICHIGAN

K. SELFRIDGE AIR FORCE BASE	MOUNT CLEMENTS	MACOMB	AIR NATIONAL GUARD
L. PHELPS-COLLINS AIR STATION	ALPENA	ALPENA	AIR NATIONAL GUARD
M. CAMP GRAYLING	GRAYLING	KALKASKA	ARMY NATIONAL GUARD
N. WUTSMITH AIR FORCE BASE	OSCODA	OSCODA	AIR FORCE
O. K. I. SAWYER AIR FORCE BASE	GWINN	MARQUETTE	AIR FORCE

*MAJOR STORAGE ACTIVITIES

REGION IV STORAGE SITES (Continued)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>MINNESOTA</u>				
N O D E P A R T M E N T O F D E F E N S E S T O R A G E				
<u>OHIO</u>				
P. CONSTRUCTION SUPPLY CENTER	COLUMBUS	BEXLEY		*DEFENSE LOGISTICS AGENCY
Q. ELECTRONIC SUPPLY CENTER	DAYTON	MONTGOMERY		*DEFENSE LOGISTICS AGENCY
R. WRIGHT-PATTERSON AIR FORCE BASE	DAYTON	MONTGOMERY		*AIR FORCE
<u>WISCONSIN</u>				
S. TRUAX FIELD	MADISON	DANE		AIR NATIONAL GUARD
T. GENERAL MITCHELL AIR BASE	MILWAUKEE	OZAUKE		AIR NATIONAL GUARD
U. FORT MCCOY	SPARTA	MONROE		ARMY

STATE: ARKANSAS				WATER CONTAINERS			COMMODIES			SANITATION KITS			STORAGE SITE/ MILES	TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE					
URBANIZED AREA															
PINE BLUFF		60,907	609	5,776 152	304	12,624 1,262	37,860 8,203	1,218	20,706 2,485					64,342 10,992	
JEFFERSON	60,907														
LITTLE ROCK-NORTH LITTLE ROCK		222,616	2,226	21,166 557	1,114	46,042 4,604	138,120 29,926	4,552	77,384 9,286					236,670 40,326	
PULASKI	222,616														
FORT SMITH		75,517	755	7,182 189	378	15,652 1,565	46,950 10,173	1,510	25,670 3,080					79,802 13,631	
SEBASTIAN	65,046														
CRAWFORD	8,373														
LE FLORE, OK	2,098														
NON-URBANIZED AREAS															
*CLEBURNE		10,349													
CONWAY		16,694													
CRITTENDEN		40,148													
*FAULKNER		31,572													
INDEPENDENCE		1,503													
JACKSON		1,340													
*JEFFERSON		24,422													
*LONOKE		26,249													
MILLER		5,893													
MISSISSIPPI		29,416													
PERRY		4,012													
POPE		8,110													
PRAIRIE		333													
*PULASKI		64,573													

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ATTACHMENT 5

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STATE: ARKANSAS (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
SEBASTIAN		3,054								
*VAN BUREN		8,275								
WHITE		39,253								
WOODRUFF		3,846								
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE TEXAS.										

STATE: LOUISIANA		POPULATION AT RISK WITHIN COUNTY		TOTAL POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES						QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE				
URBANIZED AREA															
SHREVEPORT				234,564		2,345 586	22,268 1,172	48,619 4,862	145,860 31,603	4,691	79,747 9,570			247,875 42,345	
CADDO BOSSIER		192,719 41,845													
LAKE CHARLES				88,260		882 221	8,398 442	18,294 1,829	54,870 11,889	1,765	30,005 3,601			93,273 15,932	
CALCASIEU		88,260													
BATON ROUGE				249,463		2,494 624	23,712 1,248	51,707 5,171	155,130 33,612	4,989	84,813 10,178			263,665 45,038	
EAST BATON ROUGE WEST BATON ROUGE		242,905 6,558													
LAFAYETTE				80,573		805 201	7,638 402	16,701 1,670	50,100 10,855	1,611	27,387 3,286			85,125 14,543	
LAFAYETTE		78,544													
NEW ORLEANS				962,389		9,623 2,406	91,428 4,812	199,478 1,994	598,440 129,662	19,247	327,199 39,264			1,017,067 173,738	
ORLEANS JEFFERSON ST. BERNARD		591,502 323,507 46,719													
MONROE				90,567		905 226	8,588 452	18,772 1,877	56,310 12,201	1,811	30,787 3,694			95,685 16,347	
OUACHITA		90,567													

STATE: LOUISIANA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE				
NON-URBANIZED AREAS												
ASCENSION		5,367										
BOSSIER		15,155										
CADDO		10,319										
CALCASIEU		33,301										
EAST BATON ROUGE		42,262										
EAST FELICIANA		1,136										
IBERIA		37,644										
IBERVILLE		19,282										
JEFFERSON		7,414										
LAFAYETTE		20,537										
LIVINGSTON		21,007										
ORLEANS		1,969										
QUACHITA		17,331										
PLAQUEMINES		10,451										
POINTE COUPEE		2,906										
RAPIDES		97,949										
ST. BERNARD		2,475										
ST. CHARLES		10,425										
ST. MARTIN		9,728										
UNION		1,213										
WEST BATON ROUGE		10,306										

STATE: NEW MEXICO		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
ALBUQUERQUE	297,451	2,974 744	28,272 1,488	61,653 6,165	184,950 40,073	5,959	101,133 12,136		314,355 53,697
BERNALILLO	297,451								
NON-URBANIZED AREAS									
BERNALILLO									
CHAVES	12,230								
CURRY	35,771								
DONA ANA	37,776								
MC KINLEY	1,129								
	21,785								

STATE: OKLAHOMA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	WEIGHT CUBE	WEIGHT CUBE	WEIGHT CUBE
URBANIZED AREA											
LANTON	95,687	958 240	9,120 480	19,830 1,983	59,490 12,890	1,917	32,589 3,911		101,199 17,281		
COMANCHE	95,687										
OKLAHOMA CITY	579,788	5,797 1,449	55,062 2,898	120,183 12,018	360,540 78,117	11,595	197,115 23,654		612,717 104,669		
OKLAHOMA CLEVELAND CANADIAN	508,450 68,159 3,179										
TULSA	370,545	3,705 926	35,188 1,852	76,803 7,680	230,400 49,920	7,411	125,987 15,118		391,575 66,890		
TULSA OSAGE WAGONER CREEK	364,940 3,167 2,328 1,064										
NON-URBANIZED AREAS											
CANADIAN	25,598										
CLEVELAND	3,907										
COMANCHE	533										
CREEK	15,159										
GARFIELD	50,701										
JACKSON	27,275										
KAY	1,011										
LE FLORE	25										
OKLAHOMA	7,135										
OSAGE	4,681										
PITTSBURG	2,097										
ROGERS	5,230										
TULSA	26,962										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE ARKANSAS.

[illegible]

STATE: TEXAS (Continued)		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
ODESSA	81,645	816	7,752 408	16,923 1,692	50,760 10,998	1,632	27,744 3,329		86,256 26,141
ECTOR	81,645								
EL PASO	337,471	3,374	32,072 1,688	69,949 6,995	209,850 45,468	6,749	114,733 13,768		356,655 50,924
EL PASO	337,471								
GALVESTON	61,809	618	5,890 310	12,811 1,281	38,430 8,327	1,236	21,012 2,521		65,332 1,158
GALVESTON	61,809								
TEXAS CITY-LA MARQUE	84,054	840	7,980 420	17,422 1,742	52,260 11,323	1,681	28,577 3,429		88,817 15,172
GALVESTON	84,054								
SHERMAN-DENISON	55,343	553	5,244 276	11,471 1,147	34,410 7,456	1,107	18,819 2,258		58,473 9,988
GRAYSON	55,343								
HOUSTON	1,677,863	16,778	159,410 8,390	347,775 34,778	1,043,340 226,057	33,557	570,469 68,456		1,773,219 302,903
HARRIS FORT BEND BRAZORIA GALVESTON	1,653,333 10,620 8,029 5,881								

STATE: TEXAS (Continued)

COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK
MCCALLEN-PHARR-EDINBURG	91,141	91,141
HIDALGO	91,141	
BEAUMONT		116,350
JEFFERSON HARDIN	115,919 431	
POR T ARTHUR	116,474	
JEFFERSON	116,474	
LUBBOCK	150,135	
LUBBOCK	150,135	
WACO	118,843	
MC LENNAH	118,843	
MIDLAND	60,371	
MIDLAND	60,371	
CORPUS CHRISTI	212,820	
NUECES SAN PATRICIO	205,518 7,302	

STATE: TEXAS (Continued)

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STATE: TEXAS (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
LAREDO	70,197	701 175	6,650 350	14,549 1,455	43,650 9,458	1,404	23,868 2,864		74,168 12,672
WEBB	70,197								
WICHITA FALLS	97,564	975 244	9,272 488	20,222 2,022	60,660 13,143	1,951	33,167 3,980		103,099 17,611
WICHITA	97,564								
NON-URBANIZED AREAS									
BEE									
BELL									
BEZAR									
BRAZORIA									
CAMERON									
*CHAMBERS									
COLLIN									
CORYELL									
DALLAS									
ECTOR									
EL PASO									
FORT BEND									
*GALVESTON									
GRAYSON									
GREGG									
GUADALUPE									
*HARRIS									
HARRISON									
HIDALGO									
HOWARD									
*JEFFERSON									
JONES									
KAUFMAN									

STATE: TEXAS (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	MILES	WEIGHT CUBE	CUBE
NON-URBANIZED AREAS (Continued)											
KLEBERG		31,757									
*LIBERTY		33,014									
LUBBOCK		11,171									
MC LENNAN		12,097									
MIDLAND		2,809									
MUECES		9,310									
*ORANGE		71,170									
SAN PATRICIO		13,871									
SMITH		6,239									
TARRANT		14,744									
TAYLOR		1,572									
TOM GREEN		1,192									
TRAVIS		17,665									
VAL VERDE		25,552									
WEBB		400									
WICHITA		3,364									

REGION V

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
ARKANSAS	5,829	0	4
LOUISIANA	17,291	0	3
NEW MEXICO	4,889	1	1
OKLAHOMA	17,025	2	0
TEXAS	113,524	3	4

<u>REGION V STORAGE SITES</u>				<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	
<u>ARKANSAS</u>				
A. LITTLE ROCK AIR FORCE BASE	JACKSONVILLE	PULASKI	AIR FORCE	
B. BLYTHEVILLE AIR FORCE BASE	BLYTHEVILLE	MISSISSIPPI	AIR FORCE	
C. FORT CHAFFEE	FT. SMITH	SABASTIAN	ARMY	
D. PINE BLUFF ARSENAL	PINE BLUFF	JEFFERSON	NAVY	
<u>LOUISIANA</u>				
E. BARKSDALE AIR FORCE BASE	SHREVEPORT	CADDO	AIR FORCE	
F. ENGLAND AIR FORCE BASE	ALEXANDRIA	RAPIDES	AIR FORCE	
G. FORT POLK	LEESVILLE	VERNON	ARMY	
<u>NEW MEXICO</u>				
H. FORT WINGATE	GALLUP	McKINLEY	*ARMY	
I. KIRTLAND AIR FORCE BASE	ALBUQUERQUE	BERNALILLO	AIR FORCE/GUARD	
<u>OKLAHOMA</u>				
J. NAVAL AIR DEPOT	McALESTER	PITTSBURG	*NAVY	
K. TINKER AIR FORCE DEPOT	OKLAHOMA CITY	CLEVELAND	*AIR FORCE	

*MAJOR STORAGE ACTIVITIES

REGION V STORAGE SITES (Continued)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>TEXAS</u>				
L. RED RIVER DEPOT	TEXARKANA	BOWIE	*ARMY	
M. KELLY AIR FORCE BASE	SAN ANTONIO	BEXAR	*AIR FORCE	
N. SAN ANTONIO AIR FORCE STATION	SAN ANTONIO	BEXAR	*AIR FORCE	
O. CARSWELL AIR FORCE BASE	FORT WORTH	TARRANT	AIR FORCE	
P. FORT BLISS	EL PASO	EL PASO	ARMY	
Q. FORT HOOD	KILLEEN	CORYELL	ARMY	
R. ELLINGTON AIR FORCE BASE	HOUSTON	HARRIS	AIR FORCE	

STATE: COLORADO		POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMODORES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES				QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
BOULDER			68,634	686 172	6,536 344	14,226 1,423	42,690 9,250	1,372	23,324 2,799		72,550 12,393
BOULDER		68,634									
DENVER			1,047,311	10,473 2,618	99,484 5,236	217,079 21,708	651,240 14,102	20,946	356,082 42,730		1,106,806 189,068
DENVER		514,678									
JEFFERSON		208,991									
ADAMS		165,584									
ARAPAHOE		158,058									
COLORADO SPRINGS			204,766	2,047 512	19,456 1,024	42,442 4,244	127,320 27,586	4,095	69,615 8,354		216,391 36,964
EL PASO		204,766									
PUEBLO			103,300	1,033 258	9,804 516	21,411 2,141	64,230 13,917	2,066	35,122 4,215		109,156 18,648
PUEBLO		103,300									
NON-URBANIZED AREAS											
ADAMS			17,972								
ARAPAHOE			2,287								
BOULDER			27,642								
DOUGLAS			1,856								
EL PASO			18,117								
JEFFERSON			1,848								
*LOGAN			18,852								
*MORGAN			20,105								
OTERO			13,188								
PUEBLO			10,496								
WELD			56,098								

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ATTACHMENT 6

STATE: IOWA		POPULATION AT RISK		WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
URBANIZED AREA											
WATERLOO		112,881	1,128 282	10,716 564	23,401 2,340	70,200 15,210	2,257	38,364 4,604			119,285 20,378
BLACK HAWK	112,881										
DUBUQUE		65,550	655 164	6,232 328	13,586 1,359	40,770 8,834	1,311	22,287 2,674			69,289 11,836
DUBUQUE JO DAVIESS, IL	63,142 2,408										
CEDAR RAPIDS		132,008	1,320 330	15,540 660	27,361 2,736	82,080 17,784	2,640	44,880 5,386			143,300 23,830
LINN	132,008										
DES MOINES		255,824	2,558 640	24,320 1,280	53,025 5,303	159,090 34,470	5,116	86,972 10,437			270,382 46,187
POLK WARREN	253,759 2,065										
SIOUX CITY		95,937	959 240	9,120 480	19,885 1,989	59,670 12,929	1,918	32,606 3,913			101,396 17,322
WOODBURY DAKOTA, NE UNION, SD	87,157 7,920 860										
NON-URBANIZED AREAS											
BLACK HAWK DES MOINES DUBUQUE		13,247 41,981 10,384									

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STATE: IOWA (Continued)			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			WEIGHT	CUBE
NON-URBANIZED AREAS (Continued)												
GRUNDY		630										
JOHNSON		2,077										
LEE		1,285										
LINN		12,671										
MILLS		119										
PLYMOUTH		771										
POLK		24,837										
POTTAWATTAMIE		5,313										
SCOTT		9,689										
WARREN		7,153										
WOODBURY		2,674										

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE ILLINOIS AND NEBRASKA.

STATE: KANSAS		POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES				QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
WICHITA		302,334	302,334	3,023	28,728 756 1,512	62,666 6,267	188,010 40,736	6,046	102,782 12,334		319,520 54,582
SEDGWICK		302,334									
TOPEKA		132,108	132,108	1,321	12,540 660	27,382 2,738	82,140 17,797	2,642	44,914 5,390		139,594 23,847
SHAWNEE		132,108									
NON-URBANIZED AREAS											
BARBER			61								
*BUTLER			38,658								
COMLEY			32,374								
DONIPHAN			2,387								
DOUGLAS			2,868								
ELK			218								
GREENWOOD			451								
HARPER			6,945								
*HARVEY			27,236								
JEFFERSON			1,013								
*JOHNSON			35,669								
KINGMAN			7,874								
LABETTE			16,023								
LEAVENWORTH			47,886								
LINN			2,026								
MIAMI			323								
NEOSHO			769								
RENO			6,869								
RILEY			52,916								

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STATE: KANSAS (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	MILES	WEIGHT CUBE	CUBE
NON-URBANIZED AREAS (Continued)											
SALINE		42,944									
*SEDOGWICK		48,360									
SHAWNEE		15,081									
*SUMNER		23,553									
*WYANDOTTE		18,630									
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE MISSOURI.											

STATE: MISSOURI		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
COLUMBIA	59,231	592 148	5,624 296	12,277 1,228	36,840 7,982	1,184	20,128 2,415		62,592 10,693
BOONE	59,231								
ST. JOSEPH	77,223	772 193	7,334 386	16,006 1,601	48,030 10,407	1,544	26,248 3,150		81,612 13,943
BUCHANAN DONIPHAN, KS	75,940 1,283								
SPRINGFIELD	121,340	1,213 303	11,514 606	25,151 2,515	75,450 16,348	2,426	41,242 4,949		128,206 21,903
GREENE	121,340								
KANSAS CITY	1,104,520	11,045 2,761	104,918 5,522	228,937 22,894	686,820 148,811	22,090	375,530 45,064		1,167,268 199,397
JACKSON JOHNSON, KS WYANDOTTE, KS CLAY PLATTE CASS	626,091 181,993 168,215 101,796 13,909 9,783								
ST. LOUIS	1,882,944	18,829 4,707	178,866 9,414	390,284 19,028	1,170,840 253,682	37,658	640,186 76,822		1,989,892 339,918
ST. LOUIS ST. LOUIS CITY ST. CLAIR, IL MADISON, IL ST. CHARLES, MO MONROE, IL	911,515 622,236 220,829 89,429 37,717 4,218								

STATE: MISSOURI (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS										
ANDREW		2,168								
BARTON		266								
*BATES		15,468								
BENTON		7,697								
BOONE		6,372								
BUCHANAN		7,045								
*CALDWELL		8,351								
*CAMDEN		13,315								
*CARROLL		12,565								
*CASS		29,665								
*CEDAR		9,424								
*CHARITON		11,084								
*CLAY		21,526								
*CLINTON		12,462								
COOPER		14,345								
*DALLAS		10,054								
*DAVISS		8,420								
GREENE		19,165								
HENRY		18,451								
*HICKORY		4,481								
HOWARD		2,504								
*JACKSON		28,467								
JEFFERSON		44,671								
JOHNSON		34,172								
*LAFAYETTE		26,626								
*LIVINGSTON		15,368								
*MILLER		15,002								
MONITEAU		9,775								
MORGAN		7,803								
PEMISCOT		919								
PETTIS		34,137								
PLATTE		18,155								
POLK		15,415								

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STATE: MISSOURI (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
RAY		17,599								
ST. CHARLES		23,772								
ST. CLAIR		7,667								
ST. LOUIS		39,838								
SALINE		24,837								
VERNON		15,645								

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STATE: MONTANA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
GREAT FALLS	70,905	709	6,735 354	14,696 1,469	44,088 9,552	1,418	24,106 2,892		74,929 12,798
CASCADE	70,905								
BILLINGS		711	6,754 355	14,759 1,475	44,277 9,593	1,422	24,174 2,900		75,205 12,848
YELLOWSTONE	71,197								
NON-URBANIZED AREAS									
CASCADE									
FERGUS									
JUDITH BASIN									
LEWIS AND CLARK									
MISSOULA									
PONDERA									
SILVER BOW									
TETON									
TOOLE									
WHEATLAND									
YELLOWSTONE									

STATE: NEBRASKA		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE				
URBANIZED AREA											
OMAHA	493,087	4,930 1,233	46,854 2,466	102,204 10,220	306,600 66,430	9,861	167,637 20,116			521,091 89,012	
DOUGLAS POTTAWATTAMIE, IA SARPY	373,160 64,847 53,769										
LINCOLN	153,443	1,534 384	14,592 768	31,805 3,181	95,430 20,677	3,068	52,156 6,259			162,178 27,704	
LANCASTER	153,443										
NON-URBANIZED AREAS											
BANNER	1,034										
*CHEYENNE	10,778										
DAKOTA	3,975										
*DAMES	9,761										
*DEUEL	2,717										
DOUGLAS	4,050										
*GARDEN	2,929										
*KIMBALL	6,009										
LANCASTER	7,683										
*MORRILL	5,813										
SARPY	5,168										
SCOTTS BLUFF	32,371										
SIoux	240										
FOR OTHER COUNTIES AT RISK WITHIN THIS STATE FROM BORDERING HIGH-RISK AREAS SEE IOWA.											

STATE: NORTH DAKOTA			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			WEIGHT	CUBE
URBANIZED AREA												
FARGO-MOORHEAD		85,446	854	8,132	17,710	53,130	1,709	29,053			90,315	15,426
CASS	53,420		214	428	1,771	11,512		3,486				
CLAY, MN	32,026											
NON-URBANIZED AREAS												
BARNES		9,342										
*BOTTINEAU		9,496										
*BURKE		4,739										
CASS		7,185										
*CAVALIER		8,213										
*FOSTER		4,832										
GRAND FORKS		59,360										
*GRIGGS		4,184										
*MC HENRY		8,977										
MC LEAN		7,280										
MOUNTRAIL		8,437										
NELSON		5,776										
*PEMBINA		10,728										
*PIERCE		6,323										
RAMSEY		11,775										
*RENVILLE		3,828										
SHERIDAN		828										
*STEELE		3,749										
*TOWNER		4,645										
*TRAILL		9,571										
*WALSH		16,251										
WARD		19,769										

STATE: SOUTH DAKOTA		POPULATION		TOTAL		WATER CONTAINERS		COMMODITIES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	AT RISK WITHIN COUNTY	POPULATION AT RISK	POPULATION AT RISK	POPULATION AT RISK	POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	WEIGHT CUBE	WEIGHT CUBE	CUBE
URBANIZED AREA															
SIOUX FALLS				75,146		751	7,144	15,575	46,740	1,503	25,551			79,435	
						188	376	1,558	10,127		3,066			13,569	
MINNEHAHA 75,146															
NON-URBANIZED AREAS															
BUTTE				7,825											
*HAAKON				2,802											
JACKSON				1,531											
LAWRENCE				17,453											
MEADE				16,618											
MINNEHAHA				5,407											
PENNINGTON				9,811											
*PERKINS				4,769											
UNION				751											

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE IOWA.

STATE: UTAH		POPULATION AT RISK		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	
URBANIZED AREA											
SALT LAKE CITY		479,342	4,793 1,198	45,524 2,396	99,355 9,936	298,080 64,584	9,586	162,962 19,555			506,566 86,535
SALT LAKE DAVIS	436,201 43,141										
PROVO-OREM		104,110	1,041 260	9,880 520	21,579 2,158	64,740 14,027	2,082	35,394 4,247			110,014 18,794
UTAH	104,110										
OGDEN		149,727	1,497 374	14,212 748	31,035 3,104	93,120 20,176	2,994	50,898 6,108			158,230 27,032
WEBER DAVIS	110,279 39,448										
NON-URBANIZED AREAS											
DAVIS		16,439									
SALT LAKE		22,406									
TOOELE		17,366									
UTAH		11,824									
WEBER		5,710									

STATE: WYOMING		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	MILES	WEIGHT CUBE	CUBE
NON-URBANIZED AREAS											
GOSHEN, WY		10,455									
LARAMIE, WY		56,360									
NATRONA, WY		7,350									
PLATTE, WY		4,494									

REGION VI

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
COLORADO	22,221	1	4
IOWA	10,778	0	0
KANSAS	7,072	1	2
MISSOURI	41,156	0	3
MONTANA	2,312	0	1
NEBRASKA	10,552	0	2
NORTH DAKOTA	1,391	0	2
SOUTH DAKOTA	1,223	0	1
UTAH	11,933	2	0
WYOMING	-----	-	-

REGION VI STORAGE SITES

REMARKS

HOST

COUNTY

CITY

SITE

COLORADO

A. BUCKLEY AIR BASE	AURORA	DENVER	AIR NATIONAL GUARD
B. LOWRY AIR FORCE BASE	DENVER	DENVER	AIR FORCE
C. ROCKY MOUNTAIN ARSENAL	DENVER	DENVER	ARMY
D. FORT CARSON	COLORADO SPRINGS	EL PASO	ARMY
E. PUEBLO ARMY DEPOT	PUEBLO	PUEBLO	*ARMY

IOWA

NO DEPARTMENT OF DEFENSE STORAGE

KANSAS

F. INDUSTRIAL PLANT EQUIPMENT FACILITY	ATCHISON	ATCHISON	*DEFENSE LOGISTICS AGENCY
G. FORBES AIR FORCE BASE	TOPEKA	SHAWNEE	AIR NATIONAL GUARD
H. FORT LEAVENWORTH	LEAVENWORTH	LEAVENWORTH	ARMY

MISSOURI

I. ROBERTSON AIR BASE	ST. LOUIS	ST. LOUIS	AIR NATIONAL GUARD
J. RICHARDS-GEBAUR AIR	GRANDVIEW	CASS	AIR FORCE
K. FORT LEONARD WOOD	WAYNESVILLE	PULASKI	ARMY

*MAJOR STORAGE ACTIVITIES

REGION VI STORAGE SITES (Continued)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	<u>REMARKS</u>
<u>NEBRASKA</u>				
L. LINCOLN AIR BASE	LINCOLN	LANCASTER	AIR NATIONAL GUARD	
M. OFFUTT AIR FORCE BASE	OMAHA	DOUGLAS	AIR FORCE	
<u>NORTH DAKOTA</u>				
N. GRAND FORKS AIR FORCE BASE	EMERADO	GRAND FORKS	AIR FORCE	
O. HECTOR AIR STATION	FARGO	CASS	AIR NATIONAL GUARD	
<u>SOUTH DAKOTA</u>				
P. JOE FOSS FIELD	STOUX FALLS	MINNEHAHA	AIR NATIONAL GUARD	
<u>UTAH</u>				
Q. DEFENSE DEPOT	OGDEN	WEBER	DEFENSE LOGISTICS AGENCY	
R. OGDEN AIR FORCE BASE	OGDEN	WEBER	AIR FORCE	

STATE: ARIZONA		WATER CONTAINERS		COMMODITIES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	MILES		WEIGHT	CUBE
URBANIZED AREA											
PHOENIX	864,000	8,640 2,160	82,080 4,320	179,083 17,908	527,240 116,402	17,280	293,760 35,251			903,080 155,973	
MARICOPA	863,357										
TUCSON	294,184	2,941 735	27,930 1,470	60,977 6,098	182,940 39,637	5,883	100,011 12,001			310,881 53,108	
PIMA	294,184										
NON-URBANIZED AREAS											
COCHISE	21,216										
MARICOPA	26,826										
*PIMA	57,483										
YUMA	43,962										

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ATTACHMENT 7

STATE: CALIFORNIA			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ MILES	TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE			
URBANIZED AREA														
SAN FRANCISCO-OAKLAND		2,987,850	29,878 7,470	283,860 14,940		619,302 61,930	1,857,906 402,546		59,754	1,015,818 121,898			3,157,584 539,384	
ALAMEDA	992,299													
SAN FRANCISCO	715,674													
SAN MATEO	542,407													
CONTRA COSTA	461,205													
MARIN	190,398													
SOLANO	81,769													
NAPA	4,098													
FRESNO		272,908	2,629 657	24,966 1,314		54,493 5,459	163,779 35,485		5,258	89,386 10,726			278,131 47,525	
FRESNO	262,908													
BAKERSFIELD		176,155	1,761 440	16,720 880		36,512 3,651	109,536 23,732		3,523	59,891 7,187			186,147 31,799	
KERN	176,155													
L.A.-LONG BEACH		8,351,266	83,512 20,878	739,364 41,756		1,730,990 173,099	5,192,970 1,125,143		167,025	2,839,425 340,731			8,771,759 1,507,630	
LOS ANGELES	6,868,885													
ORANGE	1,311,594													
SAN BERNARDINO	170,787													
SALINAS		62,456	624 156	5,928 312		12,945 1,294	38,835 8,414		1,249	21,233 2,548			65,996 11,274	
MONTEREY	62,456													

STATE: CALIFORNIA (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
SEASIDE-MONTEREY	93,284	932 233	8,854 466	19,336 1,933	58,008 12,568	1,865	31,705 3,805		98,567 16,839
MONTEREY	93,284								
SACRAMENTO	633,732	6,337 1,584	60,192 3,168	131,356 13,135	394,068 85,381	12,674	215,458 25,855		669,718 114,404
SACRAMENTO YOLO PLACER	586,526 25,664 21,542								
SAN BERNARDINO-RIVERSIDE	583,597	5,835 1,459	55,442 2,918	120,934 12,093	362,802 78,607	11,671	198,407 23,809		616,651 105,334
SAN BERNARDINO RIVERSIDE	352,559 231,038								
SAN DIEGO	1,198,323	11,983 2,946	111,948 5,892	248,380 24,838	745,140 161,447	23,966	407,422 48,891		1264,510 216,230
SAN DIEGO	1,198,323								
STOCKTON	160,373	1,603 401	15,238 802	33,241 3,324	99,723 21,606	3,207	54,519 6,542		169,480 28,950
SAN JOAQUIN	160,373								
SANTA BARBARA	129,774	1,297 324	12,312 648	26,899 2,689	80,697 17,484	2,595	44,115 5,294		137,124 23,426
SANTA BARBARA	129,774								

STATE: CALIFORNIA (Continued)		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	POPULATION AT RISK TOTAL AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
SAN JOSE		1,025,273	10,252	97,394 2,563	262,511 26,251	787,533 170,632	20,505	348,585 41,830	1233,512 217,588	
SANTA CLARA	1,025,273									
SANTA ROSA		75,083	750	7,144 188	15,563 1,556	46,689 10,115	1,501	25,517 3,062	217,588 13,553	
SONOMA		75,083								
MODESTO		106,107	1,061	10,070 265	21,993 2,199	65,979 14,295	2,122	36,074 4,329	112,123 19,154	
STANISLAUS		106,107								
OXNARD-VENTURA-1000 OAKS		244,653	2,446	23,256 1,224	50,710 5,071	152,130 32,961	4,893	83,181 9,982	258,567 44,167	
VENTURA LOS ANGELES	241,793 2,860									
SIMI VALLEY		59,936	569	5,396 142	11,802 1,180	35,406 7,671	1,138	19,346 2,322	60,148 10,277	
VENTURA		59,936								
NON-URBANIZED AREAS										
*ALAMEDA		80,885								
*CONTRA COSTA		97,184								
FRESNO		48,304								
IMPERIAL		31,266								
KERN		13,025								
KINGS		18,392								
LASSEN		2,853								

STATE: CALIFORNIA (Continued)			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
NON-URBANIZED AREAS (Continued)										
*LOS ANGELES		160,330								
*MARIN		15,640								
MERCED		61,795								
MONTEREY		39,958								
*NAPA		75,042								
*ORANGE		108,792								
PLACER		13,992								
RIVERSIDE		53,540								
SACRAMENTO		31,663								
SAN BERNARDINO		88,030								
*SAN DIEGO		159,531								
SAN JOAQUIN		19,091								
*SAN MATEO		13,827								
SANTA BARBARA		112,700								
SANTA CLARA		14,499								
*SOLANO		88,172								
*SONOMA		129,802								
STANISLAUS		18,785								
VENTURA		21,881								
*YOLO		66,124								
YUBA		33,916								

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STATE: HAWAII		WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	STORAGE SITE/ MILES	WEIGHT CUBE	WEIGHT CUBE
URBANIZED AREA											
HONOLULU		443,749	4,437	42,142	91,978	275,940	8,874	150,858		460,940	
			1,109	2,218	9,198	59,787		18,103		80,108	
HONOLULU	442,397										
NON-URBANIZED AREAS											
HONOLULU		152,140									

STATE: NEVADA		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA									
LAS VEGAS	236,681	2,366	22,496 1,184	49,058 4,906	147,180 31,889	4,733	80,461 9,655		251,137 42,728
CLARK	236,681								
RENO		996	9,462 498	20,663 2,066	61,980 13,429	1,993	33,881 4,066		105,323 17,993
WASHOE	99,687								
NON-URBANIZED AREAS									
CHURCHILL	10,513								
CLARK	10,820								
MINERAL	5,995								
WASHOE	19,517								

REGION VII

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
ARIZONA	18,851	1	2
CALIFORNIA	265,743	7	3
HAWAII	7,222	1	3
NEVADA	5,472	1	1

<u>REGION VII STORAGE SITES</u>				<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>	
<u>ARIZONA</u>				
A. NAVAJO DEPOT ACTIVITY	BELLMONT	COCONINO	*ARMY	
<u>CALIFORNIA</u>				
B. SACRAMENTO ARMY DEPOT	SACRAMENTO	SACRAMENTO	*ARMY	
C. SHARPE ARMY DEPOT	LATHROP	SAN JOAQUIN	*ARMY	
D. SIERRA ARMY DEPOT	HERLONG	LASSEN	*ARMY	
E. NAVAL SUPPLY CENTER	ALAMEDA	ALAMEDA	*NAVY	
F. CONSTRUCTION CENTER	PORT HUENEME	VENTURA	*NAVY	
G. NAVAL SUPPLY CENTER	SAN DIEGO	SAN DIEGO	*NAVY	
H. STOCKTON STORAGE FACILITY	STOCKTON	SAN JOAQUIN	*DEFENSE LOGISTICS AGENCY	
<u>HAWAII</u>				
I. NAVAL SUPPLY CENTER	PEARL HARBOR	-	*NAVY	
<u>NEVADA</u>				
J. NAVAL AIR DEPOT	HANTHORNE	MINERAL	*NAVY	
K. NELLIS AIR FORCE BASE	LAS VEGAS	CLARK	AIR FORCE	
*MAJOR STORAGE ACTIVITIES				

STATE: IDAHO		POPULATION AT RISK		WATER CONTAINERS		COMMODITIES		SANITATION KITS		STORAGE SITE/ MILES		TOTAL	
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK		QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			WEIGHT	CUBE
URBANIZED AREA													
BOISE CITY		85,187		851	8,084	17,656	52,968	1,704	28,968			90,020	
ADA	85,187			212	425	1,765	11,476		3,476			15,377	
NON-URBANIZED AREAS													
ADA		12,205											
ELMORE		15,060											

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ATTACHMENT 8

STATE: OREGON		POPULATION		WATER CONTAINERS		COMMODIES		SANITATION KIITS		STORAGE SITE/		TOTAL	
COUNTIES OR PARTS OF COUNTIES		AT RISK	WITHIN COUNTY	QUANTITY	WEIGHT	QUANTITY	WEIGHT	QUANTITY	WEIGHT	QUANTITY	WEIGHT	CUBE	CUBE
COUNTRIES OR PARTS OF COUNTIES		POPULATION AT RISK		CASES	CUBE	CASES	CUBE	CASES	CUBE	CASES	CUBE	MILES	
URBANIZED AREA													
EUGENE		139,255		1,392 348	13,224 696	28,864 2,886	86,592 18,761	2,785	47,345 5,681				147,161 25,138
LANE		139,255											
SALEM		93,041		930 232	8,835 465	19,959 1,995	58,785 12,736	1,860	31,620 3,794				99,240 16,995
MARION POLK		86,438 6,603											
PORTLAND		824,926		8,249 2,062	78,365 4,124	170,985 17,098	512,955 11,140	16,498	280,466 33,655				871,786 148,919
MULTNOMAH WASHINGTON CLACKAMAS CLARK, WA		542,079 109,298 100,379 73,170											
NON-URBANIZED AREAS													
*CLACKAMAS		65,709											
COLUMBIA		4,402											
JEFFERSON		6,369											
KLAMATH		35,445											
LANE		16,688											
MARION		12,968											
MULTNOMAH		12,043											
POLK		3,720											
WASHINGTON		43,870											

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STATE: WASHINGTON		POPULATION AT RISK WITHIN COUNTY	TOTAL POPULATION AT RISK	WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ MILES	TOTAL WEIGHT CUBE
COUNTIES OR PARTS OF COUNTIES	POPULATION AT RISK			QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
URBANIZED AREA											
SEATTLE-EVERETT			1,238,107	12,381 3,095	117,619 6,190	256,605 25,661	769,830 166,797	24,762	420,954 50,514		1308,403 223,501
KING SNOWMISH	1,065,034 173,073										
TACOMA			332,521	3,325 831	31,587 1,662	68,953 6,895	206,850 44,818	6,650	113,050 13,566		351,407 60,046
PIERCE		332,521									
SPOKANE			229,620	2,296 574	21,812 1,148	47,594 4,759	142,770 30,934	4,592	78,064 9,368		242,646 41,450
SPOKANE		229,620									
NON-URBANIZED AREAS											
*CLARK			55,284								
GRAYS HARBOR			3,390								
ISLAND			24,411								
KING			64,967								
KITSAP			100,564								
MASON			3,445								
PIERCE			65,452								
SKAGIT			16,919								
SNOWMISH			59,179								
SPOKANE			35,489								
THURSTON			65,089								
WALLA WALLA			29,147								

FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE OREGON.

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FOR OTHER COUNTIES AT RISK WITHIN THIS STATE
FROM BORDERING HIGH-RISK AREAS SEE OREGON.

REGION VIII

STORAGE SPACE REQUIREMENTS

STATE	SQUARE FEET	MAJOR STORAGE SITES	MILITARY SITES
IDAHO	1,386	0	1
OREGON	17,242	1	1
WASHINGTON	29,302	1	1
ALASKA	-----	-	-

<u>REGION VIII STORAGE SITES</u>					<u>REMARKS</u>
<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>		
<u>IDAHO</u>					
A. GOWEN AIR BASE	BOISE	ADA	AIR NATIONAL GUARD		
<u>OREGON</u>					
B. UMATILLA DEPOT ACTIVITY	HERMISTON	UMATILLA	*ARMY		
<u>WASHINGTON</u>					
C. FAIRCHILD AIR FORCE BASE	SPOKANE	SPOKANE	AIR NATIONAL GUARD		
D. NAVAL SUPPLY CENTER	BREMERTON	KITSAP	*NAVY		

*MAJOR STORAGE ACTIVITIES

ATTACHMENTS 9 THROUGH 28

SELECTED TWENTY CITIES

STATE: ARIZONA			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
PHOENIX										
150,400	Mohave	25,900	1,763 441	16,758 882	36,542 3,654	109,620 23,751	3,526	59,942 7,193	2,870	186,320 31,826
376,750	Coconino	48,300	4,250 1,063	40,394 2,126	88,101 8,810	264,300 57,265	8,501	144,517 17,342	6,919	449,211 76,733
132,850	Yavapai	37,000	1,699 425	16,150 850	35,205 3,521	105,630 22,887	3,397	57,749 6,930	2,767	179,529 30,687
191,000	Navajo	47,600	2,386 597	22,686 1,194	49,455 4,946	145,380 31,449	4,772	81,124 9,735	3,821	249,190 42,378
69,300	Apache	32,300	1,016 254	9,652 508	21,059 2,106	63,180 13,689	2,032	34,244 4,145	1,653	107,076 18,342
110,100 **17,200	Gila Gila	29,200 **156,500	1,565 391	14,858 782	32,438 3,244	97,320 21,086	3,130	53,210 6,385	2,547	165,388 28,253
170,000	Maricopa	971,200	11,412 2,853	108,414 5,706	236,540 23,654	709,620 153,751	22,824	388,008 46,561	19,478	1,206,042 216,018
85,600 *82,600	Pinal Pinal	68,600 *236,800	2,368 592	22,496 1,184	49,082 4,908	147,240 31,902	4,736	80,512 9,661	3,854	250,248 42,747
* Includes 82,600 from Tucson										
** Includes 17,200 from Tucson										

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ATTACHMENT 9

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ATTACHMENT 9

STATE: ARIZONA			WATER CONTAINERS			CONMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE					
TUCSON													
*168,200	Pinal												
56,300	Graham	16,600	729 182	6,916 364	15,110 1,511	45,330 9,822	1,458	24,786 2,974	1,186	77,032 13,160			
19,100	Pima	351,700	3,708 927	35,226 1,854	76,857 7,686	230,580 49,959	7,416	126,072 15,129	6,036	391,878 66,942			
71,400	Santa Cruz	14,000	854 214	8,132 428	17,701 1,770	53,100 11,505	1,708	29,036 3,484	1,390	90,268 15,417			
197,500	Cochise	61,900	2,594 649	24,662 1,298	53,767 5,377	161,310 34,951	5,188	88,196 10,584	4,223	274,168 46,833			
37,000	Greenlee	10,300	473 118	4,484 236	9,804 980	29,400 6,370	946	16,082 1,930	770	49,966 8,536			
*127,300	Gila												
*Included in Phoenix totals													
YUMA													
66,100	Yuma	60,800	1,269 317	12,046 634	26,303 2,630	78,900 17,095	2,538	43,146 5,178	2,065	134,092 22,907			
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ATTACHMENT 10													

STATE: COLORADO			WATER CONTAINERS			COMMUNES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
DENVER															
1,839	Adams	185,800	1,876 469	17,822 938		38,892 3,889	116,670 25,279		3,753	63,801 7,656		3,054		198,293 33,873	
3,714	Arapahoe	162,100	1,658 415	15,770 830		34,369 3,437	103,110 22,341		3,316	56,372 6,765		2,699		175,252 29,936	
21,447	Baca	5,700	271 68	2,584 136		5,627 563	16,890 3,660		543	9,231 1,108		442		28,705 4,904	
24,543	Bent	6,500	310 78	2,964 156		6,416 642	19,260 4,173		619	10,523 1,263		504		32,747 5,592	
88,206	Boulder	131,900	2,201 550	20,900 1,100		45,622 4,562	136,860 29,653		4,402	74,834 8,980		3,582		232,594 69,496	
7,140	Cheyenne	2,400	95 24	912 48		1,917 192	5,760 1,248		191	3,247 390		152		9,919 1,686	
15,236	Clear Creek	4,800	200 50	1,900 100		4,153 415	12,450 2,698		401	6,817 818		326		21,167 3,616	
9,258	Crowley	3,100	124 31	1,178 62		2,562 256	7,680 1,664		247	4,199 504		201		13,057 2,230	
45,858	Delta	15,300	612 153	5,814 306		12,677 1,268	38,040 8,242		1,223	20,791 2,495		995		64,645 11,043	
4,923	Dolores	1,600	65 16	608 32		1,353 135	4,050 878		130	2,210 265		105		6,868 1,175	
4,595	Douglas	8,400	130 33	1,254 66		2,953 295	8,850 1,918		260	4,420 530		229		14,524 2,547	
27,518	Eagle	7,500	350 88	8,344 176		7,259 726	21,780 4,719		700	11,900 1,420		569		42,024 6,315	
ATTACHMENT 11															

ATTACHMENT 11

STATE: COLORADO			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE					
DENVER													
4,980	Elbert	3,900	89	836	1,840	5,520	178	3,026	144	9,382			
			22	44	184	1,196		363		1,603			
55,583	Garfield	14,800	704	6,688	14,956	44,880	1,400	23,800	1,175	75,368			
			176	352	1,496	9,724		2,856		13,032			
4,058	Gilpin	1,300	54	532	1,111	3,330	107	1,819	87	5,681			
			14	28	111	722		218		968			
15,073	Grand	4,100	192	1,824	3,975	11,940	383	6,511	312	20,275			
			48	96	398	2,587		781		3,464			
6,646	Jackson	1,800	84	798	1,751	5,250	169	2,873	137	8,921			
			21	42	175	1,138		345		1,525			
49,300	Jefferson	235,400	2,847	27,056	59,011	177,030	5,694	56,798	4,634	200,884			
			712	1,424	5,901	38,357		11,616		51,397			
7,669	Kiowa	2,000	97	912	2,075	6,240	123	2,091	148	9,243			
			24	48	208	1,352		251		1,651			
31,058	Lake	8,300	394	3,762	8,158	24,480	787	13,379	640	41,621			
			99	198	816	5,304		1,605		7,107			
280,849	Larimer	89,900	3,707	35,226	76,846	230,550	7,415	126,055	6,035	391,831			
			927	1,854	7,685	49,953		15,127		66,934			
8,964	Lincoln	4,800	138	1,330	2,853	8,550	275	4,675	223	14,555			
			35	70	285	1,853		561		2,484			
159,520	Mesa	54,400	2,139	20,330	44,340	133,020	4,278	72,726	3,482	226,076			
			535	1,070	4,434	28,821		8,727		38,618			
23,947	Moffat	6,500	304	2,888	6,311	18,930	609	10,353	495	32,171			
			76	152	631	4,102		1,242		5,496			

STATE: COLORADO			WATER CONTAINERS			FORMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
DENVER															
38,856	Montezuma	13,000	519 130	4,940 260		10,748 1,075	32,250 6,988		1,037	17,629 2,115		884	54,819 9,363		
55,098	Montrose	18,400	735 184	6,992 368		15,234 1,523	45,690 9,900		1,470	24,990 2,999		1,196	77,672 13,267		
4,638	Ouray	1,500	61 15	570 30		1,272 127	3,810 826		123	2,091 251		99	2,091 1,107		
8,194	Park	2,200	104 26	988 52		2,154 215	6,450 1,398		208	3,536 424		168	10,974 1,874		
23,194	Pickin	6,200	294 74	2,812 148		6,172 617	18,510 4,011		508	8,636 1,036		468	29,958 5,195		
50,115	Prowers	13,300	634 152	6,042 318		13,145 1,315	39,450 8,548		1,268	21,556 2,587		1,032	67,048 11,453		
17,770	Rio Blanco	4,800	226 57	2,166 114		4,679 468	14,040 3,042		451	7,667 920		367	23,873 4,076		
24,193	Routt	6,600	308 77	2,926 154		6,382 638	19,140 4,147		616	10,472 1,257		501	32,538 5,558		
2,493	San Juan	800	33 8	304 16		682 68	2,040 442		66	1,122 135		53	3,466 593		
5,847	San Miguel	1,900	77 19	722 38		1,606 161	4,830 1,047		155	2,635 316		126	8,187 1,401		
10,138	Summit	2,700	128 32	1,216 64		2,661 266	7,980 1,729		257	4,369 524		208	13,565 2,317		
			11-3												

STATE: FLORIDA				WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
MIAMI																
773,013	Polk	228,500	1,001,513	10,015 2,503	95,142 5,007		207,587 20,758	622,761 134,931		20,030	340,510 40,861		16,303		1,058,413 180,800	
115,760	Highlands	29,500	145,260	1,453 363	13,803 726		30,109 3,010	90,327 19,570		2,905	49,385 5,926		2,365		153,515 26,223	
288,282	Manatee	97,100	385,382	3,854 963	36,613 1,927		79,879 7,987	239,637 51,921		7,708	131,036 15,724		6,273		407,286 69,572	
36,574	Hardee	14,900	51,474	515 128	4,892 257		10,670 1,067	32,010 6,935		1,029	17,493 2,099		838		54,395 9,292	
24,508	Charlotte	27,600	52,108	521 130	4,949 260		10,801 1,080	32,403 7,020		1,042	17,714 2,125		848		55,066 9,406	
9,108	Hendry	11,900	20,008	200 50	1,900 100		4,147 414	12,441 2,695		400	6,800 816		326		21,141 3,611	
43,854	DeSoto	13,000	56,854	569 142	5,405 284		11,784 1,178	35,352 7,659		1,137	19,329 2,319		925		60,086 10,263	
177,437	Palm Beach	349,000	493,437	4,934 1,233	46,873 2,467		102,276 10,227	306,828 66,479		9,869	167,773 20,132		8,032		521,474 89,079	

ATTACHMENT 12

12-1

STATE: METRO WASHINGTON, D.C.				WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
ARLINGTON											
37,700	Rockbridge	16,600	54,300	543 135	5,158 271	11,255 1,125	33,765 7,315	1,086 2,215	18,462 2,215	884	57,385 9,802
25,500*	Nicholas, WV	22,500	68,700	687 171	6,526 343	14,240 1,424	42,720 9,256	1,374 2,802	23,358 2,802	1,118	72,604 12,402
12,200**	Lexington	7,200	58,600	586 146	5,567 293	12,146 1,214	36,438 7,894	1,172 2,390	19,924 2,390	954	61,929 10,578
19,700*	Upshur, WV	19,100	71,600	716 179	6,802 358	14,841 1,484	44,523 9,646	1,432 2,921	24,344 2,921	1,165	75,669 12,925
9,500***	Webster, WV	9,800	30,500	305 76	2,897 152	6,322 632	18,966 4,109	610 1,244	10,370 1,244	496	32,233 5,506
7,700***	Greene	5,200	14,500	145 36	1,377 72	3,005 300	9,015 1,953	290 591	4,930 591	236	15,322 2,617
15,200*	Madison	8,600	27,900	279 69	2,650 139	5,783 578	17,349 3,758	558 1,138	9,436 1,138	454	29,485 5,036
6,400	Rappahanock	5,200	11,600	116 29	1,102 58	2,404 240	7,212 1,562	232 473	3,944 473	189	12,258 2,093
21,900#	Charlottesville	38,700	317,000	3,170 790	30,110 1,585	65,705 6,570	197,115 42,708	6,340 107,780	12,933	5,160	335,005 57,226
*Includes evacuees from Fairfax County **Includes evacuees from D.C. ***Includes evacuees from Alexandria # Includes evacuees from Prince George, Alexandria, Fairfax County, Fairfax City, Falls Church											
ATTACHMENT 13											

*Includes evacuees from Fairfax County
 **Includes evacuees from D.C.
 ***Includes evacuees from Alexandria
 # Includes evacuees from Prince George,
 Alexandria, Fairfax County, Fairfax
 City, Falls Church

STATE: METRO WASHINGTON, D.C.				WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
EVACUEES																
ALEXANDRIA																
42,700	Buena Vista	6,500	49,200	492 123	4,674 246		10,198 1,019	30,594 6,628		984	16,728 2,007		801		51,996 8,882	
11,200*	Webster, WV															
7,700	Craig	3,500	11,200	112 28	1,064 56		2,321 232	6,963 1,508		224	3,808 456		182		11,835 2,021	
4,800**	Covington	9,100	69,400	694 173	6,593 347		14,385 1,438	43,155 9,350		1,388	23,596 2,831		1,130		73,344 12,528	
20,800***	Harrisonburg	16,300	132,900	1,329 332	12,625 664		27,547 2,254	82,641 17,905		2,658	45,186 5,422		2,163		140,452 23,992	
1,600*	Greene															
19,300*	Charlottesville															
FALLS CHURCH																
7,700**	Alleghany	12,500	42,800	428 107	4,066 214		8,871 887	26,613 5,766		856	14,552 1,746		697		45,231 7,726	
1,900	Harrisonburg	16,300	18,200	182 45	1,729 91		3,772 377	11,316 2,451		364	6,188 742		296		19,233 3,285	
800*	Charlottesville															

*Included in Arlington totals

**Includes evacuees from Fairfax County

***Includes evacuees from D.C., Fairfax City, Fairfax County

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*Included in Arlington totals
 **Includes evacuees from Fairfax County
 ***Includes evacuees from D.C., Fairfax
 City, Fairfax County

STATE: METRO WASHINGTON, D.C.

STATE: METRO WASHINGTON, D. C.				WATER CONTAINERS		(COMMUNES)		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	HEIGHT CUBE	QUANTITY CASES	HEIGHT CUBE	QUANTITY CASES	HEIGHT CUBE		
PRINCE GEORGES COUNTY											
30,000	Stafford	24,600	54,600	546 136	5,187 273	11,317 1,131	33,951 7,356	1,092	18,564 2,227	889	57,702 9,856
31,000	Caroline	13,900	44,900	449 112	4,265 224	9,307 930	27,921 6,049	898	15,266 1,831	731	47,452 8,105
40,000	Spotsylvania	16,400	56,400	564 141	5,358 282	11,690 1,169	35,070 7,598	1,128	19,176 2,301	918	59,604 10,181
21,000	Westmoreland	12,100	33,100	331 82	3,144 165	7,523 752	22,569 4,889	662	11,254 1,350	578	36,967 6,405
63,000**	Fredericksburg	17,700	117,900	1,179 294	11,200 589	24,437 2,443	73,311 15,884	2,358	40,086 4,810	1,919	124,597 21,283
147,000* Charlottesville											
19,000	Fluvanna	7,600	26,600	226 56	2,147 113	5,513 551	16,539 3,583	532	9,044 1,085	431	27,730 4,781
29,000	Nelson	11,700	40,700	407 101	3,866 203	8,436 843	25,308 5,483	814	13,838 1,660	662	43,012 7,347
108,000	Albemarle	37,800	145,800	1,458 364	13,851 729	30,220 3,022	90,660 19,643	2,916	49,572 5,948	2,373	154,083 26,320
18,000	King George	8,000	26,000	260 65	2,470 130	5,389 538	16,167 3,502	520	8,840 1,060	423	27,477 4,693
40,000	Louisa	14,000	54,000	540 135	5,130 270	11,193 1,119	33,579 7,275	1,080	18,360 2,203	879	57,069 9,748
*Included in Arlington totals **Includes evacuees from D.C.											

*Included in Arlington totals
 **Includes evacuees from D.C.

STATE: METRO WASHINGTON, D.C.				WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
MONTGOMERY COUNTY														
54,800	Frederick	28,900	83,700	837 209	7,951 418		17,349 1,734	52,047 11,276		1,674	28,458 3,414		1,362	88,456 15,110
17,000	Clarke	8,100	25,100	251 62	2,384 125		5,203 520	15,609 3,381		502	8,534 1,024		409	26,527 4,531
60,800*	Winchester	19,700	127,000	1,270 317	12,065 635		26,324 2,632	78,972 17,110		2,540	43,180 5,181		2,067	134,217 22,926
42,000*	Loudon	37,200	92,900	929 38	8,825 464		19,256 1,925	57,768 12,516		1,858	31,586 3,790		1,512	98,179 16,771
127,000	Rockingham	47,900	174,900	1,749 437	16,615 874		36,252 3,625	108,756 23,563		3,498	59,466 7,135		2,847	184,837 31,574
147,000	Staunton	23,700	170,700	1,707 426	16,216 853		35,381 3,538	108,143 22,997		3,414	58,038 6,964		2,779	180,397 30,815

*Includes evacuees from D.C.

13-4

13-4

*Includes evacuees from D.C.

RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL
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16,000	Clifton Forge	5,100	21,100
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4,500* Harrisonburg

500 Charlottesville**

*Included in Alexandria totals
**Included in Arlington totals

WATER CONTAINERS			COMMODOES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
QUANTITY	WEIGHT	CUBE	QUANTITY	WEIGHT	CUBE	QUANTITY	WEIGHT	CUBE				
CASES			CASES			CASES						
211	2,004	105	4,373	13,119		422	7,174		343	22,297		
52			437	2,842			860			3,808		

RISK AREA	HOST AREA	CENSUS	TOTAL
EVACUEES			

37,200	Fauquier	26,400	63,600
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82,300	Culpeper	18,200	100,500
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49,300	Shenandoah	22,900	72,200
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35,600	Warren	15,300	50,900
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57,500*** Orange 13,800 90,900

*Included in Prince Georges totals

***Includes evacuees from Fairfax County

Included in Alexandria totals

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STATE: METRO WASHINGTON, D.C.				WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE	
RISK AREA	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
EVACUEES												
D.C.												
42,500	Elkins, WV	8,100	50,600	506 126	4,807 253	10,488 1,048	31,464 6,817	1,012	17,204 2,064	824	53,475 9,124	
103,400	Augusta	44,200	147,600	1,476 369	14,022 738	30,593 3,059	91,779 19,885	2,952	50,184 6,022	2,403	159,985 26,645	
90,800*	Waynesboro	16,200	133,000	1,330 332	12,635 665	27,567 2,756	82,695 17,917	2,660	45,220 5,426	2,165	140,556 24,009	
39,200**	Lexington											
*Includes evacuees from Fairfax County												
**Included in Arlington totals												
13-7												

*Includes evacuees from Fairfax County
 **Included in Arlington totals

STATE: METRO WASHINGTON, D.C.			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	HEIGHT CUBE	QUANTITY CASES	HEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT	CUBE
FAIRFAX COUNTY											
22,600*	Alleghany										
26,000**	Waynesboro										
106,900	Greenbrier, WV	32,100	1,390	13,205	28,811	86,433	2,780	47,260	2,263	146,898	
			347	695	2,881	18,727		5,671		25,093	
49,600	Randoiph, WV	24,600	742	7,049	15,380	46,140	1,484	25,228	1,208	78,417	
			185	371	1,538	9,997		3,027		13,395	
20,100**	Orange										
33,000	Botetourt	18,200	512	4,864	10,612	31,836	1,024	17,408	833	54,108	
			128	256	1,061	6,897		2,088		9,242	
32,000	Amherst	26,100	581	5,519	12,043	36,129	1,162	19,754	946	61,402	
			145	290	1,204	7,827		2,370		10,488	
18,900**	Page										
19,000	Clifton Forge	5,100	241	2,289	4,995	14,985	482	8,194	392	25,468	
			60	120	499	3,246		983		4,350	
28,100	Braxton, WV	12,700	408	3,876	8,457	25,371	816	13,872	664	43,119	
			102	204	845	5,497		1,664		7,365	
13-8											
*Included in Falls Church totals											
**Included in D.C. totals											

*Included in Falls Church totals

**Included in D.C. totals

RISK AREA	HOST AREA	CENSUS	TOTAL EVACUEES
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20,700* Nicholas, WV

33,800 Harrisonburg**

13,700* London**

*Included in Arlington totals
 **Included in Alexandria totals
 ***Included in Montgomery County totals

STATE: METRO WASHINGTON, D. C.				<u>WATER CONTAINERS</u>		<u>(COMMUNES)</u>		<u>SANITATION KITS</u>		<u>STORAGE SITE/ WAREHOUSE SPACE</u>	<u>TOTAL WEIGHT CUBE</u>
RISK AREA	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
FAIRFAX COUNTY											
20,700*	Nicholas, WV										
33,800**	Harrisonburg										
LOUDON COUNTY											
13,700***	Loudon										
*Included in Arlington totals **Included in Alexandria totals ***Included in Montgomery County totals											

STATE: GEORGIA			WATER CONTAINERS			COMMODIES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
MACON													
26,564	Houston	62,900	897 224	8,521 448	18,585 1,858	55,755 12,080	1,793 30,481 3,657		1,460	94,757 16,186			
6,537	Twiggs	8,200	146 36	1,387 73	3,017 301	9,051 1,461	291 4,947 593		237	15,385 2,627			
28,514	Peach	16,000	445 111	4,227 222	9,227 922	27,681 5,997	890 15,130 1,815		725	47,038 8,035			
67,144	Baldwin	34,200	1,013 253	9,623 506	21,006 2,100	63,018 13,653	2,027 34,359 4,135		1,650	107,100 18,295			
17,144	Bleckley	10,300	274 68	2,603 137	5,688 568	17,064 3,697	549 9,333 1,119		447	29,000 4,954			
10,509	Dodge	15,700	262 65	2,489 131	5,433 543	16,299 3,531	524 8,908 1,068		427	27,696 4,731			
56,888	Laurens	32,700	896 224	8,512 448	18,569 1,856	55,707 12,069	1,792 30,464 3,655		1,458	94,683 16,173			
16,059	Monroe	11,000	271 67	2,574 135	5,609 560	16,827 3,645	541 9,197 1,103		440	28,598 4,884			
8,565	Pulaski	8,100	167 41	1,586 8,350	3,455 345	10,365 2,245	333 5,661 679		271	17,612 3,008			
											14-1		

ATTACHMENT 14

STATE: ILLINOIS		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
CHICAGO									
90,700	Boone	25,400	116,100	1,161 290	11,030 581	24,064 2,406	72,192 15,642	1,890	122,696 20,959
228,800	DeKalb	71,700	300,500	3,005 751	28,548 1,503	62,285 6,229	186,855 40,485	4,892	317,573 54,248
72,400	Douglas	19,000	91,400	914 229	8,683 457	18,945 1,894	56,835 12,314	1,488	96,594 16,500
54,200	Ford	16,400	70,600	706 176	6,707 353	14,633 1,463	43,899 9,511	1,149	74,610 12,745
175,200	Henry	53,200	228,400	2,284 571	21,698 1,142	47,341 4,734	142,023 30,772	3,718	241,377 41,232
66,100	Jo Daviess	21,800	87,900	879 220	8,351 440	18,219 1,821	54,657 11,842	1,431	92,893 15,868
21,700	Kendall	26,400	48,100	481 120	4,570 241	9,970 997	29,910 6,480	781	50,834 8,683
282,700	Lake	382,600	665,300	6,653 1,663	62,204 3,327	137,899 13,790	413,697 89,634	1,813	703,103 120,105
100,800	Lee	38,000	138,800	1,388 347	13,186 694	28,769 2,877	86,307 18,699	1,808	146,685 20,056
117,400	Logan	33,500	150,900	1,509 377	14,335 754	31,277 3,127	93,831 20,330	2,456	159,472 27,241
51,700	Marshall	13,300	65,000	650 162	6,175 325	13,473 1,347	40,419 8,757	1,058	68,694 11,734
68,700	Platt	15,500	84,200	842 210	7,999 421	17,452 1,745	52,356 11,343	1,371	88,983 15,199
ATTACHMENT 15									

ATTACHMENT 15

STATE: ILLINOIS			WATER CONTAINERS			(COMMUNES)			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
CHICAGO													
29,100	Stark	7,500	366 91	3,477 183		7,586 758	22,758 4,930		732	12,444 1,493		596	38,679 6,607
146,600	Bureau	38,500	1,851 462	17,594 925		38,366 3,836	115,098 24,937		3,702	62,934 7,552		3,013	195,616 33,415
68,000	DeWitt	17,000	850 212	8,075 425		17,618 1,761	52,854 11,451		1,700	28,900 3,468		1,384	89,829 15,344
88,800	Edgar	21,600	1,104 276	10,488 552		22,883 2,288	68,649 14,873		2,208	37,536 4,504		1,797	116,673 19,930
44,400	Grundy	26,500	709 177	6,735 354		14,696 1,469	44,088 9,552		1,418	24,106 2,892		1,154	74,929 12,799
127,100	Iroquois	33,500	1,606 401	15,257 803		33,288 3,328	99,964 21,637		3,212	54,604 6,552		2,614	169,725 28,992
326,200	Kankakee	97,200	4,234 1,058	40,223 2,117		87,759 8,775	263,277 57,043		8,468	143,956 17,274		6,892	447,456 76,435
199,100	Knox	60,900	2,600 650	24,700 1,300		53,891 5,389	161,673 35,029		5,200	88,400 10,608		4,232	274,773 46,937
419,300	La Salle	111,400	5,307 1,326	50,416 2,653		110,000 11,000	330,000 71,500		10,614	180,438 21,652		8,639	560,854 95,805
143,900	Livingston	40,700	1,846 461	17,537 923		38,263 3,826	114,789 24,870		3,692	62,764 7,531		3,005	195,090 33,325
323,400	McHenry	111,600	4,350 1,087	41,325 2,175		90,164 9,016	270,492 58,606		8,700	147,900 17,748		7,081	459,717 78,529
68,200	Ogle	42,900	1,111 277	10,554 555		23,028 2,302	69,084 14,968		2,222	37,774 4,532		1,808	117,412 20,056
15-2													

STATE: ILLINOIS			WATER CONTAINERS			LOPHODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
CHICAGO													
19,300	Putnam	5,000	243 60	2,308 121	5,037 503	15,111 3,274	486	8,262 991	395	25,681 4,386			
8,900	Stephenson	48,900	578 144	5,491 289	11,980 1,198	35,940 7,787	1,156	19,652 2,358	941	61,083 10,434			
26,900	Tazewell	118,600	1,455 363	13,822 727	30,158 3,015	90,474 19,602	2,910	49,470 5,936	2,368	153,766 26,266			
16,900	Winnebago	246,600	2,635 658	25,032 1,317	54,616 5,461	163,848 35,500	5,270	89,590 10,750	4,289	278,470 47,568			
374,400	Vermillion	97,000	4,715 1,178	44,792 2,357	97,708 9,770	293,124 63,510	9,428	160,276 19,233	7,674	498,192 85,100			
96,900	Woodford	28,000	1,249 312	11,865 624	25,888 2,588	77,664 16,827	2,498	42,466 5,095	2,033	131,995 22,547			
15-3													

STATE: MARYLAND			WATER CONTAINERS			COMMUNES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	WEIGHT CUBE		WEIGHT CUBE	
KENT														
2,400 # Cecil														
BALTIMORE CITY														
17,000	Cecil	53,300	1,146	10,906	23,753	71,250	2,292	38,964	1,865	121,120				
	Total Cecil	*114,600	287	574	2,375	15,438		4,676		20,688				
254,000	Eastern Shore													
	Wicomico													
	Worcester	97,500												
	Somerset													
	Total Eastern Shore	**541,900	5,419	51,490	112,321	336,960	10,838	184,246	8,820	572,696				
			1,355	2,710	11,232	73,008		22,110		97,828				
72,600	Carroll	69,000	2,015	19,152	41,765	125,310	4,030	68,510	3,280	212,972				
	Total Carroll	***201,500	505	1,008	4,177	27,151		8,221		36,380				
# Included in totals under Baltimore City														
*Includes Baltimore Co., Anne Arundel, Harford, Kent														
**Includes Baltimore Co., Anne Arundel														
***Included Baltimore Co., Anne Arundel, Howard														
16-2														

16-2

Included in totals under Baltimore City
 *Includes Baltimore Co., Anne Arundel,
 Harford, Kent
 **Includes Baltimore Co., Anne Arundel
 ***Included Baltimore Co., Anne Arundel,
 Howard

STATE: MARYLAND			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT	CUBE
EVACUEES			TOTAL								
BALTIMORE COUNTY											
25,000*	Carroll										
18,500*	Cecil										
13,900	Baltimore Co.	620,400	634,300								
88,300*	Wicomico										
46,500*	Worcester										
40,000	West Virginia	???	???								
*Included in totals under Baltimore City											
			6,343	60,268	131,473	394,410	12,686	215,662	10,499	970,340	
			1,586	3,172	13,147	85,456		25,879		116,437	

STATE: MICHIGAN			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA	HOST AREA	CENSUS	QUANTITY	WEIGHT	CUBE	QUANTITY	WEIGHT	CUBE	QUANTITY	WEIGHT	CUBE		
EVACUEES			CASES			CASES			CASES				
DETROIT													
8,000	Mackinac	9,600	176	1,672	88	3,648	10,950	2,373	352	5,984	718	287	18,606 3,179
53,200	Tuscola	48,600	1,018	9,690	510	21,100	63,300	13,715	2,036	34,612	4,153	1,657	107,602 18,378
36,400	Sanilac	35,200	716	6,802	358	14,841	44,520	9,646	1,432	24,344	2,921	1,165	75,666 12,925
71,400	Shiawassee	63,100	1,345	12,768	672	27,878	83,634	18,120	2,690	45,730	5,487	2,189	142,142 24,281
47,800	Ionia	45,800	936	8,892	468	19,401	58,203	12,610	1,872	31,824	3,819	2,398	283,229 26,598
20,100	Manistee	20,400	405	3,847	202	8,395	25,185	5,457	810	13,770	1,652	659	42,803 7,311
44,900	Grand Traverse	39,200	841	7,989	420	17,432	52,296	11,330	1,682	28,594	3,431	1,369	88,879 15,183
19,400	Charlevoix	16,500	359	3,420	180	7,441	3,411	180	718	12,206	1,465	148	15,617 1,644
42,500	Montcalm	39,700	822	7,809	411	17,038	51,114	11,075	1,644	27,948	3,354	1,338	86,871 14,839
31,000	Newaygo	28,000	590	5,605	295	12,229	36,687	7,948	1,180	20,060	2,407	960	62,352 10,651
15,900	Osceola	14,800	307	2,917	154	6,363	19,089	4,136	614	10,438	1,253	500	32,444 5,542
18,000	Cheboygan	16,600	346	3,287	173	7,172	21,516	4,662	692	11,764	1,412	563	36,567 6,246
ATTACHMENT 17			86			717							
						17-1							

COUNTY	POPULATION	CENSUS	TOTAL	WATER CONTAINERS		COMMODES		SANITATION KIITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
				QUANTITY	WEIGHT CUBE	QUANTITY	WEIGHT CUBE	QUANTITY	WEIGHT CUBE		
4,000	Lenawee	82,000	167,200	1,672	15,884 418	34,656	103,968 3,466	3,344	56,848 6,822	2,722	176,700 30,184
40,100	Branch	37,900	78,000	780	7,410 195	16,167	48,501 1,616	1,560	26,520 3,182	1,270	82,431 14,080
12,100	Leelanau	10,900	23,000	230	3,185 58	4,767	14,301 470	460	7,820 938	374	24,306 4,152
5,500	Oscoda	4,700	10,200	102	969 26	2,114	6,342 211	204	3,468 416	166	10,779 1,841
61,800	Lapeer	52,400	114,200	1,142	10,349 286	23,671	71,013 2,367	2,284	38,828 4,659	1,859	120,690 20,617
32,000	Huron	34,000	66,000	660	6,270 165	13,680	41,040 1,368	1,320	22,440 2,693	1,074	69,750 11,915
77,700	Livingston	59,000	136,700	1,367	13,987 342	28,334	85,002 2,833	2,734	46,478 5,577	2,225	144,467 24,678
57,000	Clinton	48,500	105,500	1,055	10,022 263	21,867	65,601 2,187	2,110	35,870 4,304	1,717	111,493 19,045
49,500	Cass	43,300	92,800	928	8,816 232	19,235	57,705 1,923	1,856	31,552 3,786	1,511	98,073 16,753
20,400	Wexford	19,700	40,100	401	3,810 100	8,312	24,936 831	802	13,634 1,636	653	42,380 7,239
5,800	Kalkaska	5,400	11,200	112	1,064 28	2,321	6,963 232	224	3,808 456	182	11,835 2,022
20,100	Emmet	18,300	38,400	384	3,648 96	7,959	23,877 796	768	13,056 1,567	625	40,581 6,932

17-2

STATE: MICHIGAN			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE			
DETROIT														
9,000	Benzie	8,600	17,600	176 44	1,672 88	3,648 364	10,944 2,371		352 718	5,984	286	18,600 3,177		
30,000	Mecosta	28,000	58,000	580 145	5,510 290	12,022 1,202	36,066 7,814		1,160 2,366	19,720	944	61,296 10,470		
5,200	Lake	5,700	10,900	109 27	1,035 54	2,259 226	6,777 1,468		218 445	3,706	177	11,519 1,968		
5,900	Montmorency	5,200	11,100	111 28	1,055 56	2,301 230	6,903 1,496		222 453	3,774	358	23,250 3,972		
13,100	Orsego	10,400	23,500	235 59	2,233 118	4,871 487	14,613 3,166		470 959	7,990	741	48,086 8,214		
21,900	Mason	22,600	44,500	445 111	4,228 223	9,224 922	27,672 5,996		890 796	15,130	632	47,029 7,014		
38,600	Hillsdale	37,200	75,800	758 190	7,201 379	15,711 1,571	47,133 10,212		1,516 3,093	25,772	1,234	80,106 13,684		
51,600	St. Joseph	47,400	99,000	990 247	9,405 495	20,520 2,052	61,560 13,338		1,980 4,039	35,660	1,612	104,625 17,872		
7,800	Crawford	6,500	14,300	143 36	1,358 72	2,964 296	8,892 1,926		286 583	4,862	1,467	95,219 16,265		
14,400	Antrim	12,600	17,000	170 43	1,615 85	3,524 352	10,572 2,291		340 693	5,780	277	17,967 3,069		
17-3														

STATE: MICHIGAN			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
DETROIT															
Steuben, IN		20,200	202	1,919	101	4,187	12,561	418	2,772	404	6,868	824	329	21,348	3,647
LaGrange, "		20,900	209	1,986	105	4,332	12,996	433	2,816	418	7,106	853	340	22,087	3,773
Noble, "		31,400	314	2,983	157	6,508	19,524	650	4,230	628	10,676	1,281	511	33,183	5,668
DeKalb, "		30,800	308	2,926	154	6,384	19,152	638	4,150	616	10,472	1,256	501	32,550	5,560
Whitley, "		23,400	234	2,223	117	4,850	14,550	485	3,153	468	7,956	955	381	24,729	4,224
Wabash, "		35,600	356	3,382	178	7,379	22,137	737	4,796	712	12,104	1,452	580	37,623	6,427
Huntington"		35,000	350	3,325	175	7,255	21,765	725	4,716	700	11,900	1,428	570	36,990	6,319
Williams, OH		34,000	340	3,230	170	7,047	21,141	704	4,581	680	11,560	1,387	553	35,931	6,138
Defiance, "		38,000	380	3,610	190	7,876	23,628	787	5,119	760	12,920	1,550	619	40,158	6,860
Paulding, "		20,200	202	1,919	101	4,187	12,561	418	2,722	404	6,868	824	329	21,348	3,647
Van Wert, "		30,500	305	2,898	152	6,322	18,966	632	4,109	610	10,370	1,244	496	32,233	5,506
Mercer, "		37,000	370	3,515	185	7,669	23,007	767	4,985	740	12,580	1,510	602	39,102	6,679
			17-4												

STATE: MINNESOTA			WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
MINNEAPOLIS										
29,100	Koochiching	17,100	462 115	4,389 231	9,576 957	28,728 6,224	924 1,884	15,708 1,884	752	40,825 8,340
29,400	Cass	17,300	467 116	4,436 233	9,679 967	29,037 6,291	934 1,905	15,878 1,905	760	49,351 8,430
21,100	Wadena	12,400	335 83	3,182 167	6,943 694	20,829 4,512	670 1,366	11,390 1,366	1,305	84,753 14,477
37,600	Todd	22,100	597 149	5,671 298	12,374 1,237	37,122 8,043	1,194 2,435	20,298 2,435	972	63,091 10,777
26,700	Mille Lacs	15,700	424 106	4,028 212	8,788 878	26,364 5,712	848 1,729	14,416 1,729	690	44,808 7,654
28,600	Pine	16,800	454 113	4,313 227	9,410 941	28,230 6,116	908 1,852	15,436 1,852	739	47,979 8,195
12,700	Grant	7,500	202 50	1,919 101	4,187 418	12,561 2,721	404 824	6,868 824	329	21,348 3,646
13,500	Big Stone	8,000	215 53	2,042 107	4,456 445	13,368 2,896	430 430	7,310 430	350	22,720 3,881
162,200	Stearns	95,400	2,576 644	24,472 1,288	53,393 5,393	160,179 34,705	5,152 10,510	87,584 10,510	4,193	272,235 46,503
28,200	Isanti	16,600	448 112	4,256 224	9,286 928	27,858 6,035	896 1,827	15,232 1,827	729	47,346 8,087
31,200	Sherburne	18,300	495 123	4,702 247	10,260 1,026	30,780 6,669	990 2,019	16,830 2,019	806	52,312 8,936
51,900	Kandiyohi	30,500	824 206	7,828 412	17,079 1,707	51,237 11,101	1,648 3,361	28,016 3,361	1,341	87,081 14,875
					18-1					

ATTACHMENT 18

STATE: MINNESOTA			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
MINNEAPOLIS													
21,700	Pipestone	12,800	345 86	3,277 172		7,151 715	21,453 4,648		690	11,730 1,407		562	36,460 6,228
18,000	Hubbard	10,600	286 71	2,717 143		6,500 650	19,500 4,225		572	9,724 1,166		499	31,941 5,534
19,400	Aitkin	11,400	308 77	9,926 154		6,384 638	19,152 4,149		616	10,472 1,256		501	32,550 5,560
59,200	Crow Wing	34,800	940 235	8,980 470		19,484 1,948	58,452 12,664		1,880	31,960 3,835		1,530	99,342 16,969
45,800	Morrison	26,900	727 181	6,906 363		15,069 1,506	45,207 9,794		1,454	24,718 2,966		1,183	76,831 13,124
16,600	Kanabec	9,800	264 66	2,508 132		5,472 547	16,416 3,556		528	8,976 1,077		430	27,900 4,765
38,900	Douglas	22,900	618 154	5,871 309		12,809 1,280	38,427 8,325		1,236	21,012 2,521		1,006	65,310 11,156
10,600	Traverse	6,300	169 42	1,605 84		3,503 350	10,509 2,276		338	5,746 689		275	17,860 3,050
19,000	Stevens	11,200	302 75	2,869 151		6,260 626	18,780 4,069		604	10,268 1,232		492	31,917 5,452
18,900	Pope	11,100	300 75	2,850 150		6,218 621	18,654 4,041		600	10,200 1,224		488	31,704 5,415
35,400	Benton	20,800	562 140	5,339 281		11,649 1,164	34,947 7,571		1,124	19,108 2,292		915	59,394 10,145
29,700	Chisago	17,500	472 118	4,684 236		9,783 978	29,349 6,358		944	16,048 1,925		768	49,881 8,520
			18-3										

STATE: MINNESOTA			WATER CONTAINERS			COMBODS			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
MINNEAPOLIS													
21,300	Murray	12,500	33,800	338 84	3,211 169	7,006 700	21,018 4,553	676	11,492 1,379	550	35,721 6,101		
19,300	Rock	11,300	30,600	306 76	2,907 153	6,343 634	19,029 4,122	612	10,404 1,248	498	32,340 5,524		

18-5

STATE: MISSOURI			WATER CONTAINERS			IONMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE			TOTAL WEIGHT CUBE		
RISK AREA	HOST AREA	CENSUS	QUANTITY	HEIGHT	CUBE	QUANTITY	WEIGHT	CUBE	QUANTITY	WEIGHT	CUBE	STORAGE SITE/ WAREHOUSE SPACE	STORAGE SITE/ WAREHOUSE SPACE	STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT	TOTAL CUBE	TOTAL CUBE
EVACUEES		TOTAL	CASES	CASES		CASES	CASES		CASES	CASES							
ST. LOUIS																	
13,893	Scotland	5,500	193	1,833	96	4,020	12,060		387	6,579		315			30,472		
			48			402	2,613			789					3,498		
21,268	Clark	8,300	295	2,802		6,129	18,387		591	10,047		481			31,236		
			73	147		612	3,983			1,205					5,336		
30,303	Lewis	11,000	413	3,923		8,561	25,683		826	14,042		672			43,648		
			103	206		856	5,564			1,685					7,456		
13,197	Knox	5,700	189	1,795	94	3,917	11,751		377	6,409		307			19,955		
			47			391	2,546			769					3,409		
14,293	Schuyler	4,700	189	1,795	94	3,937	11,811		379	6,443		309			20,049		
			47			393	2,559			773					3,426		
62,725	Adair	22,500	852	8,094		17,665	52,995		1,704	28,968		1,387			90,057		
			213	426		1,766	11,482			3,476					15,384		
42,217	Macon	15,400	576	5,472		11,942	35,826		1,152	19,584		938			60,882		
			144	288		1,194	7,762			2,350					10,400		
21,445	Shelby	7,900	293	2,783		6,083	18,249		586	9,962		477			30,994		
			73	146		608	3,953			1,195					5,295		
78,010	Marion	28,100	1,061	10,079		21,993	65,979		2,122	36,074		1,727			112,132		
			265	530		2,199	14,295			4,328					19,154		
20,994	Ralls	7,800	287	2,726	143	5,969	17,907		575	9,775		469			30,408		
			71			596	3,879			1,173					5,196		
25,973	Monroe	9,500	354	3,363		7,353	22,059		709	12,053		577			37,475		
			86	177		735	4,779			1,446					6,402		
69,212	Audrain	25,400	946	8,997	473	19,610	58,830		1,892	32,164		1,540			99,981		
			236			1,961	12,746			3,859					17,079		

ATTACHMENT 19

STATE: MISSOURI			WATER CONTAINERS		COMMODIES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
ST. LOUIS										
46,830	Pike	16,900	637	6,051	318	13,210	39,630		1,037	67,339
			159			1,321	8,586			11,503
48,948	Lincoln	18,000	669	6,355	334	13,876	41,628		1,090	70,746
			167			1,387	9,019			12,085
27,909	Warren	9,700	376	3,572	188	7,795	23,385		612	39,741
			94			779	5,066			6,788
30,300	Montgomery	11,000	413	3,923	206	8,560	25,680		672	43,645
			103			856	5,564			7,455
151,292	Franklin	55,100	2,063	19,599		42,780	128,340		2,458	218,097
			515	1,031		4,278	27,807			27,257
32,323	Gasconade	11,900	442	4,199		9,166	27,498		720	46,725
			110	221		916	5,957			7,982
81,157	Phelps	29,600	1,107	10,516	553	22,957	68,821		1,803	117,042
			276			2,295	14,922			19,994
40,952	Crawford	14,800	557	5,291		11,555	34,665		907	58,911
			139	278		1,155	7,510			10,063
32,204	Dent	11,500	437	4,151	218	9,058	27,174		711	46,183
			109			905	5,887			7,889
19,087	Shannon	7,200	263	2,498		5,448	16,344		428	27,784
			65	131		544	3,541			4,745
16,048	Reynolds	6,100	221	2,099	110	4,591	13,773		361	23,403
			55			459	2,984			3,998
26,500	Iron	9,500	360	3,420	180	7,462	22,386		586	38,046
			90			746	4,850			6,499
						19-2				

19-2

STATE: MISSOURI			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT CUBE	
ST. LOUIS											
42,031	Washington	15,100	571 142	5,424 285	11,841 1,184	35,523 7,696	1,143	19,431 2,331	930	60,378 10,313	
25,109	Oregon	9,200	343 85	3,258 171	7,112 711	21,336 4,622	686	11,662 1,399	558	36,256 6,193	
10,087	Carter	3,900	140 35	1,330 70	2,899 289	8,697 1,884	280	4,760 571	203	14,787 2,252	
28,816	Ste. Genevieve	12,900	417 104	3,961 208	8,647 864	25,941 5,620	834	14,178 1,701	679	44,080 7,530	
129,651	Cape Girardeau	49,400	1,791 447	17,014 895	37,112 3,711	111,336 24,122	3,581	60,877 7,305	2,915	189,227 32,323	
21,815	Bollinger	8,800	306 76	2,907 153	6,346 634	19,038 4,124	612	10,404 1,248	498	32,349 5,526	
21,340	Wayne	8,500	298 74	2,831 149	6,185 618	18,555 4,020	597	10,149 1,217	486	31,535 5,387	
87,239	Butler	33,500	1,207 301	11,466 603	25,026 2,502	75,078 16,266	2,415	41,055 4,926	1,965	127,500 21,797	
24,991	Ripley	9,800	347 86	3,296 173	7,211 721	21,633 4,687	696	11,832 1,419	566	36,761 6,280	
66,320	Stoddard	25,700	920 230	8,740 460	19,074 1,907	57,222 12,398	1,840	31,280 3,753	1,498	97,242 16,611	
88,621	Scott	33,300	1,219 304	11,580 609	25,271 2,527	75,813 16,426	2,438	41,446 4,973	1,985	128,839 22,009	
35,005	Perry	14,400	494 123	4,693 247	10,240 1,024	30,720 6,656	988	16,796 2,015	804	52,209 8,918	
19-3											

STATE: MISSOURI			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT CUBE	CUBE
ST. LOUIS											
96,529	St. Francois	36,900	1,334 333	12,673 667	27,656 2,765	82,968 17,976	2,669	45,373 5,444	2,172	141,014 24,088	
21,909	Madison	8,600	305 76	2,897 152	6,324 632	18,972 4,110	610	10,370 1,244	497	32,239 5,507	
41,423	Mississippi	16,600	580 145	5,510 290	12,027 1,202	36,081 7,817	1,160	19,720 2,366	944	61,311 10,473	
63,825	New Madrid	23,400	872 218	8,284 436	18,079 1,807	54,237 11,751	1,745	29,665 3,559	1,420	92,186 15,747	
19-4											

STATE: NEW JERSEY			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
VINELAND										
47,389	Cape May	59,600	1,070 267	10,165 535	22,176 2,217	66,528 14,414	2,140	36,380 4,365	1,741	113,073 19,315

STATE: NEW MEXICO			WATER CONTAINERS			COMMUNES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE		
ALBUQUERQUE													
34,000	Rio Arriba	25,100	591 147	5,614 295		12,250 1,225	36,750 7,962		1,182	20,094 2,411		962	62,458 10,669
25,000	Taos	17,500	425 106	4,037 212		8,809 880	26,427 5,725		850	14,450 1,734		692	44,914 7,672
19,000	Colfax	12,200	312 78	2,964 156		6,467 646	19,401 4,203		624	10,608 1,272		508	32,973 5,632
3,000	Mora	4,700	77 19	731 38		1,596 159	4,788 1,037		154	2,618 314		125	8,137 1,390
43,700	San Miguel	22,000	657 164	6,241 328		13,618 1,361	40,854 8,851		1,314	22,338 2,680		1,069	69,433 11,860
8,200	Guadalupe	5,000	132 33	1,254 66		2,736 273	8,208 1,778		264	4,488 538		215	13,950 2,382
10,600	Torrance	5,300	159 39	1,510 79		3,296 329	9,888 2,142		318	5,406 648		259	16,804 2,870
18,800	Socorro	9,800	286 71	2,717 143		5,928 592	17,784 3,853		572	9,724 1,666		466	30,225 5,163
85,200	Valencia	40,600	1,258 314	11,951 629		26,075 2,607	78,225 16,948		2,516	42,772 5,132		2,048	132,948 22,710
43,300	Sandoval	17,500	608 152	9,776 304		12,602 1,260	37,806 8,191		1,216	20,672 2,480		990	64,254 10,975
21,300	Los Alamos	15,200	365 91	3,467 182		7,565 756	22,695 4,917		730	12,410 1,489		594	38,572 6,588
60,000	Santa Fe	54,800	1,148 287	10,906 574		23,795 2,379	71,385 15,466		2,296	39,032 4,683		1,869	121,323 20,724
1,000	Bernalillo	315,800	3,168 792	30,096 1,584		65,664 6,566	196,992 42,681		6,336	107,712 12,295		5,157	334,800 57,191

ATTACHMENT 21

ATTACHMENT 21

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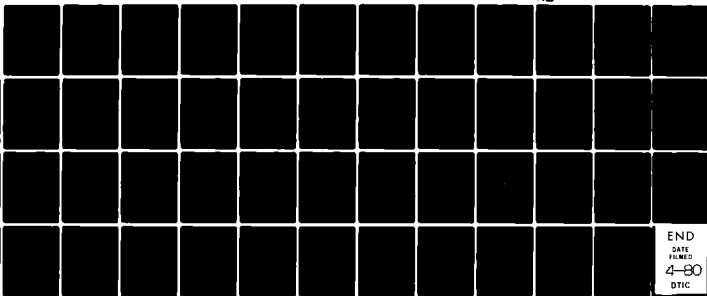
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STATE: NEW MEXICO				WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
ALBUQUERQUE											
34,000	Rio Arriba	25,100	59,100	591 147	5,614 295	12,250 1,225	36,750 7,962	1,182	20,094 2,411	962	62,458 10,669
25,000	Taos	17,500	42,500	425 106	4,037 212	8,809 880	26,427 5,725	850	14,450 1,734	692	44,914 7,672
19,000	Colfax	12,200	31,200	312 78	2,964 156	6,467 646	19,401 4,203	624	10,608 1,272	508	32,973 5,632
3,000	Mora	4,700	7,700	77 19	731 38	1,596 159	4,788 1,037	154	2,618 314	125	8,137 1,390
43,700	San Miguel	22,000	65,700	657 164	6,241 328	13,618 1,361	40,854 8,851	1,314	22,338 2,680	1,069	69,433 11,860
8,200	Guadalupe	5,000	13,200	132 33	1,254 66	2,736 273	8,208 1,778	264	4,488 538	215	13,950 2,382
10,600	Torrance	5,300	15,900	159 39	1,510 79	3,296 329	9,888 2,142	318	5,406 648	259	16,804 2,870
18,800	Socorro	9,800	28,600	286 71	2,717 143	5,928 592	17,784 3,853	572	9,724 1,666	466	30,225 5,163
85,200	Valencia	40,600	125,800	1,258 314	11,951 629	26,075 2,607	78,225 16,948	2,516	42,772 5,132	2,048	132,948 22,710
43,300	Sandoval	17,500	60,800	608 152	9,776 304	12,602 1,260	37,806 8,191	1,216	20,672 2,480	990	64,254 10,975
21,300	Los Alamos	15,200	36,500	365 91	3,467 182	7,565 756	22,695 4,917	730	12,410 1,489	594	38,572 6,588
60,000	Santa Fe	54,800	114,800	1,148 287	10,906 574	23,795 2,379	71,385 15,466	2,296	39,032 4,683	1,869	121,323 20,724
1,000	Bernalillo	315,800	316,800	3,168 792	30,096 1,584	65,664 6,566	196,992 42,681	6,336	107,712 12,295	5,157	334,800 57,191

ATTACHMENT 21

ATTACHMENT 21

STATE: NEW YORK			<u>WATER CONTAINERS</u>			<u>COMMDES</u>			<u>SANITATION KITS</u>			<u>STORAGE SITE/ WAREHOUSE SPACE</u>		<u>TOTAL WEIGHT CUBE</u>	
<u>RISK AREA</u>	<u>HOST AREA</u>	<u>CENSUS TOTAL</u>	<u>QUANTITY</u>	<u>WEIGHT</u>	<u>CUBE</u>	<u>QUANTITY</u>	<u>WEIGHT</u>	<u>CUBE</u>	<u>QUANTITY</u>	<u>WEIGHT</u>	<u>CUBE</u>				
<u>EVACUEES</u>															
ROME															
50,148	Oneida City	11,000	612	5,814	306	12,695	38,085		1,225	20,825		996		64,724	
	Verma		153			1,269	8,251			2,499				11,056	
	Camden														
	Vienna														
	Ansville														
	Florence														

STATE: OHIO			WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
COLUMBUS										
56,000	Delaware	43,000	99,000	990 247	9,405 495	20,520 2,052	61,560 13,338	1,980 4,039	1,612	104,625 17,872
40,000	Madison	27,000	67,000	670 167	6,365 335	13,887 1,388	41,661 9,026	1,340 2,730	1,091	70,806 12,095
32,000	Pickaway	40,000	72,000	720 180	6,840 360	14,924 1,492	44,772 9,700	1,440 2,937	1,172	76,092 12,998
190,000	Licking	108,000	298,000	2,980 745	28,310 1,490	61,767 6,176	185,301 40,148	5,960 12,158	4,851	314,931 53,796
54,000	Perry	27,000	81,000	810 202	7,695 405	16,789 1,678	50,367 10,912	1,620 3,304	1,318	85,602 14,622
24,000	Morgan	12,000	36,000	360 90	3,420 180	7,462 746	22,386 4,850	720 1,468	586	38,046 6,499
31,000	Monroe	16,000	47,000	470 117	4,465 235	9,742 974	29,226 6,332	940 1,917	765	49,671 8,484
47,000	Union	24,000	71,000	710 177	6,745 355	14,716 1,471	44,148 9,565	1,420 2,896	1,156	75,033 12,817
51,000	Fayette	26,000	77,000	770 192	7,315 385	15,960 1,596	47,880 10,374	1,540 3,141	1,253	81,375 13,900
122,000	Ross	61,000	183,000	1,830 457	17,385 915	37,931 3,793	113,793 24,655	3,660 7,466	2,979	193,398 33,036
122,000	Fairfield	73,000	195,000	1,950 487	18,525 975	40,418 4,041	121,254 26,271	3,900 7,956	3,174	206,079 35,202
ATTACHMENT 23				23-1						

STATE: OHIO			WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
COLUMBUS													
40,000	Hocking	20,000	600 150	5,700 300	14,436 1,443	43,308 9,383	1,200	20,400 2,448	1,094	69,408 12,131			
20,000	Noble	10,000	300 75	2,850 150	6,218 621	18,654 4,041	600	10,200 1,224	488	31,704 5,415			
114,000	Washington	57,000	1,717 429	16,311 858	35,589 3,558	106,767 23,132	3,434	58,378 7,005	2,795	181,456 30,996			
												23-2	

STATE: OKLAHOMA			WATER CONTAINERS			(CHIMNEYS)			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE		
RISK AREA	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE
OKLAHOMA CITY																
42,164	Custer	22,700	648 162	6,156 324	13,444 1,344	40,332 8,738	1,297	22,049 2,645	1,055	68,537 11,708						
3,352	Blaine	11,800	151 37	1,437 75	3,140 314	9,420 2,041	303	5,151 618	246	16,005 2,734						
6,078	Kingfisher	12,900	190 47	1,805 95	3,933 393	11,798 2,556	380	6,460 775	308	20,064 3,426						
30,000	Logan	19,600	496 124	4,712 248	10,281 1,028	30,843 6,682	992	16,864 2,023	807	52,419 8,954						
114,953	Payne	50,700	1,657 414	15,741 828	34,335 3,433	103,005 22,317	3,313	56,321 6,758	269	175,067 29,904						
58,258	Pottawatomie	43,100	1,014 253	9,633 507	21,009 2,100	63,027 13,655	2,027	34,359 4,135	1,649	107,119 18,297						
131,878	Cleveland	81,800	2,137 534	20,301 1,068	48,563 4,856	145,689 31,565	4,274	72,658 8,718	3,728	238,648 41,353						
10,404	McClain	14,200	246 61	2,337 123	5,100 510	15,300 3,315	492	8,364 1,003	400	26,001 4,441						
55,814	Pontotoc	27,900	837 209	7,951 418	17,352 1,735	52,056 11,278	1,674	28,458 3,414	1,363	88,465 15,112						
10,722	Garvin	14,900	356 89	3,382 178	7,384 738	22,152 4,799	712	12,104 1,452	579	37,638 6,430						
15,116	Murray	10,700	258 64	2,451 129	5,351 535	16,053 3,478	516	8,772 1,052	420	27,276 4,659						
24-1																

ATTACHMENT 24

STATE: OKLAHOMA			WATER CONTAINERS			COMMUNES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
EVACUEES													
OKLAHOMA CITY													
28,554 *12,298	Carter	37,300	*78,152	782 195	7,429 391	16,199 1,619	48,597 10,529	1,563	26,571 3,188	1,272	82,597 14,108		
23,063	Seminole	25,100	48,163	482 120	4,579 241	9,983 998	29,949 6,488	963	16,371 1,964	783	50,899 8,694		
30,000	Grady	29,400	59,400	594 148	5,643 297	12,312 1,231	36,936 8,002	1,188	20,196 2,423	966	62,775 10,723		
24,500	Edmond City	23,600	48,100	481 120	4,569 240	9,970 997	29,910 6,480	962	16,354 1,962	782	50,833 8,683		
* Includes 12,298 from Lawton													
24-2													

* Includes 12,298 from Lawton

STATE: PENNSYLVANIA				WATER CONTAINERS			LOWMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
PITTSBURGH																
56,647	Armstrong	75,600	132,247	1,322 330	12,559 661		27,411 2,741	82,233 17,817		2,645	44,965 5,395		2,153		139,757 23,873	
144,704	Butler	127,900	272,604	2,726 681	25,897 1,363		56,503 5,650	169,509 36,726		5,452	92,684 11,122		4,438		288,090 49,212	
225,094	Beaver	208,400	433,494	4,335 1,083	41,182 2,167		89,851 8,985	269,553 58,403		8,670	147,390 17,686		7,057		458,125 78,257	
254,300	Lawrence	107,400	361,700	3,617 904	34,361 1,808		74,971 7,497	224,913 48,731		7,234	122,978 14,757		5,888		382,252 65,297	
88,106	Mercer	127,200	215,306	2,153 538	20,453 1,076		44,627 4,462	133,881 29,007		4,306	73,202 8,784		3,505		227,536 38,868	
560,905	Westmoreland	376,900	937,805	9,378 2,344	89,091 4,689		194,382 19,438	583,146 126,348		18,756	318,852 38,262		15,266		991,089 169,299	
470,257	Fayette	154,700	624,957	6,250 1,562	59,375 3,125		127,537 12,753	382,611 82,889		14,499	246,483 29,577		10,424		688,469 115,602	
347,136	Washington	210,900	558,036	5,580 1,395	53,010 2,790		115,665 11,566	346,995 75,182		11,161	189,737 22,768		9,084		589,742 100,740	
278,079	Indiana	79,500	357,579	3,576 894	33,972 1,788		74,116 7,411	222,348 48,175		7,152	121,584 14,590		5,821		377,904 64,553	
25-1																
ATTACHMENT 25																

STATE: RHODE ISLAND				WATER CONTAINERS		COMMODES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
PROVIDENCE											
116,500	Merrimac, NH	80,900	197,400	1,974 493	18,753 987	40,919 4,091	122,757 26,597	3,948	67,116 8,053	3,214	208,626 35,638
62,500	Washington	85,700	148,200	1,482 370	14,079 741	30,718 3,071	92,154 19,966	2,964	50,388 6,046	2,412	156,621 26,754

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ATTACHMENT 26

STATE: TEXAS				WATER CONTAINERS			COMMODES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE		TOTAL WEIGHT CUBE	
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE	QUANTITY CASES	WEIGHT	CUBE				
FORT WORTH																
10,631	Baylor	5,200	15,831	158 39	1,501	79	3,281 328	9,843 2,132		317	5,389 646		257		16,733 2,858	
4,794	Foard	2,200	6,994	70 17	665	35	1,450 145	4,350 942		140	2,380 285		114		7,395 1,263	
13,971	Hardeman..	6,800	20,771	208 52	1,976	104	4,306 430	12,918 2,798		415	7,055 846		338		21,949 3,749	
20,557	Childress	6,600	27,157	272 68	2,584	136	5,629 562	16,887 3,658		543	9,231 1,107		442		28,702 4,902	
17,855	Hall	6,000	23,855	239 59	2,270	119	4,945 494	14,835 3,214		477	8,109 978		388		25,214 4,306	
9,149	Cottle	3,200	12,349	123 30	1,168	61	2,560 256	7,680 1,664		247	4,199 508		201		13,047 2,229	
7,120	Motley	2,200	9,320	93 23	883	46	1,932 193	5,796 1,255		186	3,162 379		152		9,841 1,681	
18,584	Floyd	11,000	29,584	296 74	2,812	148	6,132 613	18,396 3,985		592	10,064 1,207		482		31,272 5,341	
87,105	Parker	33,900	121,005	1,210 302	11,495	605	25,081 2,508	75,243 16,302		2,420	41,140 4,936		1,970		127,878 21,844	
75,491	Palo Pinto	29,000	104,491	1,045 261	9,927	522	23,748 2,374	71,244 15,436		2,090	35,530 4,263		1,824		116,701 20,222	
24,775	Stephens	8,400	33,175	332 83	3,154	166	6,876 687	20,628 4,468		664	11,288 1,354		540		35,070 5,989	
4,867	Throckmorton	2,200	7,067	71 17	674	35	1,465 146	4,395 952		141	2,397 287		115		7,466 1,275	
				27-1												
ATTACHMENT 27																

STATE: TEXAS		WATER CONTAINERS		COMMODITIES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
FORT WORTH									
15,463	Knox	6,000	21,463	215 53	2,042 107	4,449 444	13,347 2,891	349	22,682 3,874
66,804	Eastland	18,100	84,904	849 212	8,065 424	17,598 1,759	52,794 11,438	1,382	89,725 15,327
4,483	Shackelford	3,300	7,783	78 19	741 39	1,613 161	4,839 1,048	127	8,232 1,403
25,708	Haskell	8,500	34,208	342 85	3,249 171	7,091 709	21,373 4,069	557	36,150 6,175
5,822	Stonewall	2,400	8,222	82 20	779 41	1,705 170	5,115 1,108	134	8,682 1,483
2,276	Kent	1,400	3,676	37 9	351 18	761 76	2,283 494	60	3,892 664
9,526	Dickens	3,700	12,226	122 30	1,159 61	2,535 253	7,605 1,647	199	12,912 2,206
12,755	Crosby	9,100	21,855	219 54	2,080 109	4,530 453	13,590 2,944	356	23,099 3,945
17,135	Hood	6,400	23,535	235 58	2,232 117	4,878 487	14,634 3,170	383	24,873 4,249
46,899	Erath	18,100	64,999	649 162	6,165 324	1,373 137	4,119 892	349	32,384 3,868
21,156	Comanche	11,900	33,056	331 82	3,144 165	6,852 685	20,556 4,453	538	34,937 5,967
4,240	Somervell	2,800	7,040	70 17	665 35	1,459 145	4,377 948	115	7,439 1,270
27-2									

STATE: TEXAS			WATER CONTAINERS			COMMODIES			SANITATION KITS			STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE			
FORT WORTH													
15,245	Tarrant	716,300	731,545	7,315 1,828	69,492 3,657	151,629 15,162	454,887 98,558	14,631	248,727 29,847	11,908	773,106 132,063		
105,975	Johnson	45,800	151,775	1,518 379	14,421 759	31,458 3,145	94,374 20,447	3,036	51,612 6,193	2,471	160,407 27,400		

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STATE: WISCONSIN			WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL	
RISK AREA EVACUEES	HOST AREA	CENSUS	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		WEIGHT CUBE	CUBE
MILWAUKEE											
35,000	Ozaukee	54,500	894 223	8,493 447	18,530 1,853	55,590 12,045	1,788 30,396 3,647		1,455	94,479 16,139	
144,000	Waukesha	231,300	3,753 938	35,653 1,876	77,789 7,778	233,367 50,562	7,506 127,602 15,312		6,109	396,622 67,751	
126,000	Washington	63,800	1,898 474	18,031 949	39,340 3,934	118,020 25,571	3,796 64,532 7,743		3,090	200,583 34,263	
125,000	Jefferson	60,000	1,850 462	17,575 925	38,345 3,834	115,035 24,924	3,700 62,900 7,548		3,011	195,510 33,397	
144,000	Dodge	69,000	2,130 532	20,235 1,065	44,149 4,414	132,447 28,696	4,260 72,420 8,690		3,467	225,102 38,452	
32,000	Waushara	14,800	468 117	4,446 234	9,700 970	29,100 6,305	936 15,912 1,909		762	49,458 8,448	
37,000	Juneau	18,400	554 138	5,263 277	11,483 1,148	34,449 7,463	1,108 18,836 2,260		902	58,548 10,001	
136,000	Wood	65,300	2,013 503	19,123 1,006	41,724 4,172	125,172 27,120	4,026 68,442 8,213		3,277	212,737 36,340	
84,000	Columbia	40,100	1,241 310	11,789 620	25,723 2,572	77,169 16,719	2,482 42,194 5,063		2,020	131,152 22,403	
104,000	Portage	47,500	1,515 378	14,392 757	31,402 3,140	94,206 20,411	3,030 51,510 6,181		2,466	160,108 27,350	
198,000	Sheboygan	96,700	2,947 736	27,996 1,473	61,083 6,108	183,249 39,703	5,894 100,198 12,023		4,797	311,443 53,201	
28-1											

ATTACHMENT 28

STATE: WISCONSIN		WATER CONTAINERS		COMMUNES		SANITATION KITS		STORAGE SITE/ WAREHOUSE SPACE	TOTAL WEIGHT CUBE
RISK AREA EVACUEES	HOST AREA	CENSUS	TOTAL	QUANTITY CASES	WEIGHT CUBE	QUANTITY CASES	WEIGHT CUBE		
MILWAUKEE									
175,000	Fond du Lac	84,600	259,600	2,596 649	24,662 1,298	53,808 5,380	161,424 34,975	4,226	274,350 46,864
35,000	Green Lake	16,900	51,900	519 129	4,930 259	10,757 1,075	32,271 6,992	845	54,847 9,369
19,000	Marquette	8,900	27,900	279 69	2,650 139	5,783 578	17,349 3,758	454	29,485 5,036
22,000	Adams	9,200	31,200	312 78	2,964 156	6,467 646	19,401 4,203	508	32,973 5,632
208,000	Marathon	97,500	305,500	3,055 763	29,022 1,527	63,322 6,322	189,966 41,159	4,973	322,858 55,151
28-2									

ATTACHMENT 29

STORAGE SITES FOR SELECTED TWENTY CITIES

STORAGE SITES

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>
<u>PHOENIX, ARIZONA</u>			
Navaho Depot	Bellmont	Coconini	Army
Davis-Monthan AFB	Tucson	Pima	Air Force
Luke AFB	Phoenix	Maricopa	Air Force
Yuma Air Station	Yuma	Yuma	Marine Corps
Williams AFB	Chandler	Maricopa	Air Force
<u>TUCSON & YUMA, ARIZONA</u>			
Yuma Air Station	Yuma	Yuma	Marine Corps
Fort Huachuca	Sierra Vista	Cochise	Army
<u>DENVER, COLORADO</u>			
Buckley Air Base	Aurora	Denver	Air National Guard
Lowry AFB	Denver	Denver	Air Force
Rocky Mountain Arsenal	Denver	Denver	Army
Ft. Carson	Colorado Springs	El Paso	Army
Pueblo Army Depot	Pueblo	Pueblo	Army
<u>ST. LOUIS, MISSOURI</u>			
Robertson Air Base	St. Louis	St. Louis	Air National Guard
Richards-Gebaur AFB	Grandview	Cass	Air Force
Ft. Leonard Wood	Waynesville	Pulaski	Army

STORAGE SITES (Cont'd.)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>
<u>COLUMBUS, OHIO</u>			
Construction Supply Center	Columbus	Bexley	DLA
Electronics Supply Center	Dayton	Montgomery	DLA
Wright-Patterson AFB	Dayton	Montgomery	Air Force
Rickenbacker AFB	Groveport	Franklin	Air Force
<u>DETROIT, MICHIGAN</u>			
Selfridge AFB	Mt. Clemens	Macomb	Air National Guard
Wurtsmith AFB	Oscoda	Oscoda	Air National Guard
Camp Grayling	Grayling	Kalkaska	Army National Guard
Phelps-Collins Air Base	Alpena	Alpena	Air National Guard
K. I. Sawyer AFB	Gwinn	Marquette	Air Force
<u>MIAMI, FLORIDA</u>			
Homestead AFB	Homestead	Dade	Air Force
Support Facility	Richmond Hill	Dade	Army
Patrick AFB	Cocoa Beach	Brevard	Air Force
Armory	Miami	Dade	Army National Guard
Armory	North Miami	Dade	Army National Guard

STORAGE SITES (Cont'd.)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>
<u>MACON, GEORGIA</u>			
Robins AFB	Warner Robins	Houston	Air Force
Fort Benning	Columbus	Hooghee	Army
<u>PROVIDENCE, RHODE ISLAND</u>			
Naval Training Center	Newport	Newport	Navy
North Kingston Air Station	North Kingston	Washington	Air National Guard
North Smithfield Air Station	Slatersville	Providence	Air National Guard
<u>CHICAGO, ILLINOIS</u>			
Savannah Depot	Savannah	Carroll	Army
Chanute AFB	Rantoul	Champaign	Air Force
Fort Sheridan	Highland Park	Lake	Army
Naval Training Center	Great Lakes	Lake	Navy
O'Hare Air Base	Chicago	Cook	Air National Guard
<u>ROME, NEW YORK</u>			
Griffiss AFB	Rome	Oneida	Air Force

STORAGE SITES (Cont'd.)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>
<u>PITTSBURGH, PENNSYLVANIA</u>			
Greater Pittsburgh Airport	Coraopolis	Allegheny	Air National Guard/AF
Crane Armory	Pittsburgh	Allegheny	Army National Guard
Hunt Armory	Pittsburgh	Allegheny	Army National Guard
Oakdale Support Facility	Oakdale	Allegheny	Army
<u>ATLANTIC CITY, NEW JERSEY</u>			
Atlantic City Airport	Pleasantville	Atlantic	Air National Guard
<u>DISTRICT OF COLUMBIA</u>			
Andrews AFB	Camp Springs	Prince Georges	Air Force
Bolling AFB	Washington	DC	Air Force
Fort McNair	Washington	DC	Army
Naval Shipyard	Washington	DC	Navy
<u>BALTIMORE, MARYLAND</u>			
Glenn L. Martin State AP	Baltimore	Baltimore	Air National Guard
Fort Meade	Laurel	Anne Arundel	Army
Fort Detrick	Frederick	Frederick	Army
Fort Ritchie	Cascade	Washington	Army
Annapolis Naval Station	Annapolis	Anne Arundel	Navy
Patuxent Air Station	Patuxent	St. Marys	Navy

STORAGE SITES (Cont'd.)

<u>SITE</u>	<u>CITY</u>	<u>COUNTY</u>	<u>HOST</u>
<u>ALBUQUERQUE, NEW MEXICO</u>			
Kirtland AFB	Albuquerque	Bernalillo	Air Force
<u>OKLAHOMA CITY, OKLAHOMA</u>			
Tinker AFB	Midwest City	Cleveland	Air Force
Naval Air Depot	McAlester	Pittsburg	Navy
<u>FT. WORTH, TEXAS</u>			
Carswell AFB	Ft. Worth	Tarrant	Air Force
Fort Hood	Killeen	Coryell	Army
<u>MILWAUKEE, WISCONSIN</u>			
Truax Field	Madison	Dane	Air National Guard
General Mitchell Air Base	Milwaukee	Ozaukee	Air National Guard
Fort McCoy	Sparta	Monroe	Army
<u>MINNEAPOLIS, MINNESOTA</u>			
Duluth Air Base	Duluth	Carlton	Air National Guard

RECOMMENDATIONS

The following recommendations emerge from work accomplished on this study:

1. That the collapsible commode be adopted for shelter use. It will satisfy the waste disposal needs, can be quickly assembled, and serve as a water container prior to use as a commode.
2. That a Sanitation Kit containing the items enumerated be included in shelter supplies.
3. That a water container of the reservoir type be adopted for storage of potable water.
4. That the Defense Logistics Agency continue as the Logistics Support Activity for the Civil Defense effort.
5. That the facilities of the Department of Defense and its component military bases, posts, camps, and stations be utilized for storage and distribution of shelter supplies.

ACKNOWLEDGEMENTS

Aero Tec Laboratories Inc.	Waldwick, New Jersey
Belson Manufacturing Co.	North Aurora, Illinois
Coleco Industries Inc.	Hartford, Connecticut
Chic-Sales Co.	Costa Mesa, California
Container Corporation of America	Wilmington, Delaware
Continental Forest Industries	Carteret, New Jersey
Environmental Protection Agency	Washington, D.C.
F & L Packing Corporation	Bellville, New Jersey
Fabco Inc.	Richmond, Virginia
Fabrico Manufacturing Co.	Chicago, Illinois
Firestone Coated Fabrics Co.	Magnolia, Arkansas
Flo-Frolics Corporation	Babylon, New York
Food and Drug Administration	Washington, D.C.
Grief Bros. Corporation	St. Paul, Minnesota
Hampshire Manufacturing Co.	Nashua, New Hampshire
Hedwin Corporation	New York, New York
Hollinger Corporation	Arlington, Virginia
Incinomode Corporation	Sherman, Texas
Koehler-Dayton Corporation	New Britain, Connecticut
Mansfield Plumbing Co.	Perrysville, Ohio
Monogram Industries, Inc.	Long Beach, California
Muskin Corporation	Wilkes-Barre, Pennsylvania
Nalge Company	Rochester, New York
National Industries for The Blind	Washington, D.C.

ACKNOWLEDGEMENTS (Cont'd)

National Sanitation Foundation	Ann Arbor, Michigan
National Swimming Pool Institute	Washington, D.C.
Porta-House Co.	Oakland, California
Raritan Engineering Co.	Fort Lauderdale, Florida
Rehco Corporation	Los Angeles, California
Research Products Co.	Dallas, Texas
Sattellite Industries	Minneapolis, Minnesota
Thetford Corporation	Ann Arbor, Michigan
Uniroyal, Inc.	Mishawaka, Indiana
Unit Chemical Corporation	Los Angeles, California
United Molded Co.	Port Washington, New York
United States Steel Products	Pittsburgh, Pennsylvania
United States Steel Products	Newnan, Georgia

REFERENCES

1. Guidance for Development of an Emergency Fallout Shelter Stocking Plan, CPG 1-19 dated July 1978, by the Civil Preparedness Agency.
2. Report titled, "Estimates of Sales of Bottled Water in the United States," dated 28 July 1978, by Criteria and Standards Division, Environmental Protection Agency.
3. Collapsible Water Container Kit, Final Report #1478, dated January 1971, by General American Research Division.

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

CONTAINER KIT, COLLAPSIBLE, WATER (CIVIL DEFENSE)

1 October 1979

CIVIL DEFENSE PURCHASE DESCRIPTION
FOR
CONTAINER KIT, COLLAPSIBLE, WATER (CIVIL DEFENSE)

1. SCOPE

1.1 Scope. -- This specification covers collapsible drinking water storage containers in the 350 gallon capacity range, constructed of a polyethylene support wall with polyvinyl chloride liner, for use in fallout shelters.

1.2 Classification. -- The water container kits shall be of one basic type as follows:

Type A - Supported liner type, polyethylene supporting wall, polyethylene coping to hold liner to wall, a top cover, hardware, and a twelve inch long plastic ladle.

1.2.1 Size. -- Type A has a 350 gallon capacity. Other sizes in the range of 50 to 500 gallons may be obtained by constructing units with smaller or larger diameters and amending this specification accordingly (6.3).

2. APPLICABLE DOCUMENTS

2.1 Specifications and Standards. -- The following documents of the issue in effect on date of invitation for bids or request for proposal form a part of this specification to the extent specified herein:

SPECIFICATIONS

Federal

PPP-B-1163 - Box, Corrugated Fiberboard, High Compression Strength, Weather-Resistant, Wax-resin Impregnated

STANDARDS

Federal

FED STD No. 102 - Preservation, Packaging, and Packing Levels

Military

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-109 - Inspection Terms and Definitions

(Copies of specifications and standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other Publications. -- The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids shall apply.

FOOD AND DRUG ADMINISTRATION (FDA)

21 CFR 175.300 and 21 CFR 177.1520

(Copy may be obtained from the Food and Drug Administration, Department of Health, Education, and Welfare, Washington, D.C. 20204.)

3. REQUIREMENTS

3.1 Description. -- The container shall be in accordance with the manufacturer's drawing and its associated prints. The containers are basically in the 350 gallon range. The dimensions of the containers when installed and filled with water are approximately six feet in diameter by twenty inches high, or seven feet in diameter by fifteen inches high. The containers shall be supplied with instructions for installation, a protective top cover, erection hardware, and a dipping ladle.

3.2 Preproduction Sample. -- When specified (see 6.2), the contractor shall furnish and test a preproduction sample under the direction and supervision of the Government inspector to determine conformance to this specification. The preproduction sample is defined as a production unit which shall be identical to the units which the manufacturer will subsequently produce in fulfillment of the contract. Examination and tests shall be those specified herein. Approval of the preproduction sample does not relieve the contractor of his obligation to supply units conforming to this specification. Any change or deviation of production units from the preproduction sample shall be subject to the approval of the contracting officer.

3.3 Material. -- The materials shall be as specified herein.

3.3.1 Liners and Covers. -- The liners and covers shall be constructed of polyvinyl chloride sheeting. The thickness shall be a minimum of eight (8) mil. The color shall be a shade of white. The resins, stabilizers, and plasticizers shall meet the requirements and regulations issued by the Food and Drug Administration. For materials used in contact with food and drinking water the contractor shall furnish written certification that these requirements are met.

3.3.1.1 Construction. -- The containers shall be constructed to hold water for a minimum period of one month without leakage of water. The liners must be one piece and seamless. The top protective covers may

have 1/4" lap seams. The seams of the covers shall have a breaking strength equal to basic material. No sewing or stitching shall be permitted. The containers shall be free of dirt, severe fold marks, pinholes, nicks, cuts or other imperfections which will impair their leakproofness.

3.3.1.2 Seams. -- The finished container shall not leak water in the seam areas. Any indeterminate water leakage elsewhere which does not produce a wet spot greater than 6" in diameter after a five-hour testing period will be acceptable. Any splices and seams shall not be coincident.

3.3.2 Support Wall. -- The support wall will be constructed of high density polyethylene, with a minimum .050 thickness. The wall will have the Civil Defense logo laminated thereon.

3.3.3 Repair Patch. -- Suitable repair patches shall be comprised of two strips of clear vinyl material, one side of each strip having a coating of pressure-sensitive adhesive, and a removable protective paper covering over the adhesive. The patch shall be capable of being applied either under water or in normal atmospheric conditions. The patch shall not peel off after being applied to the vinyl container liner.

3.3.4 Workmanship. -- Workmanship on the containers shall be of the highest quality and shall not permit material defects adversely affecting strength, water tightness or serviceability. Seams shall be carefully constructed. Inside and outside of containers shall be clean and free of all foreign materials. All protective polyethylene bags must be heat-sealed closed and be air tight.

4. QUALITY ASSURANCE PROVISION

4.1 Inspection Responsibility. -- Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Component and Material Inspection. -- The supplier is responsible for insuring that components and materials used are manufactured, examined and tested in accordance with referenced specifications and standards.

4.2 Preproduction Sample Inspection. -- When a preproduction sample is required, it shall be examined in accordance with applicable paragraphs of Section 3 and Section 4, with laboratory tests at the contractor's expense.

4.3 Production Inspection. -- An initial production container kit will be selected at random by the Government from the first 10 units being produced from production tooling and will be examined as specified in 4.5.1

and tested as specified in 4.6 to determine conformance to the requirements of this specification. Acceptance of an initial production tank shall not exclude the remaining tanks from the quality conformance inspection as specified in Section 4.

4.4 Quality Conformance Inspection.

4.4.1 Lot. -- A lot shall consist of one day's production of the same size and type container.

4.4.2 Sampling. -- Sampling for examination shall be in accordance with MIL-STD-105, at inspection level H. The AQL shall be 1.5 percent defective for major defects.

4.4.2.1 Sampling for Tests. -- Sampling for tests shall be in accordance with MIL-STD-105, at inspection level S-1. The AQL shall be 1.5 percent defective.

4.5 Inspection Procedure.

4.5.1 Examination. -- The unit shall be examined for the following defects:

Major

- 101 Dimensions and construction details not as specified.
- 102 Materials not as specified.
- 103 Accessories and hardware incomplete.
- 104 Cut edges of water-holding seams not sealed.
- 105 Width of seams not as specified.
- 106 Repair patches not provided.
- 107 Sealing of seams results in a thinning of vinyl material thickness on one or both sides of seams.
- 108 Seams in vinyl material are coincidental with splices.
- 109 Coping not properly formed.
- 110 Punctures or tears in unit not repaired.
- 111 Water leaks in excess of specifications.
- 112 Dirt in or on container bottom or cover (grease, dirt or other foreign matter).
- 113 Workmanship is inferior and not as specified thus affecting serviceability or reliability.
- 114 Sharp edges on inside of coiled rigid wall support.
- 115 Malfunctioning of water container.

Minor

- 201 Cut edges of non-water holding seams not fully sealed.

4.6 Tests. -- Tests for the preproduction sample and for the production units shall be as listed below. Failure to pass any test shall be cause for rejection.

4.6.1 Storage Test - High and Low Temperature. -- The complete kit shall be placed in a dry temperature of +100°F for 24 hours. At the end of this period, the container shall be allowed to return to room temperature for a period of 24 hours, then unpacked, unrolled and examined. At the time of unrolling, there shall be no adhesion of the layers to the extent of damage to the material. The procedure for the low temperature test shall be the same as that specified for the high temperature test, except the temperature shall be 0°F in lieu of the higher temperature. At the end of the high and low temperature tests, the containers shall be erected, and tested for water leakage (4.6.2).

4.6.2 Water Leakage. -- The rigid-wall unit shall be erected in the proper position to receive water. The units shall be filled with clean water to the maximum capacity without spilling water in the adjacent area. The finished tank shall not leak water at the same areas. Any water leakage elsewhere which does not produce a wet spot greater than six inches in diameter after a period of five hours will be acceptable. Damage to the plastic film, seam failure or evidence of water leakage beyond the extent described above shall constitute failure of this test.

4.7 Preparation for Delivery Inspection. -- The preservation, packaging, packing and marking of the containers shall be inspected to determine compliance with the requirements of Section 5 of this specification.

5. PREPARATION FOR DELIVERY

5.1 Preservation and Packaging. -- The container and cover each shall be folded in such a manner to have generous rather than sharp folds, and a minimum number of folds so as to fill the maximum space of the carton. The repair patches shall be placed within the polyethylene bag with the bottom and cover so as to be readily discernible, the ladle shall be placed conveniently inside the package.

5.2 Packing. -- The sealed polyethylene bag along with the parts specified in the respective assembly drawings shall be placed in a single wall corrugated fiberboard box, 200 pound burst strength, in conformance with PPP-B-636. The box ends shall be sealed with tape as specified in the Appendix of the box's specification.

5.3 Marking. -- Marking shall be in accordance with the procurement documents.

6. NOTES

6.1 Intended Use. -- The containers are intended for use in fallout shelters for short-term storage of drinking water. The source of water for those containers shall be tap water, if available, or water trapped in building systems such as boiler water supply, hot water tanks, etc.

6.2 Ordering Data. -- Procurement documents should specify the following:

- (a) Title, number, and date of this purchase description.
- (b) Type and size of container required (see 1.2).
- (c) Time required for submission of preproduction model (see 3.2).
- (d) Date initial production testing is required.
- (e) Number of containers to be furnished for initial production testing.

6.3 Deviations. -- Should there be need for changes in the requirements set forth herein, the changes shall be made by amending this document.

Custodian:
DLA Civil Preparedness Office

Preparing Activity:
DLA Civil Preparedness Office

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

COMMODE: SANITARY, FIBERBOARD, FOLDING (CIVIL DEFENSE)

1 October 1979

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

COMMODE: SANITARY, FIBERBOARD, FOLDING (CIVIL DEFENSE)

1. SCOPE

1.1 Scope. -- This document covers the requirements for fabrication of the commode and component units, unit packaging, and packing of the units comprising the sanitary commode for use in Civil Defense public fallout shelters.

1.2 Classification.

1.2.1 Types. -- The commode covered by this document shall be of one type:

Type SK V

2. APPLICABLE DOCUMENTS

2.1 Specifications and Standards. -- The following documents of the issues in effect on date of invitation for bids form a part of the specification to the extent specified herein.

Federal Specifications:

PPP-B-1163B - Box, Corrugated Fibergoard, HCS, WR, Wax Resin
Composition Impregnated.

Military Standards:

MIL-STD-105 - Sampling Procedures and Table for Inspection by
Attributes.

Civil Defense Purchase Descriptions:

Bag, Commode (Civil Defense), 1 October 1979

Tie-Wires, Commode Bag Closure (Civil Defense), 1 October 1979

3. REQUIREMENTS

3.1 General. -- All areas in which unit assembly packaging and packing operations will be conducted and all component storage areas shall be clean, sanitary and well ventilated. All operations should progress in an uninterrupted series of operations. When periods of interruption are necessary, temporary protection shall be provided to partially packaged units, as required, to insure against contamination.

3.1.1 Workmanship. -- Workmanship shall be such as to insure compliance with the requirements of this document and shall be of good quality.

3.2 Component units comprising the sanitary commode. -- The component units of each commode shall be as specified in Table I:

TABLE I

UNIT NO.	NOMENCLATURE	QUANTITY
1.	Two-piece, die-cut, scored, slotted, fiberboard box	1
2.	Bag, polyethylene (inner)	1
3.	Bag, polyethylene (outer)	1
4.	Tie-wire, plastic covered	1
5.	Assembly Instruction Sheet	1

3.3 Component Units.

3.3.1 Unit No. 1. -- The sanitary commode shall be composed of two pieces of die-cut, scored, and slotted fiberboard. The top unit shall have the glue flap glued outside and the bottom unit shall have the glue flap glued inside. The fiberboard shall be "B" flute corrugated, type SW, grade 200, impregnated (SWCFI), in conformance with the material requirements of Specification PPP-B-1163B.

3.3.1.1 Construction and die-cutting details shall be in accordance with Figures 1 and 2.

3.3.1.2 One side and one end panel of the top unit shall be printed in three colors in accordance with Figure 3.

3.3.2 Unit No. 2. -- One (1) bag, polyethylene (inner bag) with inside dimensions of 35 inches in length and 29 1/2 inches in width, fabricated in conformance with Civil Defense Purchase Description, dated 1 October 1979, "Bag, Commode (Civil Defense)."

3.3.3 Unit No. 3. -- One (1) bag, polyethylene (outer bag) with inside dimensions of 42 inches in length and 31 inches in width, fabricated in conformance with Civil Defense Purchase Description, dated 1 October 1979, "Bag, Commode (Civil Defense)."

3.3.4 Unit No. 4. -- One (1) tie-wire, 10 inches in length, in conformance with Civil Defense Purchase Description, dated 1 October 1979, "Tie-Wires, Commode Bag Closure (Civil Defense)."

3.3.5 Unit No. 5. -- One set of assembly instructions as delineated in Figure 4. The instructions shall be printed in black or blue ink on a sheet of high grade commercial bond paper of approximate size of 17 inches by 10 inches.

4. QUALITY ASSURANCE PROVISIONS

4.1 Inspection responsibility. -- The supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facilities and services acceptable to the Government. Inspection records of the examinations and tests shall be kept complete and available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Sampling for inspection and acceptance. -- Sampling for inspection and tests shall be performed in accordance with the provisions set forth in Standard MIL-STD-105, except where otherwise indicated. For purposes of sampling, an inspection lot shall consist of a completely packed shipping container.

4.2 Inspection of materials and components. -- In accordance with 4.1 above, the supplier is responsible for insuring that materials and components used were manufactured, tested, and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified, or, if none, in accordance with this document. In the event of conflict, this document shall govern.

4.3 Inspection of the end item.

4.3.1 Examination of the end item for preparation of delivery. -- Examination of the end item shall be in accordance with the classification of defects set forth below. The sample unit for this examination shall be one completely packed shipping container randomly selected throughout the lot. The inspection level, for determining the sample size, shall be I, and the acceptable quality level (AQL) shall be 2.5, expressed in defect per 100 units. The lot size shall be expressed in units of containers.

EXAMINE

Unit Commode Set

Shipping Container

DEFECT

Not type specified; not packaged in accordance with contract requirements.

Arrangement or number of component units not as specified.

Material damaged, mutilated, or not as specified.

Not type or style of fiberboard box specified.

Closure not accomplished by specified or required methods or materials.

5. PREPARATION FOR DELIVERY

5.1 Packaging.

5.1.1 The package consisting of Units Nos. 1, 2, 4 and 5 shall be positioned into Unit No. 3, long outer bag. The excess portion of the closure of the outer bag shall be folded over and secured by taping with a pressure-sensitive tape.

5.2 Packing.

5.2.1 Ten (10) packaged commodes shall be packed in a "B" flute corrugated, glued flap, type SW, grade 200, impregnated (SWCFI) box in conformance with Specification, PPP-B-1163B. The box shall be style RSC. The box shall have approximate inside dimensions of 35 inches in length, 30 inches in width, and 10 inches in depth. Exact dimensions must be determined by Contractor to assure a snug fit. Box flaps shall be sealed, using a water-resistant adhesive formulated specifically for sealing specified type of fiberboard.

5.2.2 Printing. -- The top, one side and one end of the shipping box shall be printed as delineated in Figure 5.

5.2.3 Marking.

5.2.3.1 Shipments shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Ordering Data. -- Procurement documents should specify the following:

(a) Title and date of this document.

(b) Quantity to be procured (see 1.2.1).

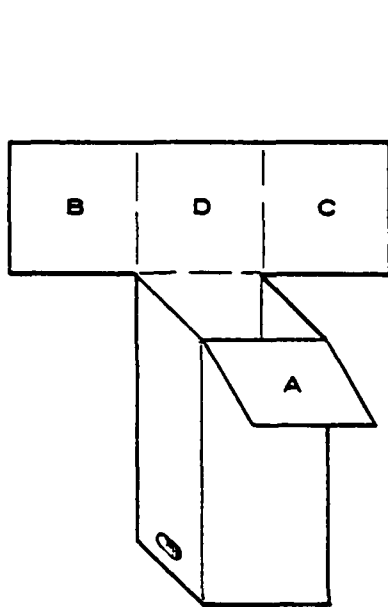
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Custodian:
DLA Civil Preparedness Office

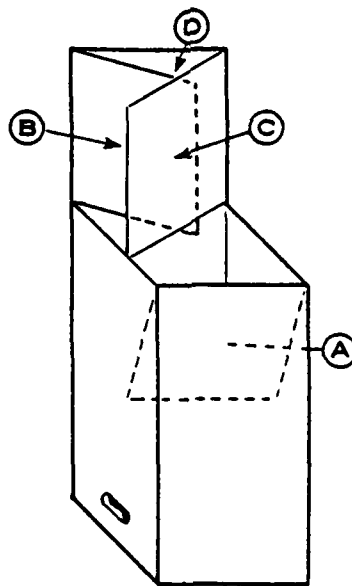
Preparing Activity:
DLA Civil Preparedness Office

Assembly Instructions
COMMODE
(Civil Defense)

ASSEMBLY INSTRUCTIONS - COMMODE (CIVIL DEFENSE)



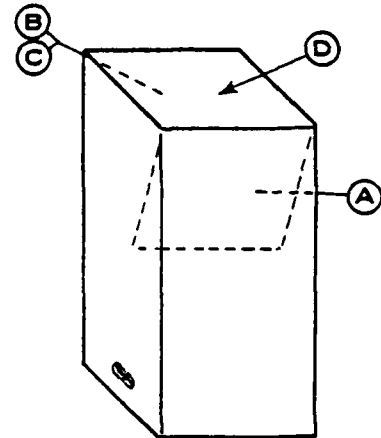
Set up base box.



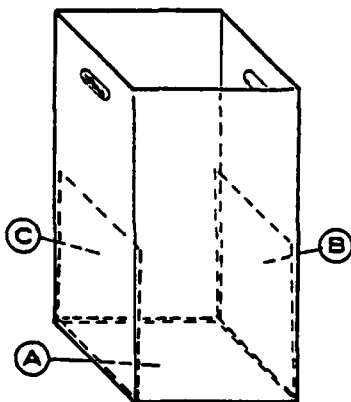
Fold flap A into base box;
flush against front side.

Fold flap B over flap D.

Fold flap C over flap B.



Fold over assembly of B-C-D.

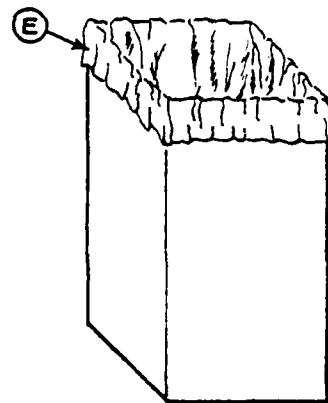


Invert box base.

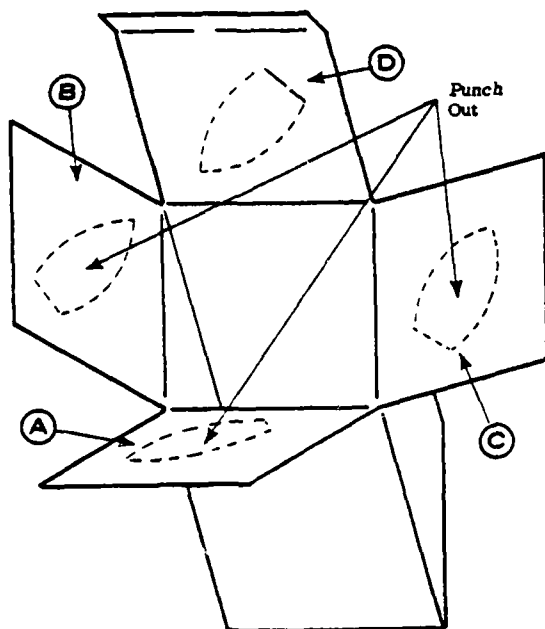
Hold flap A against side of box.

Lift flap B and C flush with
sidewalls.

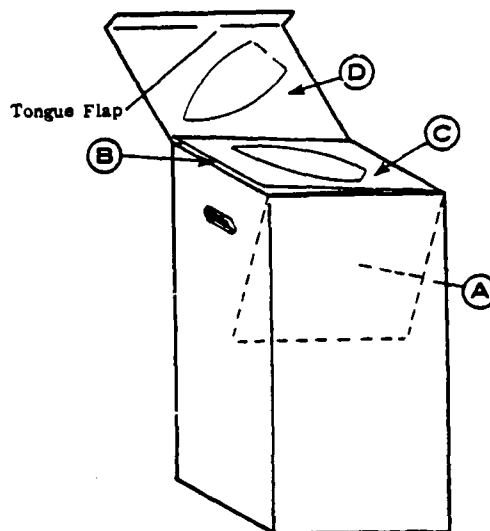
Push down A to form bottom of
box.



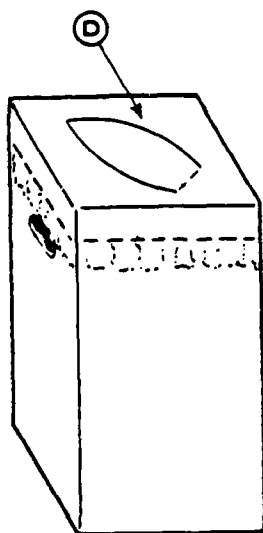
Place the SHORT plastic bag
liner (E) in box, seating the
bottom of bag carefully. Spread
mouth of bag over and down
around top of box about 3 1/2
inches (bottom edge of hand
holes).



Set up body box.



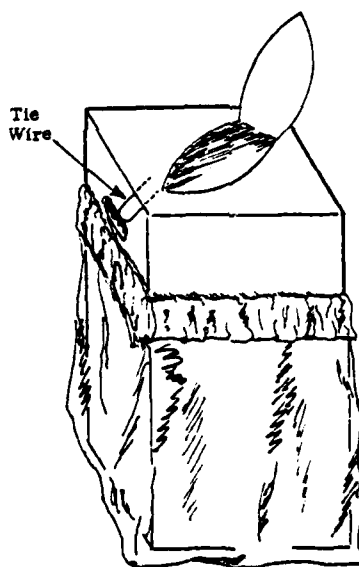
Fold flap A into body box flush against front side; fold over B and C.



Fold over D - inserting tongue flap thru slot.

Invert box - fold down A to rest on B.

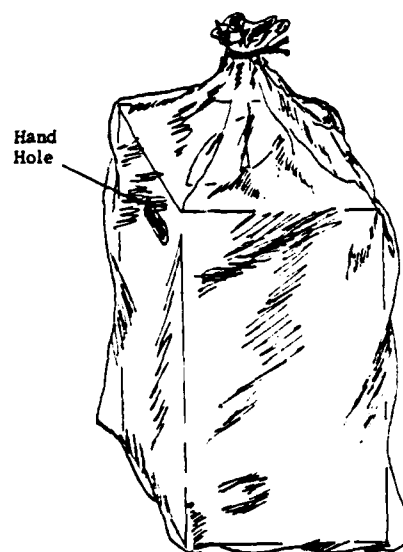
Slide body box over base box and plastic bag with panels having the hand hole slots in parallel with each other.



Slide the tie-wire part way under flap D to prevent its loss. Place the assembled commode within the LONG plastic bag and fold down the plastic bag to just below the commode box hand holes.

Add the commode chemical as per instructions printed on commode chemical package.

Commode is now ready for use.



When commode is filled, close seat, unfold the plastic outer bag. Take the tie-wire from under flap D and gather the top of the plastic bag together and tie off. To move commode, lift by using hand holes on side.

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

BAG, COMMODE, POLYETHYLENE (CIVIL DEFENSE)

1 October 1979

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

BAG, COMMODE, POLYETHYLENE (CIVIL DEFENSE)

1. SCOPE

1.1 Scope. -- This purchase description covers the requirements for polyethylene bags for lining Civil Defense sanitation commodes.

1.2 Classification. -- Bags covered by this purchase description shall be of one type.

2. APPLICABLE DOCUMENTS

2.1 Specifications and Standards. -- The following documents of the issue in effect on date of invitation for bids or request for proposal form a part of the specification to the extent specified herein.

STANDARDS

Military

MIL-STD-105 - Sampling Procedures and Tables for Inspection Attributes.

SPECIFICATIONS

Federal

L-P-378 - Plastic Film (Polyethylene Thin Gage).

(Copies of specifications and standards required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Material. -- Bags shall be made from polyethylene tubing conforming to Type II, Grade C, Finish 1 of Federal Specification L-P-378.

3.1.1 Thickness of film. -- The tubing shall be manufactured by a properly controlled extrusion process so that the average thickness of the film shall be not less than 0.004 inch. At no point shall the thickness be less than 0.0036 inch.

3.2 Bag Construction.

3.2.1 General. -- Each bag shall be fabricated so that it is completely leakproof to water in extended storage. Each individual bag shall be uniformly constructed and free from pinholes, tears, holes, cracks, blisters, wrinkling, sharp creases, heel breaks, nicks, cuts or other imperfections which will impair their leakproofness. The top and bottom edges shall be square cut at right angle to the sides of the tubing. Extreme care shall be exercised to eliminate undue tension or creasing of tubing side edges during bag making operations.

3.2.2 Bottom seal seam. -- Bottom seal seam shall be effected by electronic or thermal impulse or heat seal methods. Seal shall be straight and continuous, free from wrinkles, creases, contamination, gaps or other defects which will impair the ability of the bag to remain leakproof to water in extended storage. Seal seams shall be a minimum of 1/8 inch in width, or at the option of the contractor, shall be a double seal with the width of each seam being a minimum of 1/16 inch in width and space between seams being a minimum of 1/16 inch in width.

3.2.3 Dimensions. -- Bag dimensions shall be inside dimensions measured to inside of seals as specified in contract or order. Tolerances of plus or minus 1/2 inch in length and 1/4 inch in width will be permitted.

3.2.4 Type. -- The bag shall be a conventional open-mouth type bag with a straight continuous bottom seal only. No top seal shall be applied.

3.3 Seam Strength. -- The seams of each individual type bag, tested in accordance with 4.3.1 shall withstand a static load of 3.5 pounds for five minutes at $75^{\circ} \pm 5^{\circ}\text{F.}$ with no evidence of seam slippage or peel back.

3.4 Workmanship. -- Manufacturer's equipment shall be automatically controlled as to temperature, pressure and swell time and kept in proper adjustment at all times to insure complete compliance with tests specified in Section 4 and insure that all bags manufactured are of highest quality obtainable. The sealer bars shall be inspected regularly by the manufacturer of the bags to insure that the bars are kept clean and free of contamination and resin build-up which may result in seals of less than the high quality required. Extreme care shall be exercised to eliminate undue tension or creasing of tubing side edges during the bag making operations and packaging operations.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection. -- Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Sampling for Inspection. -- Sampling for inspection shall be performed in accordance with the provisions set forth in Standard MIL-STD-105, except where otherwise indicated. For purposes of sampling, an inspection lot for examinations and tests shall consist of all material submitted for delivery at one time, except that the maximum lot size shall not exceed 50,000.

4.2 Inspection of Materials and Components. -- In accordance with 4.1 above, the supplier is responsible for insuring that materials and components used were manufactured, tested and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified, or, if none, in accordance with this specification. In the event of conflict, this specification shall govern.

4.2.1 Certificate of compliance. -- Unless otherwise specified, acceptance of the resin and tubing used in the fabrication of the bags will be satisfied on the basis of a certification of compliance from the supplier certifying that the applicable characteristics of the resin and tubing comply with the requirements specified in paragraph 3.1 of this purchase description.

4.3 Method of Tests.

4.3.1 Seam strength. -- At least one hour after sealing, one 1-inch wide specimen shall be cut perpendicular to the line of the seam, from each seam of each individual sample bag. One leg of the specimen shall be so clamped that the specimen hangs freely. A load of 3-1/2 pounds shall be applied to the free end in such manner as to avoid impact loading the seam. The load shall be allowed to act for five minutes, after which the seam shall be examined for slippage or peel back. The test shall be conducted at room temperature. (For referee purposes, room temperature shall be defined at 70° to 80°F.) Peel back shall be defined as any separation of the seam from the inside line of contact to the sealer.

4.4 Rejection and Retest. -- Bags which have been tested shall not be submitted for acceptance. Bags which fail to pass all requirements of this purchase description are classified as defective. Lots which have been rejected may be reworked or replaced to correct the defects and resubmitted for acceptance. Before resubmitting, full particulars concerning previous rejections and the action taken to correct the defects found in the original shall be furnished the inspector in writing, or in his absence, forwarded to the procuring activity. Bags rejected after retest shall not be resubmitted without the specific approval of the procuring activity.

5. PREPARATION FOR DELIVERY (Not Applicable)

6. NOTES

6.1 Ordering Data. -- Procurement documents should specify the following:

- (a) Title and date of this document.
- (b) Quantity of bags of each size required.
- (c) Inspection responsibility, methods and tests (see Section 4).

Custodian:
DLA Civil Preparedness Office

Preparing Activity:
DLA Civil Preparedness Office

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

TIE - WIRES, BAG CLOSURE: CIVIL DEFENSE

1 October 1979

CIVIL DEFENSE PURCHASE DESCRIPTION

FOR

TIE - WIRES, BAG CLOSURE: CIVIL DEFENSE

1. SCOPE AND CLASSIFICATION

1.1 Scope. -- This purchase description covers the requirements for tie-wires used for bag closures to be included in sanitation kits.

1.2 Classification. -- Tie-wires covered by this purchase description shall be of one type.

Type 1 - Plastic covered

2. APPLICABLE DOCUMENTS

2.1 Specifications and standards. -- The following standards, of the issues in effect on date of invitation for bids, form a part of this purchase description to the extent specified herein.

STANDARDS

Military

MIL-STD-105 - Sampling Procedures and Tables for Inspection
by Attributes.

MIL-STD-109 - Inspection Terms and Definitions.

(Copies of specifications and standards required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Materials. -- Tie-wires shall be made from lengths of wire covered with two strips of plastic laminated to each other and positively bonded to the wire core.

3.1.1 Wire. -- The wire used in the manufacture of tie-wires shall be dead soft annealed iron wire, of not less than 22 gauge.

3.1.2 Plastic Covering. -- The plastic covering used on tie-wires shall be a virgin vinyl plastic or polyethylene, or other plastic. The plastic must be such as to not migrate to polyethylene when used as a closure wire for polyethylene bag-liners.

3.1.3 Bonding. -- The plastic covering material shall be laminated using a plastic or waterproof adhesive or shall be heat-bonded.

3.2 Construction. -- The finished tie-wire shall be laminated and positively bonded to the wire core in such a manner that the covering cannot be forced to slide lengthwise along the wire core exposing the wire.

3.3 Weather Resistant. -- The tie-wire shall not be adversely affected by temperature extremes, or periods of exposure to high humidity and water. There shall be no deterioration of the covering material, signs of delamination, or breakdown of the bond or bonding material when tested in accordance with paragraph 4.4 of this purchase description.

3.4 Dimensions. -- The width of the plastic covering shall be not less than 5/32" and the overall length of the tie-wires shall be not less than 8 inches.

3.5 Workmanship. -- Tie-wires shall be manufactured and packaged in a clean and workman like manner and in accordance with good industry practice.

4. SAMPLING INSPECTION AND TEST PROCEDURES

4.1 Inspection responsibility. -- The supplier is responsible for the performance of all inspection requirements specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facilities and services acceptable to the Government. Inspection records of the examination and tests shall be kept complete and available to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 Sampling for inspection and acceptance. -- Sampling for inspection and acceptance shall be in accordance with the provisions of Military Standard MIL-STD-105, except where otherwise indicated.

4.2.1 Inspection of components and materials. -- In accordance with 4.1 above, the supplier is responsible for insuring that components and materials used were manufactured, tested, and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified, or, if none, in accordance with this specification. In the event of conflict, this specification shall govern.

4.3 Inspection of the end item. -- Unless otherwise specified by the procuring activity, conforming with the requirements, as specified in Section 3, will be satisfied by acceptance of contractor's certificate of compliance.

4.4 Method of tests.

4.4.1 Low Temperature Test. -- Tie-wires shall be placed in a cold chamber and kept at 0°F. for a period of 24 hours and then allowed to return to room temperature.

4.4.2 High Temperature Test. -- Tie-wires shall be placed in an oven and kept at 120°F. for a period of 24 hours and then allowed to return to room temperature.

4.4.3 High Humidity Test. -- Tie-wires shall be placed in a humidity chamber and kept at 90°F. and 90% - 95% for a period of 24 hours and then allowed to return to room temperature.

4.4.4 Waterproofness. -- Tie-wires shall be submerged in water at room temperature for a period of 24 hours and then allowed to dry.

5. PREPARATION FOR DELIVERY (Not Applicable)

Custodian:
DLA Civil Preparedness Office

Preparing Activity:
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