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Air National Guard ECAMP: Analysis of the Compliance Assessment Process

by Donna J. Schell

August 2000

**Construction Engineering
Research Laboratory**

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Foreword

This study was conducted for the Air National Guard (ANG) under Military Interdepartmental Purchase Request No. 9830147. The ANG Readiness Center technical monitor was Joy Hoyle.

The research was performed by the Installation Division (CN), Environmental Processes Branch (CN-E) of the Construction Engineering Research Laboratory (CERL). The Principal Investigator was Donna J. Schell (CN-E). The CERL technical editor was Linda L. Wheatley, Information Technology Laboratory. Dr. Ilker Adiguzel is Branch Chief (CN-E) and Dr. John T. Bandy is Division Chief (CN). Dr. Alan Moore is Acting Director of CERL.

CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Director of ERDC is Dr. James R. Houston and the Commander is COL James S. Weller.

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1 Introduction

Background

The U.S. Air National Guard (ANG) has conducted environmental compliance assessments since the early 1990s in conformance with the general provisions of Air Force Instruction (AFI) 32-7045 by using contract assessors. To assure itself of the effectiveness and quality of its assessment program, the ANG Readiness Center/Civil Engineer Environmental Quality (ANGRC/CEVQ) asked the Construction Engineering Research Laboratory (CERL) to perform onsite process evaluations during 13 ANG Environmental Compliance Assessment Management Program (ECAMP) assessments and review the resulting assessment data for accuracy and completeness. This report summarizes the practices that should be considered for unilateral implementation, discrepancies in processes/guidance, and gaps/problem areas in the assessment process.

Objectives

The objectives of this effort were to review the entire environmental compliance assessment process as implemented by ANG to identify:

- practices that should be considered for unilateral implementation
- discrepancies in process or guidance
- gaps or problem areas in the process.

Approach

This analysis and review were conducted by CERL personnel accompanying the ANG-ECAMP contractor on the following ECAMP assessments:

- Fort Wayne, IN
- Louisville, KY
- Atlantic City, NJ
- Terre Haute, IN
- Smoky Hill, KS

- Pease, NH
- Toledo, OH
- Bangor, ME
- Klamath Falls, OR
- Selfridge, MI
- Portland, OR
- Fort Worth, TX
- Battle Creek, MI

The first assessment for this effort was done in December 1998 and continued until September 1999.

Process evaluation was performed by document review, personnel interviews, and process observation. In addition to the author, five individuals from CERL who are familiar with compliance auditing techniques were selected to perform the quality assurance (QA) function. They were: Dr. Don Cropek, Dr. David Krooks, Michelle Hanson, Tina Hurt, and Carolyn O'Rourke. QA personnel were briefed on the current ANG-ECAMP process and instructed to perform the following actions, at a minimum:

1. Review prior QA reports.
2. Attend the in-brief unless assessors have started assessing, which takes priority.
3. Accompany assessors as they go through the shops.
 - a. Do they introduce themselves?
 - b. Do they ask open-ended questions?
 - c. Do they look at paperwork in addition to non-paper activities/facilities?
 - d. Do they verify what is told to them verbally?
 - e. Do assessors appear to be operating from internal knowledge or are they consulting the manuals?
 - f. Are assessors helpful or is there an inspector "attitude"?
 - g. QA personnel are not expected to be experts in all areas of environment and safety, but take notes of what is seen or heard if things do not sound quite right. These notes will come in handy when reviewing the report to see if all the findings were written.
4. Sit in on team meetings.
 - a. Is there information exchange?
 - b. Do people challenge each other at all?
5. Interview installation personnel, both those managing the assessment and those receiving the assessment.
 - a. What do they feel would make the process more helpful to them (pre-assessment, onsite, and post-assessment)?
 - b. Do shop people know what ECAMP is and that it is what is going on?

6. Interview assessors to see what they think would improve the process.
7. If available, bring home a copy of the draft report.

QA personnel were instructed not to perform the following actions, at a minimum:

1. Help in the execution of the assessment.
2. Review findings during the assessment.

QA personnel were instructed to provide the following products as a result of each assessment in which they participated:

1. Completed QA form.
2. Report review comments by the QA personnel and a second QA person who did not participate in the visit.

2 U.S. Air National Guard Environmental Compliance Assessment Management Program

To effectively review the ANG-ECAMP program, it was necessary to first understand the existing process. When the review began, the ANG was already undergoing a process change with the implementation of updated software and an effort to reduce the period of time between the creation of the draft ECAMP report and the completion of the final ECAMP report. This overview is based on interviews with ANG personnel.

Pre-Assessment Activities

All interaction with the installation point of contact (POC) in setting up the assessment is done by ANG (Chuck Smith or Joy Hoyle). The installation rarely provides any copies of plans or permits for review prior to the assessment, and there is no expectation that they would be reviewed in advance even if they were available.

The installation does receive, and is requested to complete, a pre-visit questionnaire (see Appendix A), which is provided to the assessment team. The only other pre-assessment information the installation receives is a scheduling letter.

ANG obtains an Enforcement Vulnerability Analysis from the Air Force Regional Environmental Officer (see Appendix B). No telephone calls are made to the state for regulatory interpretation questions prior to the assessment by either the contractor or ANG. Local regulations are researched before the assessment in some standard areas (e.g., Publicly Owned Treatment Works [POTW] pretreatment standards).

Contractors are required to review regulations before performing the assessment. The ANG impression is that this review is of actual regulations rather than assessment manuals. The contractors are not accustomed to using state manuals.

During the Assessment

Except for rare instances, ANG-ECAMPs are done in 1 week. Monday is a travel day. An in-brief is given the first day onsite (Tuesday), usually by the ANG representative, but it can be given by the contractor (an example is shown in Appendix C).

The assessment team consists of environmental, safety, and industrial hygiene assessors. They use the following manuals for the assessment: The Environmental Assessment Management (TEAM) Guide; the ANG Supplement to TEAM, Volume 1; the ANG Supplement to TEAM, Volume 2; and the appropriate state supplement. TEAM Guide, the state supplement, and Volume 1 of the ANG Supplement are used for the environmental portion of the assessment. Volume 2 of the ANG Supplement addresses safety and industrial hygiene requirements. It is the ANG expectation that all subject areas covered in the manuals will be addressed during ECAMP, as applicable. Emphasis changes with size and mission.

The following TEAM Guide issues, with 29 Code of Federal Regulations (CFR) citations (Occupational Safety and Health Administration [OSHA]), are written up in the environmental portion of the report: flammables cabinets, flammable storage buildings/warehouses, outside flammables storage, and compressed gas storage. They may not be assessed, however, by the environmental assessors. This decision is made in the field among the assessors, and it varies from assessment to assessment. Material Safety Data Sheets (MSDSs) and Hazardous Communication Standards (HAZCOM) (from OSHA) are always the responsibility of the Bioenvironmental Office.

In determining which facilities to visit at an installation, the contractor uses the following parameters:

- Environmental assessors visit the shops they feel are pertinent to the topics they are covering.
- Industrial hygiene (IH) assessors have a set list of shops (see Appendix D) to look at, and then they do a sample of the remaining. By regulation, the IH assessor cannot assess state employees. Possible exceptions to this rule concern training, personal protective equipment (PPE), and medical examinations, but these issues are unresolved.
- Safety looks at as many shops as time will allow.

If disagreement arises between the assessor and the installation about interpretation of an ambiguous regulation, the state regulator may be called during the assessment.

The installation is not out-briefed daily because the installation ECAMP manager is usually out with the assessment team. An exception is made if something requiring immediate attention is found. The team meets daily, however, to discuss topics including any gray areas, the probability of finishing on schedule, problems with personnel, and any show stoppers, significant, or willful. An individual finding is not discussed unless it is ranked as willful or significant.

The out-brief is on Thursday or Friday, depending on the size and complexity of the assessment. The ANG representative does an overview. One assessor each for the environmental, safety, and IH areas briefs "major" findings for environmental, and "serious" and higher findings for safety and IH. Assessors will brief a "minor" finding if it is a root of a programmatic problem. This occurs predominantly in safety. The draft findings are presented to the installation at this time.

Writing Findings

Assessors are encouraged to write findings daily, but are not required to do so. As of March 1999 assessors started using a Microsoft® Access™ database developed for the ANG-ECAMP. Before that time, reports were written in Microsoft® Word.

At the time of the process analysis, assessors were not performing root cause analysis. Starting in March 2000, assessors began performing root cause analyses, but the root causes show up only in the database, not in the report. The installation will be allowed to challenge and change the root cause.

The rating system for the environmental portion of the assessment is different than the rating system for OSHA. The differences are described in the next two sections.

Environmental Compliance

Significant Deficiency: A problem categorized as significant requires immediate action. It poses, or has a high likelihood to pose, a direct and immediate threat to human health, safety, the environment, or the installation mission.

Major Deficiency: A problem categorized as major requires action, but not necessarily immediate. This category of deficiencies usually results in a notice of violation from regulatory agencies. Major deficiencies may pose a threat to human health, safety, or the environment. Immediate threats must be categorized as significant.

Minor Deficiency: Minor deficiencies are mostly administrative in nature. They may also involve temporary or occasional instances of noncompliance.

Environmental/Occupational Health and Occupational Safety Compliance

Willful Deficiency: A willful deficiency is a violation in which the employer either knowingly failed to comply with a legal requirement (purposeful disregard) or acted with plain indifference to employee safety.

Serious Deficiency: A serious deficiency exists when the workplace hazard could cause an accident or illness that would most likely result in death or serious physical harm, unless the employer did not know or could not have known of the violation.

Repeated Deficiency: An employer may be cited for a repeated violation if that employer was cited previously for a substantially similar condition.

Other Deficiency: A deficiency that has a direct relationship to job safety and health, but is not serious in nature, is classified as other.

Prior to the start of the process analysis, assessors were instructed to ensure that a positive finding was above and beyond the standard criterion and that it had value to be shared across installations and services. Prior to the process analysis, however, positive findings did not stringently abide by the "above and beyond" principle, but were used as a pat on the back.

Unlike other assessment reports with which CERL is familiar, ANG reports also have a place for assessors to highlight issues that are not out of compliance but need to be noted. This section (called Observations and Comments) is for management practices (MPs), positives, and "by the way" or "don't forget" comments.

Findings QA is to be done by having one assessor read another assessor's findings. Additionally, the ANG representative does a read through before the out-brief.

Post-Assessment Activities

The post-assessment activities were in the process of changing during this review. Before March 1999, the installation, ANG, and the contractor would do a scrub of the assessment report. The base was required to identify closed findings, disagreements, and mistakes (e.g., wrong building numbers), and return this information to ANG 30 days from the out-brief. This action resulted in the candidate report. Then the base developed an action plan for all remaining open items and submitted it to ANG (45 days from finishing the initial scrub). The candidate report and the action plan were then reviewed by ANG and the contractor.

Starting in March 1999 a written draft was to be left with the installation along with the database from which the report was produced at the end of the assessment week. The installation has 60 days to review the report and create the action plan. The ANG and contractor review the report concurrently. If the installation is not going to meet the deadline, they send e-mail to ANG at the 30-day mark.

3 Summary of Findings and Recommendations

Appendices E through Q contain the complete reports prepared by QA personnel. This chapter summarizes the most pervasive process problems and recommended solutions. When action has been taken to resolve a problem, this action is also noted.

Pre-Assessment Processes

- Assessors were observed using out-of-date manuals to perform assessments. This practice meant that regulations that had been added, deleted, or revised since the edition they were using were not accurately being assessed.

Suggested solution: Develop process to ensure assessors have up-to-date manuals and software. Assessors must come into the field with the current versions of manuals if they are expected to use the manuals as the primary tool to which findings are tied.

Action taken: The contractor has designated a POC to ensure that, prior to an assessment, all assessors have the most up-to-date versions of the appropriate manuals.

- Research is not done prior to the assessment on local environmental regulations or environmental regulations that are highly interpreted. Without this information, incorrect guidance can be given to the installation, and the Enforcement Vulnerability Analysis (EVA) from Air Force Center for Environmental Excellence (AFCEE) Regional Environmental Offices (REOs) are not helpful on these matters.

Suggested solution: Identify the issues to be researched prior to the assessment and include it as a part of the scope of work. Issues to be considered are:

Local Regulations (County environmental/health)	Interpretations concerning:
Septic systems POTW pretreatment standards Local recycling resources Asbestos abatement Fire codes Solid waste landfills (restrictions on what goes to the landfill) Erosion/coastal protection Air Districts (NOTE: Some of these regulations are already covered in CERL state supplements.) Sole source aquifers Historic Districts	Hazardous waste satellite accumulation point management Disposal of POL*-contaminated wastes Applicability of SPCC* regulations to mobile tankers Hazardous Waste identification Numbers Transportation of hazardous Wastes from CESQGs* to SQGs Clarification of poorly written storage tank regulations When is an oil/water separator an underground storage tank (UST)?
*POL – petroleum, oil, and lubricants SPCC – Spill Prevention, Containment, and Countermeasures CESQG – Conditionally Exempt Small Quantity Generator	

Action taken: The ANG has identified issues to research prior to the assessment and this list will go into the scope of work (SOW) for the assessment contract.

- Installations typically did not have paperwork to be reviewed as part of the assessment ready and waiting for the assessors. This caused a delay in the assessment processes and reduced the number of facilities at an installation that could be assessed.

Suggested solution: Instead of using the vague and overwhelming list of paperwork in the current previsit questionnaire (PVQ), create a specific and limited list. This list should be the most common types of paperwork actually found on an ANG base instead of all possible types of paperwork. The suggested environmental list includes:

- Air Emissions Inventory (AFI 32-7040, para 2.8)
- Air emissions permits, if applicable (usually state regulated)

- Cultural Resources Management Plan, if applicable (AFI 32-7065, para 2.2 and Department of Defense Instruction (DODI) 4715.3, para D3(c) and Enclosure 7)
- Tier I or Tier II reports (Executive Order [EO] 12856; 40 CFR 370.20, 370.25, and 370.28)
- Hazardous Materials (HAZMAT) Plan 1 (AFI 32-4002, para 3.3)
- Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2)
- Hazardous Waste Manifests (40 CFR 262.40(a), 262.40(c), 262.40(d), 262.42(b), 262.43, and 262.44)
- Natural Resources Management Plan, if applicable (AFI 32-7064, para 2.1 and 2.3 and DODI 4715.3, para D2(b), D2(h), and Enclosure 7)
- Bird/Aircraft Strike Hazard (BASH) Plan, if applicable (AFI 91-202, para 7.11.1.4 and 7.11.2)
- Environmental Assessments (EAs) or Environmental Impact Statements (EISs) produced in the last 3 yr (National Environmental Policy Act [NEPA])
- Pollution Prevention (P²) Plan (AFI 32-7080, para 2.2 and DODI 4715.4, para F2(c)(2))
- Halon 1301 Management Plan (Engineer Technical Letter [ETL] 95-1 implementing AFI 32-7080)
- Pesticide Management Plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 2.4.5. and 2.4.7.)
- Solid Waste Management Plan (AFI 32-7042, para 3.2)
- Spill Prevention Control and Countermeasure Plan, if applicable (40 CFR 112.7)
- Storage Tank Inventory (AFI 32-7044, para 3.2 and AFI 23-204, para 3.6.2, 13.1, and 13.3)

- Asbestos Management Plan and Operating Plan, if applicable (AFI 32-1052, para 5 and 6)
- Lead-Based Paint (LBP) Management Plan, if applicable (Headquarters, U.S. Air Force/CC Policy letter 24 May 1993, para 6)
- Wastewater/stormwater permits, if applicable (40 CFR 122.1(b)(3), 122.26(c), and 122.26(g))
- List of oil/water separators
- Wastewater/stormwater sampling results for the last year.

A similar list should be created for the IH and safety arenas.

Action taken: The ANG has tasked the Health and Safety staff as well as their contractors to do a thorough scrub of the documents list and the pre-visit questionnaire.

During the Assessment

- Generally poor assessment practices that lead to an incomplete assessment were observed. Assessors were observed being led on a tour of facilities rather than thoroughly looking behind all doors and in the cupboards. Assessors were not observed looking for paperwork in the shops, but relied instead on assurances by the installation POC that the paperwork was there. Interviewing techniques did not lead to open-ended conversations. It was not uncommon for shop personnel interviewed after the assessment to comment that they did not feel as if they could ask questions.

Suggested solution: Provide reminder/refresher training for assessors. Assessors need to be reminded of the following:

- Ask open-ended questions, not “you inspect this annually, right?”
- Look at the supporting paperwork in the shops.
- Do not put the shop supervisor in the position of giving a guided tour; this should be an interactive process. Ask questions to let them show off their knowledge even if you know the process they are explaining backward and forward.

- Talk to more than just the shop supervisors; ask personnel how they think things work.
- Ask shop personnel if they have any questions.
- Sum up what you saw at each shop to the shop supervisor. Sum up absolute findings, and go over the findings that need additional research.
- Review the previous internal/external reports.

Action taken: The contractor has instituted formal training for their assessors instead of relying on on-the-job training.

- Assessors of OSHA issues appear to have focused subject knowledge. For example, safety assessors tend to either focus on structural safety or operational safety. Depending on which assessor is inspecting a given installation, a segment of the OSHA requirements may be overlooked. Additionally, the number of "added" findings in safety and industrial hygiene are disproportionate to environmental findings. Added findings are those that the assessors write that are not tied to a citation in the tools they are required to use to perform assessments.

Suggested solution: Give consideration to identifying portions of the OSHA manual that must be assessed in an external assessment instead of trying to address the whole manual. This list could change as the program moves from cycle to cycle.

- Assessors were observed doing paperwork reviews and writing findings in the team room during the hours when installation personnel were on duty. By doing activities during the day that can be done in the hotel room at night, a smaller percentage of facilities receive assessments. One reason given for this practice was that the contractor had to be escorted on the ANG base and escorts were not always available.

Suggested solution: Clarify the policy on escorts; are they required? Consider having either the ANG representative or the assessment team leader get to the base early enough on Monday (probably by 2 pm) to gather plans and paperwork that all assessors can review in their hotel rooms on Monday evening. Lastly, stress to the assessors that they are expected to be in the field doing interviews and site visits during duty hours.

Action taken: The ANG is working on policy to clarify the escort issue. Direction has been given to the contractor that whoever calls a base about logistics is to indicate the need for multiple escorts.

- Not every assessed facility generates a finding of noncompliance. At the end of the assessment, therefore, no record exists for what facilities have actually been assessed. Such a record serves two purposes: (1) it aids ANG in knowing what their contractors are actually doing, and (2) it tells the installation what was not looked at and where they need to assess.

Suggested solution: Develop a site visit log for assessors in which assessors document where they have been. This type of log is valuable for both the installation internally and the next external team. It provides a heads up as to what was not assessed and should be looked at more closely the next time around. It should be an appendix in the report. A possible format:

Building number	Shop name	Room number (if different than building number)	Assessor (IH, ENV, or SAF)

Action taken: The ANG will include the requirement for a site visit log in the SOW.

- The observed out-briefs were not consistent as to the types of information presented or the focus of the assessors. Neither did they remind the installation of their responsibilities once the assessment is done and what use to make of the results of the assessment.

Suggested solution: With three different topics being out-briefed, it is important for briefers to remember that some people in the audience will be unfamiliar with their subject area. Slides need to be explicit and clear. Enhance and standardize the out-brief by:

- Adding a slide near the end summarizing the installation's responsibilities — may not have the same people at the out-brief as were at the in-brief

- Adding a slide at the end talking about (for example) where we go from here and trend analysis
- Using the same style and format on slides across Environmental, IH, and Safety
- Having the assessors stick to the facts of what is wrong instead of trying to mitigate up front. If needed, close with mitigating comments.

Action taken: Out-brief slides have been standardized.

Writing Findings

- In general, findings are poorly written, no guidance is available to assessors on the expectations of how findings are to be written, and the onsite QA process is cursory at best and does not ensure that: information needed to validate the finding is included in the finding, the finding is written against the correct regulatory citation, and the installation has all the information needed to know exactly what was observed and what is needed to resolve it.

Suggested solution: The following list addresses a variety of solutions. No one solution in and of itself will resolve this issue.

1. Provide a mechanism in the software to document basic installation background information (e.g., a table of questions in the introduction that clarifies status in various areas). This will only work if the introduction accompanies the findings at all times. Types of information of interest are:
 - Hazardous waste generator status and why (SQG, Environmental Protection Agency (EPA) identification number; CESQG, amounts observed, etc...)
 - Amount of POL stored aboveground and amount stored underground
 - Any permits.
2. To facilitate the verification of whether a finding is written against the correct regulatory citation, make sure the checklist item number prints on the findings sheet created by the software. This addition also helps installation personnel who are trying to solve the finding know where to

look for some additional guidance. It would also be helpful to include the building number on the finding printout.

3. Develop a style guide to eliminate inconsistencies. This guide should address what information is acceptable in specific fields of the software, what is not acceptable, how to handle abbreviations, and the general issues of style and grammar.
4. Straighten out the format of the boilerplate in the introduction once and for all — if this is boilerplate, there is no reason for poor formatting to show up.
 - Indention and spacing of numbered titles is inconsistent. Recommend left justifying the entire section to enhance readability.
 - Bulleted text has too much space between bullet and text.
 - The assessment covers more than 15 categories or protocols.
 - The Activity Review (2.3) Section is inaccurate and incomplete. It includes activities that did not take place during the assessment and does not include activities that did occur (e.g., Air Emissions Management: *no* asbestos activity was observed; air permits *were* reviewed; CFC recovery *was not* observed, etc.).
 - Major Finding (2.4) definition should be clarified to identify that *all* environmental CFR noncompliance issues are classified as Major Findings.
 - Key to Tables (2.4) should be divided to identify Environmental ratings vs. IH and safety ratings.
 - Tables 2 and 3: EOH/Safety Compliance Status should not have a NUMBERED CLOSED column printed in the table since findings are never identified as CLOSED during the assessment.
5. Clearly delineate the principles governing the writing of one finding involving many locations vs. individual findings for each location where the same condition occurs.

6. Train assessors to use the manuals. They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals such as:

- Use checklist item number XX.2.1 TEAM Guide (XX stands for the appropriate two-letter section code) to write findings that are otherwise not found in the TEAM Guide, ANG Supplement Vol 1, or the state supplement.
- The presence of guidance pages in each section to facilitate finding the desired topic rather than paging through the manuals.

Actions taken: A preliminary instruction sheet was generated and sent to all assessors (see Appendix R). Workshops were held for contractors in October and November 1999 to discuss how to use the manuals and the basic principles of writing findings (see Appendix S for the training materials used). The contractor is developing a consistency notebook to provide instruction and reminders to their assessors. ANG is in the process of straightening out the boilerplate.

- The current method of root cause analysis does not provide any information as to why an assessor feels a particular root cause applies in a given situation. This justification does not usually appear in the finding of noncompliance.

Suggested solution: Add a field to the database for the assessor to write a justification for the root cause they select. This does two things: (1) it makes the assessor take the issue more seriously, and (2) it tells the installation what the assessor was thinking.

General

- Easy to use, ANG-sanctioned tools to promote consistency and facilitate the writing of accurate findings are not in place.

Suggested solution: Develop additional tools to facilitate use of manuals. Suggested changes and additions include:

1. Add a "Missing Checklist Item" placeholder in both Parts 1 and 2 of the ANG Supplement, Vol 2.

2. Add a standard checklist item under which to write positive findings — decide whether to put one in TEAM and one in each of the parts of ANG Supplement, Vol 2.

XX.2.1	Installations should go above and beyond environmental statutory and regulatory compliance (MP) [Added April 1999].	Determine if the installation has gone above and beyond simply complying with environmental requirements.
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3. Add a suffix to the ANG Supplement checklist items so they are easily differentiated from other manuals.
4. Create “cheat sheets” to identify the checklist item number to use for common findings in the three areas of assessment.

Action taken: Suggestions 1, 2, and 3 were implemented. Suggestion 4 has been implemented for the environmental aspect of the assessment process. Development of such a cheat sheet is planned for IH and safety.

- Currently, ANG conveys information on the status of the ECAMP to its installation personnel via e-mail. This practice results in limited information being shared and minimal cross-talk.

Suggested solution: Set up a website for ANG ECAMP where, at a minimum, the following are posted:

- links to the manuals used to perform ECAMP
- a running list of the 15 most common findings in Environmental, IH, and Safety areas for the last 6 mo (so the installation does not have to call around to find this out)
- any associated guidance documents
- a forum for information exchange on ECAMP so that people can ask questions about what is found during internal assessments.

Appendix A: Pre-visit Questionnaire

Sample Pre-visit Environmental Management Questionnaire	OPR	DATE		
ITEM	YES	NO	N/A	

This questionnaire will provide background information necessary to plan and conduct an environmental compliance assessment.

Name of Installation: _____

Air Emissions

1. Does the facility have any air emission operating permits?
 If yes, how many? _____
 For which facilities? _____

2. Does installation operate one or more fuel burners?

a. Central steam plant?	—	—	—
b. Hot water?	—	—	—
c. Other? _____	—	—	—
d. Approximate size of fuel burner _____			
3. Are any hazardous or toxic air pollutants present in the installation's air emissions (e.g., beryllium, mercury, and vinyl chloride)?

—	—	—
---	---	---
4. Is the installation subject to any of the following air emission standards:

a. Particulates?	—	—	—
b. NO _x	—	—	—
c. SO ₂ ?	—	—	—
d. Volatile organic compounds?	—	—	—
e. CO?	—	—	—
f. Toxic air pollutants?	—	—	—

 If yes, please specify source of standards: _____
5. Does the installation operate any incinerators (i.e., for classified documents, medical waste, solid waste, etc.)?

—	—	—
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 a. How many? _____
 b. What type? _____
 Attach list of locations.
6. Does the installation engage in:

a. Open burning?	—	—	—
b. Open detonation?	—	—	—
c. Fire fighter training?	—	—	—
7. Does the installation use any solvent degreasers?

—	—	—
---	---	---
8. Does the installation have a drycleaning facility?

—	—	—
---	---	---
9. Does the installation have a:

a. Spray painting operation?	—	—	—
b. Surface coating operation?	—	—	—

 Attach list of locations if answered yes to either.
10. Have installation emissions resulted in complaints from the public due to:

a. Odors?	—	—	—
b. Fugitive dusts?	—	—	—
c. Other? _____	—	—	—
11. Does the installation use air pollution control equipment?

—	—	—
---	---	---

Sample Pre-visit Environmental Management Questionnaire		OPR	DATE		
ITEM		YES	NO	N/A	
If yes, please list and explain:					

12. Does installation operate a motor vehicle station?		—	—	—	
13. Does the installation dispense fuel to motor vehicles?		—	—	—	
14. List each fuel storage area and the fuel type.					
Fuel type	Quantity	Fuel type	Quantity		
_____	_____	_____	_____		
15. Does the installation have active aircraft operations?		—	—	—	
16. Does the installation have active aircraft maintenance operations?		—	—	—	
17. Does the installation have aerospace ground equipment (AGE) operations?		—	—	—	
18. Does the installation recycle/reclaim CFCs or Halons? Where?		—	—	—	
19. Please list any additional shop activities that generate any form of air pollution:					

Cultural Resources Management

- | | | | |
|---|---|---|---|
| 1. Does the installation have a plan in place for managing the preservation of Native American and Hawaiian human remains and cultural artifacts? | — | — | — |
| 2. Does the installation have an area that is designated as any of the following? (If so, please have maps indicating locations available for team on arrival): | | | |
| a. Cultural resource? | — | — | — |
| b. Archaeological resource? | — | — | — |
| c. Historic structure? | — | — | — |
| d. Cold war resources | — | — | — |

Hazardous Materials Management

- | | | | |
|---|---|---|---|
| 1. Does the installation store any flammable materials? | — | — | — |
| 2. Does the installation transport any hazardous materials off-installation? | — | — | — |
| 3. Does the installation have a procedure to ensure the proper labeling, packaging, and spill response for hazardous materials? | — | — | — |
| 4. Does the installation store: | | | |
| a. Acids? | — | — | — |
| b. Caustics? | — | — | — |
| c. Flammables? | — | — | — |
| d. Combustibles? | — | — | — |
| e. Compressed gases? | — | — | — |
| f. Oxidizers? | — | — | — |

Hazardous Waste Management

- | | | | |
|---|---|---|---|
| 1. Does the installation produce any wastes classified as: | | | |
| a. Ignitable? | — | — | — |
| b. Corrosive? | — | — | — |
| c. Reactive? | — | — | — |
| d. Toxic? | — | — | — |
| 2. Which of the following classifications does the installation fall under? | | | |
| Conditionally Exempt Small Quantity Generator (generates less than 100 kg/mo) | | | |
| Small Quantity Generator (generates 100-1000 kg/mo) | | | |
| Generator (generates more than 1000 kg/mo) | | | |
| 3. Does the installation operate a TSDF onsite? | — | — | — |
| Permitted?_____ | | | |
| Unpermitted?_____ | | | |

Sample Pre-visit Environmental Management Questionnaire ITEM	OPR DATE		
	YES	NO	N/A
4. Does the installation treat or dispose of hazardous wastes onsite? If so, please specify waste type and treatment method:	—	—	—
5. Does the installation accept wastes from other installations for treatment, storage, or disposal?	—	—	—
6. Does the installation engage in the transportation of hazardous wastes:			
a. Onbase?	—	—	—
b. Offbase?	—	—	—
c. Central transport (transportation squadron)?	—	—	—
d. Individual unit transport?	—	—	—
7. Does the installation have a hazardous waste management (contingency) plan?	—	—	—
8. Does the installation have a spill, prevention, and response (contingency) plan?	—	—	—
9. Does the installation utilize other locations for the treatment, storage, or disposal of hazardous waste? Please specify:	—	—	—
10. Does the installation use any nonhazardous solid waste (including used oil) as a supplemental fuel source?	—	—	—
11. Does the installation have a contractor dispose of its hazardous waste? Which office monitors this contract?	—	—	—

Natural Resources Management

1. Does the installation have an area designated as a natural resource, including "highly protected" and "more generally protected"?	—	—	—
2. Does the installation have a plan for managing its natural resources?	—	—	—
3. Are there any areas on the installation that have any of the following? (If so, please have maps indicating locations available for team on arrival):			
a. Wetlands?	—	—	—
b. Flood Plains?	—	—	—

Other Environmental Issues

Environmental Impact Analysis Process (EIAP)

1. Does the base civil engineering office perform Environmental Planning functions?	—	—	—
2. Do they maintain copies of AF Form 813, Request for Environmental Analysis?	—	—	—
3. Does the Environmental Protection Committee review, and approve or disapprove environmental documents during the EIAP?	—	—	—

Environmental Noise

4. Does the installation have an active runway?	—	—	—
5. Does the installation have any operations or maneuvers that produce environmental noise (i.e., target ranges, skeet range, helicopter pad)?	—	—	—

Installation Restoration Program

6. Is the installation currently on the National Priority List (NPL)?	—	—	—
7. Does the installation currently have any designated IRP sites?	—	—	—
8. If IRP sites are present, does the installation maintain documentation of all interim and final remedial actions or decisions in the IRP program? Location of documents	—	—	—

9. For installations with IRP sites, the installation maintains the Administrative Record that details the physical situation at the installation?	—	—	—
a. Is the location of the Record easily accessible to the public?	—	—	—
b. Does the installation periodically advertise location of Records and Procedures for assessments?	—	—	—

Sample Pre-visit Environmental Management Questionnaire		OPR	DATE		
ITEM		YES	NO	N/A	
Pollution Prevention Management					
10.	Has the installation developed a pollution prevention management plan?	—	—	—	
11.	Are hazardous materials for the installation purchased centrally?	—	—	—	
12.	Does the installation purchase recycled products? If yes, what?	—	—	—	

Program Management					
13.	Does the installation include all environmental projects listed in the Civil Engineering Contract Reporting System (CECORS) in the A-106 report?	—	—	—	
14.	Does the installation have a single point of contact (POC) for the A-106 Pollution Abatement Plan?	—	—	—	
15.	Who is responsible for the quality and dating of the automated A-106?				

16.	Does the installation have a mechanism in place to ensure that the automated A-106 accurately reflects the project and requirement data maintained in other databases (CECORS, Programming Design and Construction (PDC), etc.)?	—	—	—	
17.	Does the installation accurately reflect financial data (obligations, expenditures) in the A-106 systems?	—	—	—	
Pesticide Management					
1.	Does the installation use pesticides in regulated quantities?	—	—	—	
2.	Do installation personnel apply pesticides?	—	—	—	
3.	Does the installation hire contractors to apply pesticides?	—	—	—	
4.	Are pesticide wastes disposed of at the installation?	—	—	—	
5.	Are pesticides stored on the installation?	—	—	—	
	Please list locations:				

6.	Are medical records kept for individuals involved in the management of pesticides?	—	—	—	
7.	Where are pesticides prepared at the installation?				

Petroleum, Oil and Lubricants (POL)					
1.	Does the installation have a motor pool?	—	—	—	
	a. How many? _____				
	b. Locations (if more than one)? _____				
2.	Does the installation store oil in large volumes?	—	—	—	
3.	Does the installation have a spill prevention and response plan?	—	—	—	
4.	Does the installation's spill plan include provisions pertaining to hazardous substances or hazardous wastes?	—	—	—	
5.	Does the installation conduct spill response training?	—	—	—	
6.	Does the installation use fuel bladders during field exercises?	—	—	—	
7.	Does the installation have any oil/water separators?	—	—	—	
	(Please have a map showing locations available for the team.)				
8.	Does the installation use a hydrant system for aircraft fueling?	—	—	—	
9.	Does the installation use fuel trucks for aircraft fueling?	—	—	—	
Solid Waste Management					
1.	Does the installation have a solid waste management facility onsite?	—	—	—	

Sample Pre-visit Environmental Management Questionnaire		OPR	DATE		
ITEM		YES	NO	N/A	
2. Does the installation have a:					
a. Resource Recovery Facility (DRMO) on the installation?		—	—	—	
b. Resource Recovery Facility (DRMO) off the installation?		—	—	—	
c. Sanitary Landfill?		—	—	—	
d. Construction Debris Landfill?		—	—	—	
e. Municipal Solid Waste Landfill?		—	—	—	
f. Solid waste incinerator?		—	—	—	
g. Solid waste recycling program?		—	—	—	
3. Does the installation have any unofficial landfill sites that are no longer in use?		—	—	—	
4. Is waste transported off-installation for disposal:					
a. In landfills?		—	—	—	
b. In incinerators?		—	—	—	
c. Others (specify): _____		—	—	—	
5. Does the installation dispose of ash residues or sludge:					
a. Onbase?		—	—	—	
b. Offbase?		—	—	—	
6. Is the installation monitored for:					
a. Leachate?		—	—	—	
b. Groundwater?		—	—	—	
7. Does the installation currently dispose of, or has it been used for the disposal of asbestos?		—	—	—	
8. Does the installation generate pathological wastes?		—	—	—	
9. Does the installation dispose of pathological wastes on base by incineration?		—	—	—	
Storage Tank Management					
1. Does the installation have an aircraft fuel storage area?		—	—	—	
If yes, do storage tanks have properly sized and constructed containment dikes equipped with draws?		—	—	—	
2. Does the installation have any active USTs		—	—	—	
If yes, how many are there and what size are they?	_____				
3. Does the base have any inactive USTs?		—	—	—	
If yes, where are they located, how many are there, and what size are they?	_____				
4. Does the installation have any active ASTs		—	—	—	
If yes, where are they located, how many are there, and what size are they?	_____				
5. Does the installation have any inactive ASTs?		—	—	—	
If yes, where are they located, how many are there, and what size are they?	_____				

6. Does the installation have any storage tanks containing hazardous waste?		—	—	—	
7. Does the installation have any storage tanks for used oil?		—	—	—	

Sample Pre-visit Environmental Management Questionnaire		OPR	DATE		
ITEM		YES	NO	N/A	
Toxic Substances Management					
PCBs					
1. Are PCB (polychlorinated biphenyl) or PCB-contaminated fluids in use or stored on the installation:					
a. Transformers?		—	—	—	
b. Capacitors?		—	—	—	
c. Switch gear?		—	—	—	
d. Circuit breakers?		—	—	—	
e. Other? _____		—	—	—	
2. Are there any PCB items in storage for disposal?		—	—	—	
Item	Concentration				
_____	_____				
_____	_____				
_____	_____				
3. Does installation dispose of PCBs or PCB-contaminated equipment on or offbase?		—	—	—	
Asbestos					
4. Does the installation have ANG-owned primary or secondary schools?		—	—	—	
5. Has the installation conducted a complete base-wide asbestos facility survey?		—	—	—	
6. Does the installation have a written Asbestos Management Plan?		—	—	—	
7. Does the installation have a written Asbestos Operating Plan?		—	—	—	
8. Does the installation operate an in-house asbestos removal team?		—	—	—	
9. Has the installation undergone any asbestos removal projects in the past?		—	—	—	
10. Is there any asbestos on the installation that has been removed and is awaiting disposal at this time?		—	—	—	
11. Will the installation have any demolition, remodeling, or renovation projects underway at the time of the ECAMP assessment?		—	—	—	
Please identify those projects and buildings:					

12. Does the installation maintain training records for asbestos workers?		—	—	—	
Location of records					

13. Does the installation dispose of asbestos on the installation?		—	—	—	
Radon					
14. Is the installation located in a geographic area where high levels of radon are typically found?		—	—	—	
15. Has the installation been monitored for radon?		—	—	—	
Location of records					

Wastewater Management					
1. Does the installation have a wastewater discharge permit?		—	—	—	
From whom? _____					
2. Does the installation have a NPDES stormwater permit?		—	—	—	
From whom? _____					
3. Does the installation have any discharges of the following:					
a. Stormwater runoff from operational or storage area?		—	—	—	
b. Stormwater runoff from undeveloped area?		—	—	—	
c. Dredge and fill solids drainage water?		—	—	—	
d. Wastewater treatment installation effluent?		—	—	—	
e. Process wastewater?		—	—	—	

[illegible]

Sample Pre-visit Environmental Management Questionnaire		OPR	DATE		
ITEM			YES	NO	N/A

Signature of individual completing this form: _____

Date completed: _____

ATTENTION: The following records should be available for review by the assessment team either prior to the assessment or immediately upon arrival at the installation.

(NOTE: Not all installations will have, or are even required to have, all of the following documents.)

General

1. Detailed maps of the installation indicating street names and building numbers. Enough for one for every member of the assessment team.
2. A phone list.
3. Copies of notices of violation (NOVs) issued to the installation in any of these areas.

Air Emissions Management

1. Air emissions inventory.
2. All air related permits.
3. A list of steam generating units and boilers and their size, fuel used, and locations.

Cultural Resources Management

1. Any cultural or archaeological resources surveys.
2. Management plans for cultural and archaeological resources.
3. A list of properties nominated for the National Register.

Hazardous Materials Management

1. A list of hazardous material storage/use areas.
2. A waste minimization plan.
3. MSDSs.
4. Documentation of personnel training.
5. The OHSPC plan.
6. A copy of any reports of spills.
7. Copies of the Tier I or Tier II reports.
8. Documentation on contaminated sites.

Hazardous Waste Management

1. The Hazardous Waste Management plan.
2. A list of hazardous wastes generated at the installation.
3. A list of waste generation/storage areas.
4. USEPA identification number.
5. Manifests.
6. Any permits.
7. The biennial report.
8. Personnel training records.

Natural Resources Management

1. The endangered species survey.
2. The Natural Resources Management Plan.
3. Any land management plans.
4. Recent EAs, EISs, FNSIs, or NOIs.

Other Environmental Issues

1. Current EAs, FNSIs, and EISs.
2. The AICUZ Study.
3. Noise complaints.
4. Pollution Prevention Management Plan.
5. Purchase orders for recycled materials.
6. CFC Halon purchase request.
7. The A-106.

Pesticides Management

1. The Pesticide Management Plan.
2. A list of pesticide storage sites.
3. Application records.
4. MSDSs for pesticides.
5. Personnel certifications for applicators.
6. Contracts for pesticide application.

POL Management

1. The SPCC plan.
2. A list of POL storage areas.
3. Upgrading and/or closure plans.

Solid Waste Management

1. Any contracts with waste haulers.
2. Any recycling plans.
3. All documentation pertaining to landfill operation or closure.
4. Records on groundwater sampling resulting from monitoring wells.

Storage Tank Management

1. A list of all USTs/ASTs and their locations.
2. Release detection documentation.
3. UST integrity test results.
4. Site contamination reports after tank removals.

Toxic Substances Management

1. The PCB inventory.
2. The PCB annual report.
3. The results of the asbestos survey.
4. The Asbestos Management Plan.
5. Radon survey results.

Wastewater Management

1. All NPDES/SPDES permits.
2. Maps of the storm, sanitary, and industrial sewers.
3. A copy of pretreatment standards imposed on the installation.
4. A list of maintenance shops/operations to include wash facilities.
5. Locations of holding ponds, sedimentation pits, and open/end-of-pipe discharge points.

Water Quality Management

1. Copies of drinking water test results.
2. Copies of reports to the state.

Environmental/Occupational Health

- Documentation of annual surveys of identified industrial work places and administrative workplaces.
- Records of exposure surveys.
- Records of audiometric tests.
- Records on exposure monitoring.
- Records on medical surveillance.
- Documentation of training.
- Records of exposure determination for bloodborne pathogens.
- Documentation on the hearing conservation program.
- Documentation on the respiratory protection program.
- Documentation on the permit space program.
- Documentation on the compliance programs for airborne contaminants.
- Copies of the health and safety plan for hazardous waste operations.
- Copies of the emergency response plan for release of hazardous substances.
- Copies of the exposure control plan for bloodborne pathogens.

Safety

- Facilities Inspection reports
- Copies of Written Training Plans
- CSP Binder Permit space program
- Emergency action plan and fire protection plan (if necessary)
- Hazard abatement log/plan
- Minutes of base Occupational Safety and Health Committee
- Occupational health metrics
- Environmental Differential Pay entitlements (if any)
- Log of occupational injuries and illnesses
- Spot Inspection Log

Appendix B: Example Enforcement Vulnerability Analysis

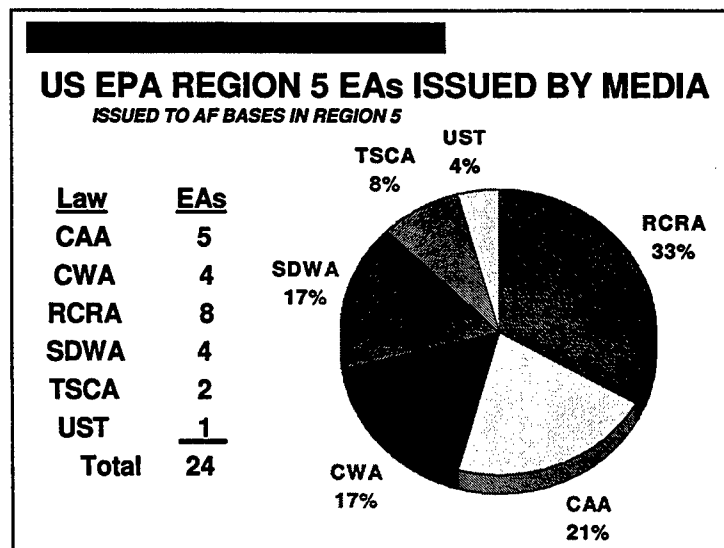
Slide 1



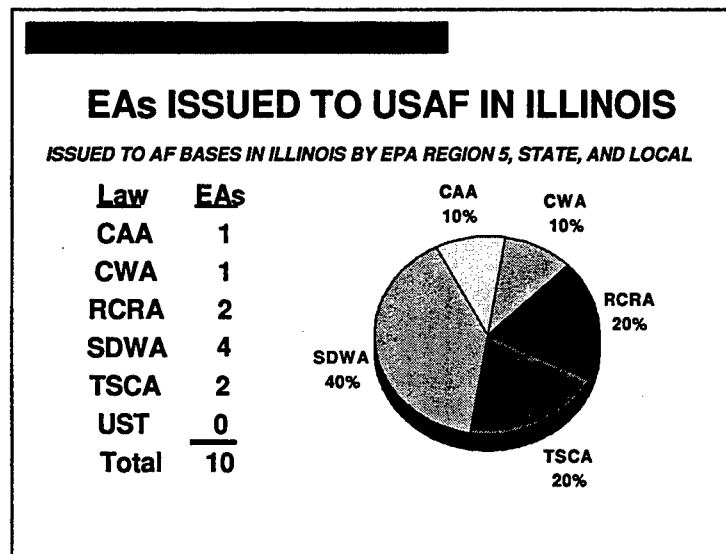
Enforcement Vulnerability Analysis
Capital Municipal Airport, Illinois
August 1998

Gary D. Lynn, RA
 Regional Environmental Officer
 Air Force Center for Environmental Excellence
 Regional Environmental Office - Central Region
 Dallas, Texas
 (214) 767-4858 FAX: (214) 767-4861

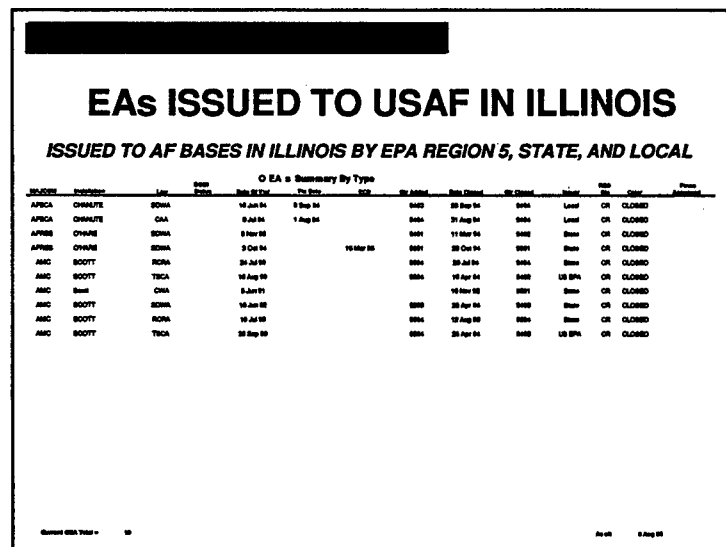
Slide 2



Slide 5



Slide 6



Slide 7

Regulator Issues/Concerns (Air Quality)

- Have not been able to contact as of 17 Aug 98.

Source:
Mike Elbol
Air Section
Illinois EPA
(217) 782-2113

Slide 8

Regulator Issues/Concerns (Water Quality)

- Have not been able to contact as of 17 Aug 98.

Source:
Thomas McSwiggin
Water Section
Illinois EPA
(217) 782-0610

Slide 9

Regulator Issues/Concerns
(Hazardous Waste)

- Have not been able to contact as of 17 Aug 98.

Source:
Doug Clay
Bureau of Land
Illinois EPA
(217) 782-6761

Appendix C: Example In-Brief

Slide 1



**Environmental Compliance
Assessment and Management
Program (ECAMP)**

CHUCK SMITH
DSN 278-8136

Slide 2



**ECAMP
Objectives**

ECAMP is Designed to:

- Enhance ANG Compliance With Federal, State, and Local Regulations
- Assure Commanders That Their EOSH Programs are Effective
- Provide Data for Identifying, Programming and Budgeting EOSH Programs
- Assist Base Personnel With Compliance, Training, and Program Requirements

Slide 3

ANGL  A World Class Organization

ECAMP
PROGRAM DESCRIPTION
Environmental Compliance Protocols

Air Emissions	POL
Cultural Resources	Solid
Hazardous Materials	Waste
Hazardous Waste	Storage Tanks
Natural Resources	Toxic Substances
Other Environmental Issues	Wastewater
Pesticides	Water Quality

Slide 4

ANGL  A World Class Organization

ECAMP
PROGRAM DESCRIPTION
Occupational Health Compliance Protocols

Basic Program	Lead
Illness and Injury	Cadmium
Hazard Communication	Benzene
PPE	Methylene Chloride
Occupational Noise	Bloodborne Pathogens
Ionizing Radiation	Emergency Response
Non-Ionizing Radiation	Sanitation
Ventilation	Confined Spaces
Spray Finishing	Ergonomics
Dip Tanks	General Construction
Air Contaminants	Asbestos Construction
Asbestos	Lead Construction

Slide 5



ECAMP
PROGRAM DESCRIPTION
Occupational Safety Compliance Protocols

Basic Program Elements	Lockout/Tagout
Illness and Injury Reporting	Fire Protection
Personal Protective Equipment	Materials Handling
Walking Working Surfaces	Machinery & Machine Guarding
Means of Egress	Hand & Portable Powered & Other Hand Held Equipment
Hazardous Materials	Welding Cutting & Brazing
Accident Prevention	Safety-Related Work Practices
Permit Required Spaces	

Slide 6



ECAMP
Compliance Definitions

Compliance - No Significant or Major Deficiencies
Non- Compliance - Deficiencies Were Identified

- **Significant Deficiencies**
 - Require Immediate Action
 - Are a Direct and Immediate Threat
- **Major Deficiencies**
 - Regulatory - Requires Action
 - Usually Will Result in a Notice of Violation (NOV)
- **Minor Deficiencies**
 - Mostly Administrative
 - Brief Periods When Requirements are Not Met

Slide 7

As National Guard A World Class Organization



Compliance Definitions Occupational Safety & Health

- Willful
- Serious
- Repeated
- Other

Slide 8

As National Guard A World Class Organization



Compliance Definitions Occupational Safety & Health

- **Willful**
 - A Willful Violation Is Defined As a Violation In Which the Employer Either Knowingly Failed To Comply With a Legal Requirement (Purposeful Disregard) or Acted With Plain Indifference To Employee Safety.
- **Serious**
 - A Serious Violation Exists When the Workplace Hazard Could Cause an Accident or Illness That Would Most Likely Result In Death or Serious Physical Harm, Unless the Employer Did Not Know or Could Not Have Known Of the Violation.

Slide 9



Compliance Definitions Occupational Safety & Health

- **Repeated**
 - An Employer May Be Cited For a Repeated Violation If That Employer Has Been Cited Previously For a Substantially Similar Condition. A Notice Of Unsafe or Unhealthful Working Conditions Is Viewed As a Repeated Violation If It Occurs Within 3 Years From the Final Abatement Date Of the Previous Notice. Federal Establishments Are Not Limited To the Specific Cited Establishment. For Example, a Multi-Facility Employer Can Be Cited For a Repeated Violation If the Violation Recurred At any Plant or Facility Within the OSHA Area Office Jurisdiction or Region wide.

Slide 10



Compliance Definitions Occupational Safety & Health

- **Other**
 - A Violation That Has a Direct Relationship To Job Safety and Health, But Is Not Serious In Nature, Is Classified As "Other".

Slide 11



**Air National Guard
ECAMP**

**As a Part of the Action Plan the
Base Must Submit A-106
Documents for Any Finding That
Requires Funding From ANGRC
The Air Guard Uses the A-106 as a
Budgeting Tool for Environmental
Funding**

Slide 12



**AIR NATIONAL GUARD
ECAMP**

Occupational Safety & Health

The base assigns a
Risk Assessment Code (RAC)
for any occupational safety & health
finding that requires additional funding.
The Air Guard uses RAC's as a
budgeting tool for OSH funding.

Slide 13



ECAMP
Evaluation Report Format - Five Sections

TEAM RESPONSIBILITIES

1. Executive Summary
2. Background and Scope
3. Environmental Compliance Status

BASE RESPONSIBILITIES

4. Action Plan
5. Distribution

Slide 14



ECAMP
**External Evaluation
Reporting and Follow Up**

Eight Step Process

- Pre-Evaluation Activities
- On-Site Evaluation
- Out-briefing and Draft Preliminary Environmental Findings
- Preliminary Environmental Findings Review (30 Days)
- Candidate Environmental Findings
- Proposed Action Plan and Candidate Environmental Findings Comments (45 Days)
- Final Environmental Evaluation Report
- Quarterly Update to Follow-Up Actions

Slide 15

6th National Guard A World Class Organization



**Deficiency Resolution
Tracking Form**

Deficiency Number:
Compliance Category:
Topic:
Planned Completion Date:
Actual Completion Date:
Current Status:
Proposed Solution:
Other Comments:
Base OPR:

Slide 16

6th National Guard A World Class Organization



**MEASURES OF MERIT
(ENVIRONMENTAL)**

**% CLOSED 30 DAYS, 90 DAYS, AND
120 DAYS**

- FINDINGS REMAIN OPEN UNTIL ALL ACTION IS COMPLETE
- WHERE FUNDING REQUIRED FROM ANG, BASE RECEIVES
MEASURE OF MERIT CREDIT WHEN ALL PROGRAMMING
DOCUMENTS COMPLETE

**REPEAT FINDINGS NEGATIVE
MEASURE OF MERIT**

Slide 17



MEASURES OF MERIT

Occupational Safety & Health

- % CLOSED
_____...within 30 days, 90 days & 1 year
- BEE reports these data each quarter for
MGen Weaver's Dashboard
- RAC costs are a separate metric.

Slide 18



ARGUING WITH AN
INSPECTOR IS LIKE
WRESTLING WITH A PIG IN THE MUD.
AFTER A WHILE YOU REALIZE
THAT THE PIG ENJOYS
IT....

Appendix D: Industrial Hygiene Shop List

Shop Code	Shop Name
0441-FAAG-001	A-10 AGE
FAEG-002	EGRESS
FAJM-003	A-10 PROPULSION
FAEL-004	A-10 ELECTRO/ENVIRO
FAMU-006	MUNITIONS
FAWA-007	ARMAMENT
FAPH-008	A-10 FLIGHTLINE/PHASE
FAAV-009	A-10 ECM
FAAV-012	A-10 MISSION SYS
FAAG-018	C-130 AGE
FAJM-019	C-130 PROPULSION
FAPH-021	C-130 FLIGHTLINE/ISO
FAAV-022	C-130 COM/NAV
XXXX-024	AERIAL PORT
FARC-025	C-130 R&R TIRE
FAND-031	NDI
FACC032	C-130 STRUCTURAL
FAPN-033	PNEUDRAULICS
FARC-034	A-10 R&R TIRE
FASR-035	A-10 STRUCTURAL
FAEV-036	C-130 ELECTRO/ENVIRO
FAFS-037	WELDING
FAFS-038	FUEL CELL
SUFU-046	POL/LAB
TRVM-048	VEHICLE MAINT
BAPP-055	PHOTO LAB
BAXX-058	SECURITY POLICE
CEFD-067	FIRE DEPARTMENT

Appendix E: Process Quality Assurance/ Quality Control (QA/QC) Form for Fort Wayne, IN

Installation Name: 122 FW

Installation Environmental POC: 1Lt Jack Gilbertsen

Phone: 219-478-3390

Email: jgilbertsen@infwa.ang.af.mil

Assessment Team Leader: Eric Dille (SAIC)

Phone: 303-279-7242 **Email:** eric.a.dille@cpmx.saic.com

Reviewer's Name: David A. Krooks

Phone: 217-352-6511 x7314 **Email:** d-krooks@cecer.army.mil

Dates of assessment: 1 - 4 December 1998

Dates of onsite review: 1 - 4 December 1998

Other Major POCs present: Chuck Smith, ANG/CEV, Debbie Folks-Huber (CERL)

Activities observed (examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

- In-brief
- Interviews with ANG/CEV personnel, Installation Environmental Manager, BEE Tech, MPH, and Safety Officer

- Accompanied industrial hygiene assessor to Fuels Maintenance, Engine Shop, AGE
- Accompanied safety assessor to Safety Office, Weapons Release Shop, Fuels Shop, AGE, Propulsion, Machine Shop
- Interviewed Contractor Team Lead
- Accompanied Environmental assessors to flightline satellite accumulation point, Corrosion Control, Propulsion Shop, Machine Shop, AGE, Weapons Shops
- Observed writing of findings and production of report
- Out-brief

General Comments

What was particularly noticeable during the in-brief was the care that Chuck took to make clear the distinction between the environmental and OSHA parts of the assessment. He carefully distinguished the protocols that would be evaluated in each area (environmental vs. industrial health vs. safety), the differing ways in which the findings from the environmental side would be rated as opposed to the ways in which the OSHA-related findings would be rated and the differing ways in which fixes would be funded (A-106 vs. RAC). He discussed the base's response to the draft report and how the installation's MAP was intended to include longer term fixes that would involve time, people, and dollars, but not near-term fixes such as providing training or affixing labels or drawing up a plan. He emphasized that the OPR is not the Environmental Manager or the Safety Manager or Military Public Health, but the person who really owns the fix. As to measures of merit, he discussed the positive one (finding closure rate) and the negative one (repeat findings), again taking care to emphasize that both environment and occupational health/safety were being evaluated.

The typical pattern of an ANG assessment is to spend the morning of Day 1 reviewing documentation, the afternoon of Day 1 in the shops, and all of Day 2 in the shops. The morning of Day 3 is devoted to more shop visits (if necessary), and report writing begins in the morning/afternoon of Day 3, with the out-brief on the morning of Day 4 (Friday), in this instance 0830.

The team is divided into three groups:

1. Environmental (Eric Dille, Jack Templeton, and Bonnie Carson [who is here as training for joining the team later], all of SAIC)
2. Environmental/Occupational Health (Bob Reisdorf of SAIC)
3. Safety (Gayla Anderson of SAIC)

ANG/CEV personnel received no Environmental Vulnerability Assessment from the AFCEE Regional Environmental Office prior to this assessment and did not attempt to obtain one.

Assessors receive a hard copy of the previous assessment onsite, and they take care to ensure that previous findings are addressed while they write their findings for the ongoing assessment. I did not have the impression that the previous findings were reviewed prior to site visits on the installation.

Assessors' findings are reviewed for quality, consistency, etc. during the process of writing. There is a (light) scrub for comprehensibility and completeness as the findings are written, but the real burden of QA appears to lie on the contractor's Program Manager (PM) and what she does with the draft findings during the production of the so-called candidate report. The candidate report results from the review of the findings by ANG/CEV and the SAIC PM after the installation has commented on them; the PM can make changes to findings (even if she was not part of the assessment itself) without consulting with the person(s) who wrote them, but she does not always delete/revise them without consultation. The candidate report will be going away as the use of the database begins.

The ANG allows for a distinction between an "observation/comment" and an actual finding. Though the assessor may have uncovered an actual deficiency, that deficiency may be noted in an observation/comment rather than in a finding. Usually, the type of driver makes a difference (AFI/DOD vs. CFR); the former would result in an observation/comment, the latter in a finding. Also, political/pastoral motives may lead to an observation/comment rather than a finding: it was reported that one installation had 26 major findings as its assessment drew to a close, and after that point, issues tended to be addressed in observations/comments rather than findings. It appears to be the case that the SAIC Team Leader makes this call, perhaps in consultation with the MAJCOM representative, though the assessors themselves may also decide to write an observation/comment. In one instance during this assessment, the assessor was having difficulty finding a regulatory driver and just decided to make an observa-

tion/comment rather than continuing the search for a driver. Positives have been noted heretofore in the observation/comment section. Now that the Air Force wants positive findings to be counted, they will be written as findings.

The main reason for the distinction between observation/comment and finding appears to be the sense that the assessors don't really have a way to motivate commanders to comply with things that they cannot be fined for.

Only major (for OSHA, serious) findings are reviewed at the out-brief. I was impressed with the clarity of the presentations the SAIC people made. Chuck wrapped up the briefing in his slightly diffuse fashion. The installation commander was present at the out-brief and seemed quite satisfied with the outcome of the assessment.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		NA
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.						
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.				X		
6. Cited a true finding, rather than someone's perception/application of a regulation, in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions. SAIC is not so tasked.						
8. Recorded findings daily.	X					
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.				X		
11. Displayed professional and courteous attitude.			X			
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.	X					
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions. SAIC is not so tasked.						NA
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.	X					

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers).				X		
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).			X			
22. Investigated for "root causes" of deficiencies/findings. SAIC is not so tasked.						NA
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.			X			
24. Informed other team members of potential concerns related to their assigned media protocols.						NO
25. Kept team leader informed of problems encountered by the team members.						NO
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.		X				
27. Information provided will help focus on problem areas.				X		
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				X		
29. New findings were discovered.				X		
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.	X					
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.						NA
32. Overall performance of the assessment team.			X	X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
34. Responded to QA/QC comments on findings of noncompliance.				X		
Comments: No team meeting was held after the in-brief. Assessors introduced themselves about 50% of the time. Assessors did not generally explain the ECAMP program at all. Assessors gave summaries of their findings upon leaving a shop less than 50% of the time. No assessor wrote findings prior to Thursday. The industrial hygiene assessor was careful to explain in each instance that the shop could expect visits from a team dealing with safety and from one dealing with environmental issues; he was only looking at occupational health issues. The environmental team's shop visits seemed to me cursory at best, mere walk-throughs. The team placed the greatest emphasis on hazardous materials/hazardous waste; only rarely were other protocols addressed. The contractors' team leader reported that the other protocols were covered as part of the paper chase or in interviews as they came up. Often I saw things that appeared to merit questions from the assessors, but the questions were not asked. (e.g., open container in flamm cabinet; washracks (where detergents could be/were used) that drain to O/W separators then to POTW); no inquiries were made as to the fate of filter media in Corrosion Control's paint booth; in the propulsion shop the assessors completely missed a side room that had a flamm cabinet in it that had a nasty VOC head when opened in the presence of another assessor.) The question of whether there were copies of the installation spill plan in the shops was never asked; the assessors did regularly ask about inspection records and logs for satellite accumulation points. The compliance assessment manuals do not appear to be used much at all. I asked the contractor Team Leader how assessors could be sure they were not missing things that they ought to be seeing. He observed that you could spend a month on the installation and still not see all that there was to see in TEAM Guide. It seems to me that the assessors rely entirely on their own capacities, eyes, and experience and that they use the manuals only as sources for hooks to hang their findings on. I should think that the use of the manuals as a review for completeness would enhance consistency across the installations and assessors, but that does not appear to concern either the ANG or the contractors. There is no team discussion of ratings. Instead, as each individual finishes writing, the results are passed to a colleague for review; the IH/Safety people reviewed each other's, and the environmental subteam reviewed theirs. The rough draft of the report was presented to the ANG lead at 1300 so that he could prepare for a briefing to the Support Group commander at 1400. This was the first time the ANG had seen the findings and the first time that anyone from the installation heard a formal presentation of the results of the assessment. The ANG lead did challenge some of the findings, resulting in the deletion of one and in changes to a number of others. The assessors spent some considerable time looking for citations after the findings themselves had been written and reviewed by the ANG lead. The emphasis appears to be entirely on the citation itself; the manuals are merely mines for citations; they do not seem to play much of a role in establishing whether or not a finding is legitimate. Once all the citations have been found, the team members searched the final version of the previous ECAMP report for carry-over and repeat findings.						

* NA = Not Applicable, NO = Not Observed

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the installation. SAIC does not appear to be so tasked.						NA
2. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		
3. Clearly explained the goal and purpose of ECAMP during the in-briefing.						NA - ANG's job
4. Familiar with the ECAMP process.				X		
5. Present and available throughout the assessment.				X		
6. Effectively performed as liaison between installation staff and assessment team.						NO
7. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.	X					
8. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.	X					
9. Coordinated daily assignments to ensure each site team is not excessive.						NA
10. Effectively out-briefed installation commander/staff.				X		
11. Overall performance of Team Leader.				X		
12. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.	X					
13. Held daily team meetings. People met, but there was no agenda.						NA
14. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e. satellite accumulation point clarification, inclusion of mobile source in SPCC).		X				

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
15. Ensured copies of TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel to use in developing the corrective action plan.						NO; they get what they need from DENIX
16. Ensured positive findings were "above and beyond" compliance.		X				
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		X	X			
Comments: State supplements are downloaded from DENIX. Usually one junior SAIC person is assigned the task of looking for state-specific information. No calls are made to state regulators on hot-button issues or issues of interpretation. Special facts relating to the states are, he said, usually uncovered in permits themselves and/or in the review of previous findings and conversations with installation personnel. There is no concentrated research effort directed at uncovering state-specific information. Any such information that is uncovered is communicated to other team members either face-to-face or by e-mail. The contractors' Team Leader was asked about ways in which he thought the ECAMP process could be improved. He suggested that the installation should review its own plans for currency and contents and provide the assessors with a list of deficiencies! It was also suggested that some protocols could be de-emphasized. It appears to me that this already happens in practice. He also suggested that the environmental team could perhaps be split, and that ANG might review its report formatting requirements. These, in his opinion, are quite burdensome. Perhaps the use of the database for report writing will relieve the assessors of a good deal of this type of work.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).				X		
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.						NO
4. Attended daily out-briefings and participated in discussions of findings. There were none.						NA
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings. There were none.						NA
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).				X		
7. Effectively coordinated the in-briefing and out-briefing.				X		
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.						NA
9. Acted effectively as liaison between the assessment team and installation personnel.				X		
10. Resolved problems encountered by the assessment team members.						NO
11. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
12. Objectively recommended assessment sites/facilities/operations. I don't know what this means.						
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).				X		
14. Appropriate installation personnel were available to the assessment team.				X		
15. Overall performance of Environmental Coordinator/Staff.				X		

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings and notification of tenants.				X		
17. Provided a complete PVQ to the assessment team.				X		
18. Reviewed assessor root cause selection/justification for accuracy.						NA
19. Allowed access to sites/facilities other than those on pre-determined list.						NA
There is no predetermined list.						
Comments: The EM had downloaded the PVQ from DENIX himself. The installation's ECAMP working group was instrumental in publicizing and organizing for the assessment. The main tool for publicity was e-mail. The principle players, though, (namely EM, BEE Tech, MPH, and Safety) had taken an AFIT ECAMP course by satellite some 6 weeks prior to the assessment. According to the EM, the course was particularly useful in helping them all to understand the ECAMP process. The preassessment publicity appears to have been effective; no shop personnel exhibited any surprise at the presence of ECAMP assessors on-base.						

Reviewers' Suggested Corrective Actions

ANG should consider traveling on Sunday and beginning its assessments on Monday, so as to allow time for a more intentional, corporate review of findings and enhance the depth with which assessors look at environmental issues.

A team meeting prior to the start of the assessment is crucial, especially when CERL QA is part of the picture. In addition to clarifying the goals of the QA process for them, assessors need to be reminded of the proper structure of an interview, of interviewing techniques, and of the goals of their activity; onsite educational opportunities were often missed during this assessment.

ANG should insist that assessors write findings daily.

ANG should insist on an intentional corporate review of findings.

No work appeared to have been done off the clock on this assessment. Working off the clock would help create the time necessary to conduct good team review of findings. Though I'm sure this is difficult to accomplish (especially with contractors), I do think the work ethic needs to change.

ANG should give serious consideration to eliminating the distinction between findings and observations/comments.

ANG should insist on getting a more intentional review of state/local issues and regulatory interpretations. Toward this end, ANG should be proactive in getting EVAs from AFCEE REOs prior to each assessment.

ANG should insist on a regular use/review of manuals by assessors as a control on the assessors' knowledge, consistency, and thoroughness.

ANG needs to define the precise scope of the assessment with respect to safety regulations/policies that are not part of the manual. There is no other obvious way to ensure that the various safety assessors are looking at the same issues across the Guard's installations and looking at them with the same degree of thoroughness. If the distinction between findings and observations/comments is preserved, and if ANG continues to want NFPA and parts of the CFR that are not in the manual to be assessed, perhaps these "beyond scope" issues should be addressed in observations/comments.

Appendix F: Process QA/QC Form for Louisville, KY

Installation Name: 123rd Airlift Wing Kentucky Air National Guard, Louisville, KY

Installation Environmental POC: Phil Aschbacher **Phone:** 502-364-9402

ANG Team Leader: Chuck Smith

Reviewer's Name: Donna Schell

Phone: 217-352-6511 **Email:** d-schell@cecer.army.mil

Dates of assessment: 9 – 12 March 1999

Dates of onsite review: 9 – 12 March 1999

Other Major POCs present (Representative from ANG HQ, other observers etc): None.

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday:

AM

- In-brief
- Environmental assessors review paperwork Tuesday morning. Paperwork available for review was: Hazardous Waste Management Plan; Groundwater Protection Plan; NPDES permit; air permits; waste analysis; waste disposal records; previous external ECAMP, internal ECAMP; hazardous waste annual report; SPCC; SWPP, P² plan. Interviewed Environmental POC to clarify issues related to hazardous waste, storage tanks, and wastewater,

asbestos (none onsite), PCBs (have disposal records from old base - none on-site now), pesticides (done by state maintenance; have annual application records); training records (in each shop for hazmat/haz waste, not centralized; AF 55, some stormwater centralized); Tier I/Tier 2 reports (Tier 2 done); air emissions inventory, wastewater monitoring results. Title V permit requirements do not apply;

PM

- Accompanied IH assessor to the motor pool, corrosion control, supply, and the paint booth-media blast area.

Wednesday:

AM

- Accompanied Environmental assessors to: AGE, Metal Processing/Welding, NDT, Structural Repair, Fuel Cell, Avionics, electro-environmental, pneudraulics, wheel tire maintenance.

PM

- Accompanied safety assessor to the Fire Department, the 205th, and Ops.

Thursday:

AM

- Interviewed shop POCs who were ECAMPed: Fuel Cell, motor pool, and CE.

PM

- Interviewed base personnel: Environmental Coordinator, Industrial Hygienist, Safety Manager.
- Present during writing of findings and creation of report.

Friday:

AM

- Out-brief

General Comments (Insert here comments which do not fit in comment boxes elsewhere in the form)

- Comment was made by the IH that, on the IH side of the house they thought that there was still some confusion over ECAMP versus the IG.
- At the out-brief, the NGB representative did a comparison between this base and others. This promotes a competitiveness in ECAMP.
- The out-brief slides were inconsistent – the Environmental slides indicate where the findings were found, neither IH nor Safety did.
- So much effort put into minimizing the severity of the findings at the out-brief, it was hard to figure out what the real findings were.
- Both the out-brief and in-brief were well attended.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.			X			
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.		X				
6. Cited a true finding, rather than someone's perception /application of a regulation in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.		X				
8. Recorded findings daily.		X				
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).					X	
10. Technically knowledgeable.			X			
11. Displayed professional and courteous attitude.			X			
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).		X				
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NA
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.				X		
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).			X			

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).		X				
20. Before departing, explained the potential findings to the senior person at each facility.	X					
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).		X				
22. Investigated for "root causes" of deficiencies/findings.	X					
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.		X				
24. Informed other team members of potential concerns related to their assigned media protocols.	X					
25. Kept team leader informed of problems encountered by the team members.						NA
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.	X					
27. Information provided will help focus on problem areas.						NA
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.			X			
29. New findings were discovered.			X			
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.		X				
32. Overall performance of the assessment team.		X				
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.		X				

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
34. Responded to QA/QC comments on findings of noncompliance.						NA
Comments: Assessors did not have copies (paper or electronic) of the TEAM Guide, the KY Supplement, the ANG Supplement, Vol 1 and 2. One assessor had the wrong version of the software. IH assessor clearly communicated the parameters of what he wanted to look at up front in 4 of the 5 shops visited. At the one shop where this was not done, the first one, he corrected the oversight part way through the visit. All assessors did a good job of introducing themselves personally. Environmental assessors only looked at paperwork in the shops at two of the nine shops visited (at Metal Process/Welding and Fuel Cell). Paperwork that should have been looked at was documentation for hazardous waste training, spill response training. No assessor was observed asking shop personnel if they had any questions. No assessor was observed asking shop personnel, other than supervisory, about what they did with waste or how they would respond to a spill, how did they use respirators, or could they find a MSDS sheet for a substance randomly pulled from a shelf/cabinet. The SOP was to let the shop supervisor take them on a tour. No assessor was observed giving a summation of potential findings to shop personnel. Assessors were not observed asking the "why" questions that get to root cause. QA person accompanied the IH assessor and the Environmental assessors to the Fuel Cell. The Safety assessor visited the area between the two. With the third team, the shop supervisor did not show the assessors as many areas as he did the first team. The assessment team did not question whether there were other areas. Having visited these other areas with the first team, there were potential environmental issues not reviewed (a wastewater recycler, a CFC compressed gas cylinder, and some miscellaneous materials in a storage room) by not asking this question. Findings are written in inconsistent styles, some are in present tense, some past; some start with an overarching broad statement, others start with the details. No QA of each other's findings was observed by assessment team members or the ANG representative. There seems to be little or no communication between assessors of issues of possible interest that cross team lines. In general, time was used ineffectively by reviewing paperwork during duty hours when facilities could be being assessed and people interviewed.						

* NA = Not Applicable, NO = Not Observed

PART 2. ANG TEAM LEADER						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.					X	
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.					X	
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.			X			
7. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.						NA
8. Coordinated daily assignments to ensure each site team is not excessive.		X				
9. Effectively out-briefed installation commander/staff.			X			
10. Overall performance of Team Leader.				X		
11. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.			X			
12. Held daily team meetings.						NA
13. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).	X					
14. Ensured copies of TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.	X					

PART 2. ANG TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
16. Ensured positive findings were "above and beyond" compliance.						
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		X				
Comments: The ANG NGB representative set the team up by stressing how wonderful this base was and how hard they worked the issues. This can lead to pressure to not find things and/or create an expectation they will not find things. No documentation of what areas were visited by who is required/requested.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).			X			
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.			X			
4. Attended daily out-briefings and participated in discussions of findings.						NA
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings.						NA
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
7. Effectively coordinated the in-briefing and out-briefing.				X		
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.				X		
9. Acted effectively as liaison between the assessment team and installation personnel.				X		
10. Resolved problems encountered by the assessment team members.						NO
11. Solicited ideas from assessors that could enhance the installation's environmental program.			X			
12. Objectively recommended assessment sites/facilities/operations.						NO
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).				X		
14. Appropriate installation personnel were available to the assessment team.					X	
15. Overall performance of Environmental Coordinator/Staff.				X		
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media					X	

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
sources, shop briefings, and notification of tenants.						
17. Provided a complete PVQ to the assessment team.					X	
18. Reviewed assessor root cause selection/justification for accuracy.						NO
Comments: Paperwork was not available as the assessment team got to their conference room. Environmental assessors asked for access to files, received permission, and raided the files themselves. One sign of base awareness of ECAMP was in the motorpool on the "daily jobs" whiteboard there was a sign "ECAMP starts March 8. Be Ready." When interviewed after the assessment, three of three shop supervisors commented that they wished the assessor would given them information about what they saw wrong. Two of the three shop supervisors interviewed commented that they felt like they were giving a tour, there were few questions, little interaction. Three of the three shop supervisors said they are unaware of the checklists that are being used as the standard for the assessment, but wish they knew what they were. Three of the three shop supervisors said they felt this to be more like an inspection than an "assistance" visit. In order to prepare for the ECAMP, base personnel sought out findings from other bases done recently. The Safety Manager felt the lack of "OSHA" or "Safety" in the title "ECAMP" was detrimental in his ability to convey safety is a part of ECAMP.						

Comments on the Louisville, KY DRAFT Report.

Finding Number	Comment
Introduction	The spacing of the bullets between the dot and the first letter of the text is too large and looks sloppy.
Section 3	The formatting of this section does not look correct. It looks like some indents are missing and it needs to be looked at in terms of what is really decided to be printed out in the reports.
03.001	The checklist item number that should be used for this is HM.1.3 TEAM Guide (29 CFR 1910.1200(b)(3)(i), 1910.1200(b)(4)(i), 1910.1200(b)(5), and 1910.1200(f)(5) through 1910.1200(f)(7)). This does not have any AFOSH citations. The AFOSH citations are not needed since there is a Federal regulatory driver that outweighs an AFOSH citation every time.
03.002	This should be written up against HM.35.9 TEAM Guide which has a more accurate citation of (29 CFR 1910.106(d)(7)) rather than just 29 CFR 1910.106.
03.003	This should be written up against checklist item HM.45.1 TEAM Guide which has the citation 29 CFR 1910.101.
03. Comments	Comment 1. Why isn't this a finding under HW.10.1 TEAM Guide for characterization? Or, if the material is in use, the assessor should have asked what is done with the weapons cleaning rags to determine if there was inappropriate disposal of the hazardous waste. At a minimum, it could have been written up for waste stream minimization under O4.15.3. Installations are required to work to minimize hazardous waste generation (AFI 32-7080, paras 3.3 and 3.3). Comment 2. No Comment.
04.001	Give an example of some of the things that are wrong — where did you see SAPs that were not in the plan, etc? The Hazardous Waste Management Plan is not a Federal Requirement. The Federal regulations cited are the requirement for an LQG to have a contingency plan. The contingency plan is not the same as the AF Hazardous Waste Management Plan and this base is an SQG not an LQG. It is strictly an AF requirement and should have been written up under HW.10.2. Installations that generate hazardous waste are required to have a Hazardous Waste Management Plan (AFI 32-7042, para 2.2 and Attachment 2).
04.002	What about the wastewater recycler at the Fuel Cell? The checklist item number is HW.10.1 TEAM Guide with citation (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11).
O4 Comments	Comment 1: This, and comment 4, should have been written up as a finding under HW.35.1 TEAM Guide (40 CFR 262.34(c)). These are finable offenses by state regulators depending on their interpretations of the SAP requirements. Since the assessment team does not call and ask for interpretation of these kinds of issues from the state, the most conservative approach should be taken with a suggested solution of getting documented guidance from the state. Comment 2 - No comment. Comment 3 - No comment. Comment 4 - see Comment 1. Comment 5 - Why wasn't this included in finding 04.002? The way it is written it sounds like there is actual improper disposal going on. What is actually happening to the waste solder?

Finding Number	Comment
	Does it go in the trash? Is it actually hazardous?
06.001	How many are multiple? 2? 5? 10? 20? This was written up under O4.15.1. ANG Supplement "Installations are required to develop procedures to centrally control the purchase and use of hazardous materials (AFI 32-7080, para 2.4.1)." Based on the suggested solution, it might have been better to write it up under O4.15.3. ANG Supplement "Installations are required to work to minimize hazardous waste generation (AFI 32-7080, paras 3.2 and 3.3)."
06.002	This should be listed as checklist item number O4.15.2. ANG Supplement "Installations are required to participate in the reduction of the USEPA 17 Industrial Toxics (AFI 32-7080, para 3.2)." The last sentence of the finding is a suggested solution – not a part of the finding description. Any suggestions on acceptable substitutes?
07.001	What types of pesticide is it commonly used for? This should be listed as checklist item PM.15.2. ANG Supplement "Equipment used for pesticide applications must be dedicated to the pest management operation and meet specific requirements (AFI 32-1053, para 3.6.)." The text of the AFI does not require the equipment to be labeled. This finding should be rewritten to focus on the non-pesticide uses the equipment is being used for, and the suggested solution is the labeling.
07.002	Is the issue there is a plan but it is not comprehensive, or there is no plan? This should be listed as under checklist item PM.1.2. ANG Supplement "Each installation is required to have a comprehensive pest management plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 2.4.5. and 2.4.7.) [Citation Revised June 1998]."
08.001	No comment.
08.002	Why does this have to be labeled - it is a part of the process, not a storage container in and of itself. Also, doesn't this stuff usually end up testing as hazardous waste and not used oil?
08.003	For a tank, this should be written up under ST - not POL. The correct checklist item number is ST.5.2 TEAM Guide "Drainage of rainwater from diked areas must be controlled by a valve that is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii))." What size tank is this and what is in it? Is it a mobile or stationary tank? What keeps the stormwater from going down the drain routinely?
08 Comment 1	Is enough spilled that it is a RQ? Is there a possibility the PO.15.1 TEAM Guide or PO.65.1 TEAM Guide encompass the situation? Need more information to rule them out. To me "on the ground" means onto the dirt - is that the case? How big of a stained area is there?
09.001	The citation listed in the report is found in SO.120.1.KY. Disposal of medical waste must meet specific standards (902 KAR 20:016, Sections 10(g) and 10(h)) [Revised November 1997; Revised November 1998]. But, the checklist item in the manual does not say anything about

Finding Number	Comment
	manifests. So it might be better to use SO.2.1 TEAM Guide to highlight it as missing from the manual.
15.001	The best place for this finding is LG.15.1, citing 29 CFR 1960.67(b). Chapter 39 on Illness and Injury Reporting was extensively revised in November of 1998. All references to 29 CFR 1904 were removed at the request of the sponsor in favor of 29 CFR 1960. Where were the hearing loss cases? Was the issue they were not recorded at all – or that they were recorded longer than 6 working days after receiving the information? Please clarify.
16.001	This should be listed against checklist item number HC.50.1. Installations must have an MSDS in the workplace for each hazardous chemical they use (29 CFR 1910.1200(g)(1) and (g)(8)). What specific products were identified as not having an MSDS? Was Supply the only place this was found? If it was only in Supply, delete the first sentence that makes it sound like this is a base-wide problem. If it occurs in multiple places, list all the places identified. Are we talking paper copies or electronic?
16.002	This should be listed against checklist item number HC.70.1. An inventory of all hazardous materials used within the work area must be developed and maintained (29 CFR 1910.1200(e)(1) (i)). The first sentence makes it sound like this is a basewide problem, not just 2 shops. If it occurs in multiple places, list all the places identified or use the form "X out of Y shops visited did not have all required MSDSs. Examples include:" Provide examples of what was missing from the inventory.
17.001	This should be listed against checklist item number PE.60.2. Installations that use cylinders or air compressors to supply breathing air to respirators must meet specific standards (AFOSH STD 48-1, para 8.3.3. through 8.3.3.3, 29 CFR 1910.134(i)(5) through 1910.134(l)(8)). NOTE: This is a somewhat different citation than that listed in the report, which actually applies only to IDLH atmospheres. What is the source of contamination?
17.002	The citations in the report are from two different checklist item numbers in the manual. PE.90.6. A respirator fit-test must be carried out for each wearer of a tight-fitting respirator at least once every 12 mo (AFOSH STD 48-1, para 6.2.3) and PE.90.1. Installations must meet specific requirements with regard to respirator fit-testing (29 CFR 1910.134 (f)(1) through 1910.134(f)(3) and AFOSH STD 48-1, para 6.2.1). PE.90.1 addresses the requirement to have fit testing. PE.90.6 addresses the AF requirement to do it annually. If the only issue here is the fit testing is not occurring annually, then PE.90.6 is the one that should be used. How many shops were visited and how many shops out of the total visited did not have annual fit testing? This is needed to indicate the severity of the problem.
17.003	This should be listed against checklist item number PE.10.1. Installations must provide, ensure the use of, and maintain protective equipment wherever circumstances require (29 CFR 1910.132(a) and 1910.132(b)).
17.004	This should be listed against checklist item number PE.20.1. Installation employees must use

Finding Number	Comment
	appropriate eye or face protection when exposed to certain hazards (29 CFR 1910.133(a)(1)). This and 17.003 use "in some instances," a phrase that is unhelpfully vague. What kind of PPE was actually in use in the battery shop in Supply? A wrong kind of PPE or none at all?
18.001	This should be listed against checklist item number NO.40.4. Installations must repeat monitoring of noise exposure under specific circumstances (29 CFR 1910.95(d)(3)). The citation in the report appears to be incorrect.
18.002	This should be listed against checklist item number NO.50.9. Installations must obtain an audiogram at least annually for personnel exposed to noise at or above an equivalent dose of 8-h at 85 DBA (29 CFR 1910.95(g)(6) and AFOSH STD 161-20, para 3-5a). "Personnel" should not be capitalized.
18.003	The citations in the report are from two different checklist item numbers: NO.60.4. Installations must evaluate hearing protector attenuation for the specific noise environments in which protectors will be used (29 CFR 1910.95(j)(1)) and PE.10.1. Installations must provide, ensure the use of, and maintain protective equipment wherever circumstances require (29 CFR 1910.132(a) and 1910.132(b)). I think the one that is really wanted is PE.10.1, which would than have a "17" prefix. What did you see to lead you to this conclusion — what is wrong with the hearing protectors?
18.004	This should be listed against checklist item number NO.30.3. Hazardous noise areas must be clearly identified (AFOSH STD 48-19, para 2.1.4.). Why are they needed? Why is this room a hazardous noise area?
25.001	This should actually be written under BE.10.2, citing DODI 6055.5, para F.1.a.(1), which requires comprehensive, periodic evaluations of all potential health hazards in the workplace. It's the preliminary determination of workplace exposure that's missing here; one does not know what the exposure is, so the finding should not be written using AS.10.1 "Installations must ensure that no personnel are exposed to an airborne concentration of asbestos in excess of certain limits (29 CFR 1910.1001(c)(1) and (c)(2))," a hook for actually exceeding an exposure level.
30.001	This should be listed against checklist item number BP.10.2. Installations where occupational exposure is possible must establish a written exposure control plan designed to eliminate or minimize personnel exposure (29 CFR 1910.1030(c)(1)(i)).
38.001	The requirement for annual inspections is found in BA.10.14. The safety staff and functional managers must inspect all AF facilities and work areas in accordance with specific requirements (AFI 91-202, para 3.1). But, I do not see the requirement for response there, nor do I find the cited AFI in the manual. How much is "some" — more than 10%, 30%, 75%? How many work orders were identified as being outstanding, out of how many reviewed?
38.002	This citation does not appear to be in the manual. Use checklist item number HM.2.1. TEAM Guide as a placeholder for now. What does "some time" mean - 1 year, 2 years, 5 years?
40.001	The citations used are found in two different portions of the manual. The 29 CFR 1910.132(d)

Finding Number	Comment
	citation is used throughout the PE.10 section and requirements specific to head protection are in SP.20.1. Installation employees must wear protective helmets under certain circumstances (29 CFR 1910.135(a)(1)). But, SP.20.1 talks about protection from falling objects, not "bump" protection. It is unclear whether this is really a requirement – at least based on the provided citations.
41.001	This should be listed against checklist item number WS.60.1. All ladders must be maintained in a safe condition and inspected regularly (29 CFR 1910.27(f)).
41.002	This citation listed in the report refers to WS.10.1. Places of employment, passageways, storerooms, and service rooms must be kept clean, orderly, and in a sanitary condition (29 CFR 1910.22(a)(1)). This seems to be a bit of a stretch for a finding about stuff stored on top of shelving. What types of items are we talking about?
41.003	This should be listed against checklist item number WS.10.1. Places of employment, passageways, storerooms, and service rooms must be kept clean, orderly, and in a sanitary condition (29 CFR 1910.22(a)(1)). What does "poor housekeeping" mean? Need description to clarify – one person's "poor housekeeping" could be another person's "tidy." Even though this would appear to be an appropriate use of 29 CFR 1910.22(a)(1), it is not clear that housekeeping issues should be addressed in an ECAMP finding unless there is a direct threat to health and/or safety.
41.004	These citations do not appear to be in the manual. This should be written up against HM.2.1. TEAM Guide for now.
42.001	This should be listed against checklist item number ME.20.16. Fire alarm signaling systems are subject to certain maintenance and testing requirements (29 CFR 1910.37(n)). What are the proper intervals – are they tested/maintained at all?
42.002	Are they tested/maintained at all? This should be listed against checklist item number ME.20.15. Automatic sprinkler systems are subject to maintenance, inspection, and testing requirements (29 CFR 1910.37(m)).
44.001	This AFOSH is not in the manual. Write findings under HM.2.1.TEAM.
45.001	This should be listed against checklist item number PS.10.17. Installations must prepare an entry permit before entry is authorized (29 CFR 1910.146(e)(1), (e)(2), and (e)(4)). The AFOSH citation is apparently not needed.
46.001	This should be listed against checklist item number LT.10.2. Installations must use specific criteria in determining whether to use a lockout or tagout system (29 CFR 1910.147(c)(2)(i) and 1910.147(c)(2)(ii)). The installation is permitted to use tags, if the same degree of employee protection is demonstrable. The finding does not indicate that use of tags in any way fails to provide full employee protection; it must, if there is to be a finding.
47.001	There is a typo in the citation. It should be 1910.159(c)(1), not 1919. This citation is not listed as a separate checklist item number, but it is referred to in FP.10.2.

Finding Number	Comment
	Installations must select and distribute portable fire extinguishers according to certain requirements (29 CFR 1910.157(d)). So there is a possibility of using FP.10.2 or to use HM.2.1. TEAM Guide.
47.002	This citation does not appear to be in the manual. This should be written up against HM.2.1. TEAM Guide for now. What was blocking it – a permanent fixture, a temporary fixture, what?
47.003	This should be listed against checklist item number SF.50.3. Sprinkler heads must be kept clean (29 CFR 1910.107(f)(3)). This is in section 22, not 47.
47.004	This citation is not listed as a separate checklist item number, but it is referred to in FP.10.2. Installations must select and distribute portable fire extinguishers according to certain requirements (29 CFR 1910.157(d)). So there is a possibility of using FP.10.2 or to use HM.2.1. TEAM Guide.
47.005	This citation is not listed as a separate checklist item number but it is referred to in FP.10.2. Installations must select and distribute portable fire extinguishers according to certain requirements (29 CFR 1910.157(d)). So there is a possibility of using FP.10.2 or to use HM.2.1. TEAM Guide. The title is "Incorrect Sprinkler Selected," but the finding sounds as if it is the right sprinkler installed incorrectly – which is it?
47.006	This citation does not appear to be in the manual. This should be written up against HM.2.1. TEAM Guide for now.
47.007	This should be listed against checklist item number HM.35.4. Storage cabinets used for the storage of flammable/combustible liquids must meet specific requirements (29 CFR 1910.106(d)(3)). This is a TEAM Guide checklist item number.
48.001	This should be listed against checklist item number MS.40.42. Periodic inspections that satisfy certain requirements must be performed (29 CFR 1910.179(j)(3)). Inspections may be required more often than once per year, depending on the host's activity, severity of service, and/or environment. The finding gives the false impression that the requirement is for annual inspections only.
48.002	This should be listed against checklist item number MS.40.3. Rated load markings must satisfy certain requirements (29 CFR 1910.179(b)(5)).

The following noncompliance issues were observed while accompanying the assessors, but not written as findings in the report.

- Universal waste in Avionics — there are a variety of batteries (lithium, alkaline, etc.) stored in Avionics labeled "Universal Waste." While a couple of questions were asked about the batteries, the following concerns were not addressed in findings:

1. Storage exceeded 1 year. This time limit can be exceeded if the reason is the small quantity universal waste handler is waiting to accumulate sufficient quantities for disposal. That was not verified in the QA/QC persons hearing. This is under HW.280.2 in TEAM Guide.
 2. Containers of universal waste were not closed. The batteries were being collected in open cardboard boxes. This is under HW.290.1 in TEAM Guide.
 3. There is training required that is specific to universal waste, not hazardous waste. No questions were asked and no paperwork reviewed. This is under HW.300.1 in TEAM Guide.
- According to the environmental manager, his January sample results exceeded the wastewater permit requirements. This was overheard on Tuesday when the environmental assessors were talking about items found in the paperwork review process. If this was in violation of a NPDES permit, it should have been written up under WA.10.1 TEAM Guide. If it is a stormwater permit, it should have been written up under WA.10.3 TEAM Guide.
 - While interviewing the Fire Department, there was a discussion about a fire hose in a hangar being the wrong type of hose. There is no finding documenting this.
 - While writing findings, there was a discussion about 29 CFR 1910.156 not being in the manual and the need to write it up against HM.2.1. in TEAM Guide. I do not know what the finding was about, but there is no safety finding with that citation.
 - Degreaser in the Fuel Cell. According to the BEE, this is an illicit degreaser and the Fuel Cell does not need it. Plus the Fuel Cell has not requisitioned the solvent in it through the correct channels but scrounged it from other degreasers. There is supposedly little to no need for this degreaser in the Fuel Cell operation. This could have been written as a waste minimization finding under O4.15.3 in TEAM Guide. Or, if the solvent was scrounged, I would be surprised if they had an MSDS sheet for it.

Reviewers' Suggested Corrective Actions

1. Improve utilization of time onsite. Assessors need to be using duty hours to be in the field — not in the team room reviewing paperwork or writing findings. Options to consider:
 - 1.a. Have either the ANG representative or the assessment team leader get to the base early enough on Monday (probably 2 pm) to gather up plans and paperwork that all assessors can review in their hotel rooms on Monday evening.
 - 1.b. Stress to the assessors that they are expected to be in the field doing interviews and site visits during duty hours.
2. Develop process to ensure assessors have the up-to-date manuals and software. Assessors must come into the field with the current versions of manuals if they are expected to use the manuals as the primary tool to which findings are tied. Assessors should know the following:
 - 2.a. U.S. TEAM Guide is updated quarterly, the new version is posted within the first 2 weeks of September, December, March, and June.
 - 2.b. State supplements are updated annually, usually within the month it was updated previously.
 - 2.c. ANG Supplement, Vol 1 (Environmental) is updated quarterly, the new version is posted within the first 2 weeks of September, December, March, and June.
 - 2.d. ANG Supplement, Vol 2 (IH and Safety) is updated quarterly.
 - 2.e. Current version number of software to be used at a site, not just a copy of the software.
3. Provide reminder/refresher training for assessors. Assessors need to be reminded of the following:
 - 3.a. Ask open-ended questions, not "you inspect this annually, right?"
 - 3.b. Look at the supporting paperwork in the shops.

- 3.c. Do not put the shop supervisor in the position of giving a guided tour, this should be an interactive process. Ask questions to let them show off their knowledge even if you know the process they are explaining backwards and forwards.
- 3.d. Talk to more than just the shop supervisors, ask personnel how they think things works.
- 3.e. Ask shop personnel if they have any questions.
- 3.f. Sum up what you saw at each shop to the shop supervisor. Sum up absolute findings, go over the findings that need additional research.
- 3.g. How to use the manuals. They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals.
- 4. Train assessors on how to use the manuals. They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals such as:
 - 4.a. Use checklist item number XX.2.1 TEAM Guide (XX stands for the appropriate 2-letter section code) to write findings that are otherwise not found in TEAM Guide, ANG Supplement Vol 1, or the state supplement.
 - 4.b. The presence and use of guidance pages in each section to facilitate finding the desired topic rather than paging through the manuals.
- 5. Develop additional tools to facilitate use of manuals.
 - 5.a. Add a "Missing Checklist Item" placeholder in both Parts 1 and 2 of the ANG Supplement, Vol 2.
 - 5.b. Add a standard checklist item to write positives up under — need to decide whether to put one in TEAM and one in each of the parts of ANG Supplement, Vol 2.

XX.2.1 Installations should go above and beyond environmental statutory and regulatory compliance (MP) [Added April 1999].

Determine if the installation has gone above and beyond simply complying with environmental requirements.

- 5.c. Add a suffix to the ANG Supplement checklist items so they are easily differentiated from other manuals. Suggested suffix is AG. Need decision on if this should be done for IH and Safety as the splitting of that document is starting.
- 5.d. Create "cheat sheets" that identify the checklist item number to use for common findings in the three areas of assessment.
6. Develop a site visit log for assessors in which assessors document where they have been. This type of log is valuable for both the installation and the next external team. It should be an appendix in the report that provides a heads up as to what was not assessed and should be looked at more closely the next time around. A possible log format:

Building number	Shop name	Room number if different than building number	Assessor (IH, ENV, or SAF)

- Develop tools to facilitate the base's preparation for ECAMP
 - ◊ Instead of using the vague and overwhelming list of paperwork in the current PVQ, create a specific and limited list. This list should be the most common types of paperwork actually found on an ANG base instead of all possible types of paperwork. Suggested environmental list includes:
 - * Air Emissions Inventory (AFI 32-7040, para 2.8)
 - * Air emissions permits, if applicable (usually state regulated)
 - * Cultural Resources Management Plan (if applicable), (AFI 32-7065, para 2.2 and DODI 4715.3, para D3(c) and Enclosure 7)
 - * Tier I or Tier II reports (Executive Order [EO] 12856; 40 CFR 370.20, 370.25, and 370.28)
 - * HAZMAT Plan 1 (AFI 32-4002, para 3.3)
 - * Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2)

- * Hazardous Waste Manifests (40 CFR 262.40(a), 262.40(c), 262.40(d), 262.42(b), 262.43, and 262.44)
- * Natural Resources Management Plan, if applicable (AFI 32-7064, para 2.1 and 2.3 and DODI 4715.3, para D2(b), D2(h), and Enclosure 7)
- * Bird/Aircraft Strike Hazard (BASH) Plan, if applicable (AFI 91-202, para 7.11.1.4 and 7.11.2)
- * EAs or EISs produced in the last 3 yr (NEPA)
- * P² Plan (AFI 32-7080, para 2.2 and DODI 4715.4, para F2(c)(2))
- * Halon 1301 Management Plan (ETL 95-1 implementing AFI 32-7080)
- * Pesticide Management Plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 2.4.5. and 2.4.7.)
- * Solid Waste Management Plan (AFI 32-7042, para 3.2)
- * Spill Prevention Control and Countermeasure Plan, if applicable (40 CFR 112.7)
- * Storage Tank Inventory (AFI 32-7044, para 3.2 and AFI 23-204, para 3.6.2, 13.1, and 13.3)
- * Asbestos Management Plan and Operating Plan, if applicable (AFI 32-1052, para 5 and 6)
- * LBP Management Plan, if applicable (HQ USAF/ CC Policy letter 24 May 1993, para 6)
- * Wastewater/stormwater permits, if applicable (40 CFR 122.1(b)(3), 122.26(c) and 122.26(g))
- * List of oil/water separators.
- * Wastewater/Stormwater sampling results for the last year.

A similar list should be created for the IH and Safety arenas.

- ◇ Set up a web site for ANG ECAMP where the following things are posted:
 - * link to the manuals
 - * a running list of the 15 most common findings in environmental, IH, and Safety areas for the last 6 mo so the installation does not have to call around to find this out
 - * any associated guidance documents
 - * a forum for info exchange on ECAMP so that there is a place to ask questions about what people find in internals.
- ◇ Publicize DENIX outside of the main offices; it should be being used at CE, Ops, flight line, etc.
- ◇ Shop-specific manuals. If CERL moves to using ACCESS to write its manuals, this can be done by indexing the individual checklist items with appropriate terms (e.g., Vehicle Maintenance, Painting/Depainting). Otherwise, alternatives need to be explored to find a way to provide the shops with manageable copies of what they are being assessed against.
- Improve content and usefulness of findings.
 - ◇ Need background information to assure validity of finding. Perhaps a table of questions that clarify status in various areas that goes in the introduction. This will only work if the introduction accompanies the findings at all time. Types of information of interest are:
 - * Hazardous waste generator status and why (SQG, EPA ID number; CESQG, amounts observed...)
 - * Amount of POL stored aboveground and amount stored underground.
 - * Any permits.
 - ◇ On the printed copy, need to know the checklist item number used to write the finding. This helps the QA person in determining if the finding is written in the correct place. It also helps base personnel who are trying to solve the finding know where to look for some additional guidance.
 - ◇ Develop a style guide to eliminate inconsistencies.

- ◇ Have the format of the boilerplate in the introduction straightened out once and for all — if this is boilerplate, there is no reason for bad formatting to show up.
- ◇ It would be extremely helpful to know what principles govern the writing of one finding involving many locations vs. individual findings for each location where the same condition occurs.
- Improve root cause analysis process. Add a field to the database for the assessor to write a justification for the root cause they select. This does two things, (1) it makes the assessor take the issue more seriously, and (2) it tells the installation what the assessor was thinking.
- Enhance and standardize the out-brief.
 - ◇ Add a slide at the end summarizing the installation's responsibilities — may not have the same people at the out-brief as were at the in-brief.
 - ◇ Add a slide at the end talking about where we go from here — trend analysis, etc.
 - ◇ Use the same style and format on slides across Environmental, IH, and Safety.
 - ◇ Get the assessors to stick to the facts as to what is wrong instead of trying to mitigate up front. If needed, close with mitigating comments.
 - ◇ With three different topics being out-briefed, it is important for briefers to remember that there are going to be people in the audience who have no clue of their subject area. So slides need to be explicit and clear.

Appendix G: Process QA/QC Form for Atlantic City, NJ

Installation Name: 177 Fighter Wing, Atlantic City, NJ

Installation Environmental POC: Major John Elwood

Phone: 609-383-6328

Assessment Team Leader: Robert Reisdorf, SAIC

Reviewer's Name: Tina Hurt

Phone: 217-373-3441 **Email:** t-hurt@cecer.army.mil

Dates of assessment: 16 – 19 March 1999

Dates of onsite review: 16 – 19 March 1999

Other Major POCs present (Representative from ANG HQ, other observers etc): LTC Ramon Cintron, NGBRC

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday:

AM

- In-brief
- Environmental/IH/Safety reviewed paperwork. Environmental met with Maj Elwood to look up reports/permits/plans/documentation while IH had quite everything available to start review. Environmental reviewed air permits, spill plans, the hazardous waste management plan, pest management plan, pollution prevention plans, NPDES permits and stormwater plans, UST re-

cords, PCB records, medical waste documentation, and previous external ECAMP.

- Accompanied IH assessor to Aircraft Fuel Systems.

PM

- Accompanied Safety assessor to the 242 hangar, fuels, AGS, tire shop, electrical shop, 441 Hangar, and supply.

Wednesday:

AM

- Accompanied environmental assessors to survey Warren Grove Bombing Range (108/ARW/DET-1).

PM

- Accompanied safety assessor to the POL tank farm.
- Accompanied environmental assessors to AGE, Avionics, EOD, TMO, HW Central Point, CE Yard, Pump House, and Fire Department.

Thursday:

AM

- Observed environmental findings discussions.
- Interviewed Safety POC.
- Interviewed IH POCs.
- Interviewed shop POC at the Hangars, Fuels, and Hydraulics.

PM

- Observed report preparation and out-brief meeting.
- Observed out-brief.

General Comments (Insert here comments which do not fit in comment boxes elsewhere in the form.)

Environmental assessors would be more efficient assessing by each being responsible for a specific section rather than all 3 evaluating the same 13. It appeared to be confusing when trying to figure out where something was observed deficient. Each assessor had a different note or visual recollection of the particular area. If, for instance, one person was mainly responsible for HW, HM, and SW, when inspecting the shops as a group, they would be more thorough and focused in those areas. It appeared that protocol areas were missed and the obvious activities were looked into based on being familiar with ANG facilities.

- The out-brief emphasized how quickly findings were corrected and closed out while not conveying the importance of the root cause and acknowledging the "snapshot in time" concept to allow for additional internal review in other areas where this finding could occur.
- Comment was made by the Safety POC that having a way to share information would be helpful via ANG Bulletin Boards. This would create an avenue to share lessons learned, new technology, and more efficient practices not otherwise known.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.			X			
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.		X				
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.		X				
8. Recorded findings daily.	X					
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.				X		
11. Displayed professional and courteous attitude.			X			
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).		X				
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.	X					
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.		X				
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.		X				
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).			X			

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.	X					
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).	X					
22. Investigated for "root causes" of deficiencies/findings.	X					
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.		X				
24. Informed other team members of potential concerns related to their assigned media protocols.	X					
25. Kept team leader informed of problems encountered by the team members.						NO
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.	X					
27. Information provided will help focus on problem areas.						NA
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.		X				
29. New findings were discovered.						NA
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.		X				
32. Overall performance of the assessment team.			X			

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.		X				
34. Responded to QA/QC comments on findings of non-compliance.						NO
Comments: Assessors did not have paper copies of TEAM Guide, the NJ Supplement, or the ANG Supplement, Vol 1 and 2. Electronic files observed being referenced were out-of-date TEAM Guide sections. Electronic NJ or ANG Supplements were not observed being referenced. The Safety and IH POCs introduced assessors and summarized what the purpose of their visit was. The Safety and IH assessors interactively surveyed the facilities with the shop POCs and explained deficiencies or possible noncompliance issues as they were encountered. The Environmental POC did not introduce the assessors and only announced that the ECAMP assessors were going to look around. The Environmental assessors did not introduce themselves and appeared as inspectors asking very few questions and merely doing a walk through. In many shops, documentation may have been questioned but never reviewed. The Environmental POC requested that the Environmental assessors look at the HW SAP logs instead of just asking if they had them. Assessors were not observed asking shop personnel if they had any questions. Environmental assessors did not interview shop personnel in areas of spill response, hazardous material/waste handling, POL practices, or general daily practices. Shop supervisors commented that the visit was more like a tour and assessors gave little or no indication of deficiencies. One shop supervisor, being familiar with TEAM and ANG supplement, commented that the internal assessment they perform is more thorough and wondered what protocol was being used since very few questions were asked. Outfalls and installation perimeters were not observed being inspected. Hazardous Waste Central Accumulation point requirements, i.e., alarm, spill response, etc., were not observed being questioned, HW.80.4 TEAM. WARREN GROVE BOMBING RANGE Assessor did not request to see antifreeze/oil pickup contract. Assessor did not request to see the Solid Waste Disposal Contract. No AST logs were looked at. Facility has one 2000-gal diesel and one 1000-gal gasoline AST. Integrity testing is required under ST.5.4 TEAM (40 CFR 112.7(e)(2)(vi)). Assessor recommended changing the ACCUMULATION POINT sign on the hazardous waste storage area to SATELLITE ACCUMULATION POINT. This area is managed as a 180-day storage area, not as an SAP, and it is not at or near the point of generation under the control of one individual.						

* NA = Not Applicable, NO = Not Observed

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		NA
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.						
3. Familiar with the ECAMP process.				X		
4. Present and available throughout the assessment.				X		
5. Effectively performed as liaison between installation staff and assessment team.				X		
6. Reminded team of essential elements (i.e., goals and objectives of ECAMP, interviewing techniques) prior to the start of the assessment.			X			NA
7. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.		X				
8. Coordinated daily assignments to ensure each site team is not excessive.		X				
9. Effectively out-briefed installation commander/staff.			X			
10. Overall performance of Team Leader.			X			
11. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NA
12. Held daily team meetings.		X				
13. Obtained pertinent local regulations (i.e., pre-treatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).	X					

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
14. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.	X					
16. Ensured positive findings were "above and beyond" compliance.		X				
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		X				
Comments: The assessment Team Leader did little to no daily coordination with the group to determine sites to be visited, areas of concern, and status of protocol areas. Daily information out-briefs were requested by the Environmental Coordinator but were never held. This daily recap would provide for a more efficient assessment and work environment by sharing concerns, clarifying notes/questions, and developing a plan for the next day while informing the POC of daily findings. The out-brief was not rehearsed, performed in a very casual nature in the presence of the Commander and General, and did not clearly identify deficiencies. Emphasis was put on findings being an isolated situation that was corrected instead of conveying the snapshot in time concept and identifying the potential root cause so this deficiency could be looked into at all similar locations.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).					X	
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.		X				
4. Attended daily out-briefings and participated in discussions of findings.						NA
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings.						NA
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
7. Effectively coordinated the in-briefing and out-briefing.					X	
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.					X	
9. Acted effectively as liaison between the assessment team and installation personnel.				X		
10. Resolved problems encountered by the assessment team members.						NA
11. Solicited ideas from assessors that could enhance the installation's environmental program.		X				
12. Objectively recommended assessment sites/facilities/operations.				X		
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					X	
14. Appropriate installation personnel were available to the assessment team.					X	
15. Overall performance of Environmental Coordinator/Staff.					X	
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop					X	

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
briefings and notification of tenants.						
17. Provided a complete PVQ to the assessment team.					X	
18. Reviewed assessor root cause selection/justification for accuracy.						NO
Comments: IH paperwork was ready to be reviewed while assessors gathered environmental paperwork as needed from the Environmental Coordinator's files and shelves. The Environmental Coordinator announced the ECAMP at a facility-wide safety meeting and explained the process, preparation procedures, and what to expect the day of the assessment.						

Comments on the Atlantic City, NJ, Draft Report

Finding Number	Comment
Background	Indentation and spacing of numbered titles is inconsistent. Recommend left justifying the entire section to enhance readability. Bulleted text has too much space between bullet and text. The assessment covers more than 15 categories or protocols. The Activity Review (2.3) Section is inaccurate and incomplete. It addresses activities that did not take place and does not address the activities that did (i.e., Air Emissions Management: no asbestos activity was observed; air permits <i>were</i> reviewed; CFC recovery <i>was not</i> observed etc.). Major Finding (2.4) definition should be clarified to identify that <i>all</i> environmental CFR noncompliance issues are classified as Major Findings. Key to Tables (2.4) should be divided to identify Environmental ratings vs. IH and Safety ratings. Tables 2 and 3: EOH/Safety Compliance Status should not have a NUMBERED CLOSED column printed in the table since they are never identified as CLOSED during the assessment.
Section 3	This section does not read well. The information is bunched up and in incomplete sentences. The margins for the introduction area are too large.
03.001	Are they in use or in a cabinet being stored with no projected use? Other option for labeling would be helpful, i.e., tagged, etc. How many grease guns?
04.001	The suggestion mentioned in the condition statement should be moved to the Suggested Action column. What kinds of batteries and how many? The finding was written up against a criteria for Small Quantity Handlers of Universal Waste, the finding does not indicate what size universal waste generator the base actually is. The statement (This deficiency is closed) is spaced to close to the next finding. Also, how this finding was corrected would be helpful.
04.002	What kinds of batteries and how many?
04.003	Was there paint on the paint stencil? What kind of paint was in the paint can— not all paints are considered hazardous waste. What size hazardous waste generator is the base — if a CESQG, this kind of disposal would be allowed in some states if acceptable to the local landfill. How do you know they were determined to be hazardous? By whom? How?
04.004	What waste streams and quantities were observed at the SAP?
04.005	Was the assessor looking for spill response training (TEAM PO.5.7. All installation/CW facility personnel involved with the management and handling of oil must take part in periodic training in spill prevention and response (40 CFR 112.1(d) and 112.7(e)(10))? OR, was the assessor asking about hazardous waste training? If hazardous waste training is the issue, the finding needs to be written indicating that the hazardous waste

Finding Number	Comment
	training was insufficient because it did not address spill response. Did the assessor look at the training syllabus? How do you know this facility is an LQG? As a reviewer I can only make that assumption based on the citation used to write the finding. When was the training done?
04.006	How and when have fluorescent lightbulbs been determined to be a hazardous waste? This is not true in all cases and all states. What is the point of generation that this SAP is "at or near"? How many bulbs are we talking about?
04.007	This is more of a comment and something to mention in the out-brief. Is there a specific act above and beyond compliance, i.e., special tracking system, innovative training method?
04 Comment	No comment.
07.001	Suggested solution could indicate what the pest management plan is required to include appropriate to this installation. This item is identified as closed although the completed pest management plan was not available for review before departure and required MAJCOM approval.
14.001	AFI-48-145 is not part of the citation in BE.10.3. If there is an additional requirement that goes beyond the CFR in that AFI that is not being fulfilled, it should be written as a separate finding under HM.2.1. TEAM.
15.001	This should be two separate findings; LG.20.1 for maintaining a log and LG.10.1 for reporting the incident to safety. This protocol is 39 not 15. The finding is not clear whether there is a log and it is inadequate, or there is no log at all. How do you know it is not being reported - did the assessor have other documentation or information that there has been a hearing loss case that was not reported?
17.001	This should be two separate findings; PE.10.3 conducted assessment 29 CFR 1910.132(d)(1) and PE.10.4 provide written certification 29 CFR 1910.132(d)(2). What does "most" mean? 51%, 70%, 90%? How do you know this – by interviewing people, by document review, what?
17.002	This should be two separate findings; PE.30.5 OIs AFOSH and PE.30.16 updated to reflect changes in the workplace 29 CFR 1910.134(c)(1). Need to clarify which sites had no OIs and which had inadequate OIs. The discussion on what an OI should contain belongs in the suggested action.
17.003	The correct citation for this finding is PE.60.3, 29 CFR 1910.134(i)(8), not 29 CFR 1910.134(d)(3). An old version of the CFR or manual is being used.

Finding Number	Comment
17.004	AFOSH 91-31 para 2.10 is not in the manual. If there is an additional requirement that goes beyond the CFR in that AFI that is not being fulfilled, it should be written as a separate finding under HM.2.1. TEAM. This appears to be three separate findings: PE.10.2 29 CFR 1910.132(c) Correct PPE for the activity. PE.10.3 29 CFR 1910.132(d)(1) Activity requires PPE. PE.10.4 29 CFR 1910.132(d)(2) Written certification of hazard assessment. Split out the issues and clearly identify what and where they are. The finding condition does not mention the incomplete PPE hazard assessment that is mentioned in the Suggested Action. This is addressed in 17.001 and should also have been written up under PE.10.3. The suggested solution should identify how to correctly select proper PPE.
17.005	Shouldn't a part of the suggested action also be that they get they right kind of respirator? Or was the correct type of respirator available at certain locations, but not being used?
17.006	This should be written against PE.100.2 29 CFR 1910.134(h)(2) and AFOSH STD 48-137, para 8.2.2. An old version of the CFR or manual is being used. The citation listed pertains to fit testing. Sentences 3 and 4 are unnecessary.
18.001	This should be written against NO.50.9 not NO.50.1. All information and citation is correct, just tied to the wrong checklist item number. What percentage of the shops reviewed have this problem? "Several" is a meaningless term. Sentences 3 and 4 are the suggested action - not the finding.
30.001	Within the condition statement, replace should with is required to be reviewed and updated annually ... When was it last updated? Did the assessor observe any new or modified task that needs to be included in the update?
40.001	AFOSH 127-32 is not part of the manual. Use HM.2.1 TEAM to write the finding. Where was this observed? The last sentence of the finding is the suggested action, not a part of the description of what is wrong.
41.001	AFOSH 91-22 is not part of the manual. Use HM.2.1 TEAM to write the finding. How do you know this - was there a lack of paperwork - where did you see fixed ladders that must be inspected?
41.002	Why are pipes on the floor bad housekeeping? Are they scattered — is this area used for daily operations - what type of activities take place that could be hazardous, etc?

Finding Number	Comment
46.001	Is this adequate or should a finding about training etc. be written up. LOTO was not used properly – training sounds like the issue. The finding description has a list of things that it says are not happening, but the suggested action does not seem to address the same things.
47.001	ANGETL 97-1 and 29 CFR 1910.165(e)(2) are not part of the manual. Use HM.2.1 TEAM to write the finding.
47.002	Suggested action should not include "should." Inspect on a monthly schedule. "Several" implies more than two areas, only two are identified. Were they the only two areas? If not - where were the other ones?
47.003	29 CFR 1910.159(a)(2) is not part of the manual. Use HM.2.1 TEAM to write the finding.
49.001	Citation for MG.40.2 is 29 CFR 1910.215(b)(3) and (b)(9). AFOSH 127-12, 4-2.c(2) is not part of the manual. If there is an additional requirement that goes beyond the CFR in that AFI that is not being fulfilled, it should be written as a separate finding under HM.2.1. TEAM.
49.002	Suggested Action should include "Fabricate according to required specifications ...".

177th Fighter Wing

The following noncompliance issues were observed while accompanying the assessors, but not written as findings in the report:

- Medical waste documentation was incomplete. No return manifest was documented for the December shipment of waste, and no log was found for the March shipment. The last external identified a finding pertaining to the Medical Waste Disposal Contract, which did not appear to be looked into. (While reviewing the medical waste documentation, the only contract included was from 1993.) If tracking forms and/or exception reports are not complete, SO.125.5.NJ (NJAC 7:26-3A.21(a) and (c)) should be a finding. If annual medical waste generator reports are incomplete, SO.125.7.NJ (NJAC 7:26-3A.21(h)) should be a finding.

Warren Grove Bombing Range

Finding Number	Comment
Background	Indentation and spacing of numbered titles is inconsistent. Recommend left justifying the entire section to enhance readability. Bulleted text has too much space between bullet and text. The assessment covered 13 environmental categories. The Activity Review (2.3) Section is inaccurate and incomplete. It addresses activities that did not take place and does not address the activities that did (i.e., Air Emissions Management: no asbestos activity was observed; air permits <i>were</i> reviewed; CFC recovery <i>was not</i> observed etc.). Major Finding (2.4) definition should be clarified to identify that <i>all</i> CFR non-compliance issues are classified as Major Findings.
Section 3	This section does not read well. The information is bunched up and in incomplete sentences. The margins for the introduction area are too large.
03.001	The citation is incorrect for this finding. HM.1.3 29 CFR 1910.1200(b)(3)(i), 1910.1200(b)(4)(i), 101-1200(b)(5), and (f)(5) through (f)(7) should be used. Other option for labeling would be helpful, i.e., tagged, etc. How many grease guns?
12.001	The first sentence should indicate "discharging without a permit." What detergent? What is the average usage of the facility? Suggested Action should also indicate the use of another means to wash vehicles in the interim.

COMMENTS:

New oil containers were being drained into a drum labeled Waste Oil (Is it contaminated? Handled as a hazardous waste?). Why not USED OIL (since mixed fresh product) to be recycled? PO.65.6 TEAM (40 CFR 279.22(c)) requires used oil containers to be labeled USED OIL.

Only two employees had HAZCOM training while the other six employees working at the site had no hazardous material training at all (HM.10.2 TEAM (29 CFR 1910.1200(b)(iii), (4)(iii), (6), and (h))).

The following noncompliance issues were observed while accompanying the assessor, but not written as findings in the report:

- Container labeling at the 180-day hazardous waste storage area was being done incorrectly. The site currently dates drums at the time they are full. The requirement is to date the drum at the time of the first drop of waste (HW.20.1. TEAM). The 180 days start at that time. They are an SQG with their own ID #.

SOFTWARE COMMENTS:

During the Atlantic City assessment, SAIC commented on software capabilities they would like to see implemented. I have put together a list for your review.

Open two reports at one time to copy portions instead of opening one, copying, closing, and opening a new one to paste.

- would like use of the Window Option to bounce between the two
- would like option to copy entire finding or portions

When entering the TEAM/ANG/STATE question number, have it automatically populate the citation.

Have access to the entire TEAM Guide in the database.

Add more Assessor # (teams vary in size).

Within Description, when typing, i.e., ois appear occasionally instead of, i.e., OIs, while FORMAT Change Case is not an option to correct it.

A suggestion is to have a criteria section to allow the requirement to be referenced when reading what the condition (finding) is and also have the TEAM/ANG/STATE question number print out for each finding in the report to be referenced for more specific detail of the requirement.

Reviewer's Suggested Corrective Actions

- Develop process to ensure assessors have the up-to-date manuals and software. Assessors must come into the field with the current versions of manuals if they are expected to use the manuals as the primary tool to which findings are tied. Assessors should know the following:
 - ◇ U.S. TEAM Guide is updated quarterly, the new version is posted within the first 2 weeks of September, December, March, and June.
 - ◇ State supplements are updated yearly, usually within the month each was updated previously.
 - ◇ ANG Supplement, Vol 1 (Environmental) is updated quarterly; the new version is posted within the first 2 weeks of September, December, March, and June.
 - ◇ ANG Supplement, Vol 2 (IH and Safety) is updated quarterly.
 - ◇ Current version number of software to be used at a site, not just a copy of the software.
- Provide reminder/refreshers training for assessors. Assessors need to be reminded of the following:
 - ◇ Ask open-ended questions, not "you inspect this annually, right?"
 - ◇ Look at the supporting paperwork in the shops.
 - ◇ Don't put the shop supervisor in the position of giving a guided tour; this should be an interactive process. Ask questions to let them show off their knowledge even if you know the process they are explaining backwards and forwards.
 - ◇ Talk to more than just the shop supervisors; ask personnel how they think things works.

- ◇ Ask shop personnel if they have any questions.
- ◇ Sum up what you saw at each shop to the shop supervisor. Sum up absolute findings, and go over the findings that need additional research.
- ◇ How to use the manuals. They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals.
- ◇ Review the previous internal/external reports.
- Train assessors on how to use the manuals. They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals such as:
 - ◇ Use checklist item number XX.2.1 TEAM Guide (XX stands for the appropriate 2-letter section code) to write findings that are otherwise not found in TEAM Guide, ANG Supplement Vol 1, or the state supplement.
 - ◇ The presence and use of guidance pages in each section to facilitate finding the desired topic rather than paging through the manuals.
- Develop additional tools to facilitate use of manuals.
 - ◇ Add a “Missing Checklist Item” placeholder in both Parts 1 and 2 of the ANG Supplement, Vol 2.
 - ◇ Add a standard checklist item to write up positives under — need to decide whether to put one in TEAM and one in each of the parts of ANG Supplement, Vol 2.

XX.2.1 Installations should go above and beyond environmental statutory and regulatory compliance (MP) [Added April 1999].

Determine if the installation has gone above and beyond simply complying with environmental requirements.

- ◇ Add a suffix to the ANG Supplement checklist items so they are easily differentiated from other manuals. Suggested suffix is AG. Need decision on if this should be done for IH and Safety as the splitting of that document is starting.

- ◊ Create "cheat sheets" that identify the checklist item number to use for common findings in the three areas of assessment.
- Develop a site visit log for assessors in which assessors document where they have been. This type of log is valuable for both the installation and the next external team. It provides a heads up as to what was not assessed and should be looked at more closely the next time around. It should be an appendix in the report. A possible format:

Building number	Shop name	Room number if different than building number	Assessor (IH, ENV, or SAF)

- Develop tools to facilitate the base's preparation for ECAMP
 - ◊ Instead of using the vague and overwhelming list of paperwork in the current PVQ, create a specific and limited list. This list should be the most common types of paperwork actually found on an ANG base instead of all possible types of paperwork. Suggested environmental list includes:
 - * Air Emissions Inventory (AFI 32-7040, para 2.8)
 - * Air emissions permits, if applicable (usually state regulated)
 - * Cultural Resources Management Plan (if applicable), (AFI 32-7065, para 2.2 and DODI 4715.3, para D3(c) and Enclosure 7)
 - * Tier I or Tier II reports (EO 12856; 40 CFR 370.20, 370.25, and 370.28)
 - * HAZMAT Plan 1 (AFI 32-4002, para 3.3)
 - * Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2)
 - * Hazardous Waste Manifests (40 CFR 262.40(a), 262.40(c), 262.40(d), 262.42(b), 262.43, and 262.44)

- * Natural Resources Management Plan, if applicable (AFI 32-7064, para 2.1 and 2.3 and DODI 4715.3, para D2(b), D2(h), and Enclosure 7)
- * Bird/Aircraft Strike Hazard (BASH) Plan, if applicable (AFI 91-202, para 7.11.1.4 and 7.11.2)
- * EAs or EISs produced in the last 3 yr (NEPA)
- * P² Plan (AFI 32-7080, para 2.2 and DODI 4715.4, para F2(c)(2))
- * Halon 1301 Management Plan (ETL 95-1 implementing AFI 32-7080)
- * Pesticide Management Plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 2.4.5. and 2.4.7.)
- * Solid Waste Management Plan (AFI 32-7042, para 3.2)
- * Spill Prevention Control and Countermeasure Plan, if applicable (40 CFR 112.7)
- * Storage Tank Inventory (AFI 32-7044, para 3.2 and AFI 23-204, para 3.6.2, 13.1, and 13.3)
- * Asbestos Management Plan and Operating Plan, if applicable (AFI 32-1052, para 5 and 6)
- * LBP Management Plan, if applicable (HQ USAF/ CC Policy letter 24 May 1993, para 6)
- * Wastewater/stormwater permits, if applicable (40 CFR 122.1(b)(3), 122.26(c) and 122.26(g))
- * List of oil/water separators
- * Wastewater/Stormwater sampling results for the last year.

A similar list should be created for the IH and Safety arenas.

- ◇ Set up a web site for ANG ECAMP where the following things are posted:
 - * link to the manuals

- * a running list of the 15 most common findings in environmental, IH, and Safety areas for the last 6 mo so the installation does not have to call around to find this out
- * any associated guidance documents
- * a forum for info exchange on ECAMP so that there is a place to ask questions about what people find in internals.
- ◇ Publicize DENIX outside of the main offices, it should be being used at CE, Ops, flight line, etc.
- ◇ Shop-specific manuals. If CERL moves to using ACCESS to write its manuals, this can be done by indexing the individual checklist items with appropriate terms (i.e., Vehicle Maintenance, Painting/Depainting). Otherwise, other alternatives need to be explored to find a way to provide the shops with manageable copies of what they are being assessed against.
- Improve content and usefulness of findings.
 - ◇ Need background information to assure validity of finding (e.g., a table of questions in the introduction that clarifies status in various areas). This will only work if the introduction accompanies the findings at all times. Types of information of interest are:
 - * Hazardous waste generator status and why (SQG, EPA ID number; CESQG, amounts observed...)
 - * Amount of POL stored aboveground and amount stored underground
 - * Any permits.
 - ◇ On the printed copy, need to know the checklist item number used to write the finding. This helps the QA person in determining if the finding is written in the correct place. It also helps base personnel who are trying to solve the finding know where to look for some additional guidance.
 - ◇ Develop a style guide to eliminate inconsistencies.
 - ◇ Straighten out the format of the boilerplate in the introduction once and for all — if this is boilerplate, there is no reason for poor formatting to show up.

- Improve root cause analysis process. Add a field to the database for the assessor to write a justification for the root cause they select. This does two things: (1) it makes the assessor take the issue more seriously, and (2) it tells the installation what the assessor was thinking.
- Enhance and standardize the out-brief.
 - ◇ Add a slide near the end summarizing the installation's responsibilities — may not have the same people at the out-brief as were at the in-brief.
 - ◇ Add a slide at the end talking about where we go from here — trend analysis, etc.
 - ◇ Use the same style and format on slides across Environmental, IH, and Safety.
 - ◇ Get the assessors to stick to the facts as to what is wrong instead of trying to mitigate up front. If needed, close with mitigating comments.
 - ◇ With three different topics being out-briefed, it is important for briefers to remember that there are going to be people in the audience who have no clue about their subject area. So slides need to be explicit and clear.

Appendix H: Process QA/QC Form for Terre Haute, IN

Installation Name: 181st Fighter Wing Indiana Air National Guard, Terre Haute, IN

Installation Environmental POC: Maj Paul Davis Phone: 812-877-5167

ANG Team Leader: Chuck Smith

Reviewer's Name: Michelle Hanson

Phone: 217-352-6511 **Email:** m-hanson@cecer.army.mil

Dates of assessment: March 30 – April 2, 1999

Dates of onsite review: March 30 – April 2, 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.):

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday:

AM

- In-brief
- Environmental assessors review paperwork Tuesday morning. Paperwork available for review was: Hazardous Waste Management Plan; NPDES permit; local industrial discharge permit; asbestos records; waste analysis; waste disposal records; previous external ECAMP; hazardous waste annual report; SPCC; SWPP, P² plan.

- Accompanied Contractor Team Leader (TL) to meeting with environmental manager. TL conducted a review of organization, changes, new buildings, etc. Discussed asbestos, PCB, recycling, nat/cult, and tank programs. TL reviewed last external ECAMP during this interview.

PM

- Accompanied IH assessor to the Motor Pool, Corrosion Control, Structural Repair, and Fuels Lab.

Wednesday:

AM

- Accompanied environmental assessors to Power Production, Electrical Shop, Mechanical Shop, Structural Repair, Grounds Maintenance, CE Supply/Issue, Egress Shop, Electro-environmental, Pneudraulics, Wheel Maintenance, Phase doc, Munitions Repair, and to the Assistant BCE to discuss Pesticides.

PM

- Accompanied safety assessor to CE Breaker Room, Detection Systems Maintenance, Power Production, Electrical Shop, Mechanical Shop, Structural Shop, Grounds Maintenance, CE Supply/Issue, Mobility, Disaster Preparedness, and Fuel Cells.

Thursday:

AM

- Interviewed shop POCs and managers who were ECAMPed: CE, Motor Pool, and Structural Shops in the main hangar.

PM

- Interviewed base personnel: Industrial Hygienist and Safety Manager.
- Present during writing of findings and creation of report.

Friday:

AM

- Out-brief

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

- The out-brief slides were very consistent – each section's slides looked similar.
- Both the out-brief and in-brief were well attended.
- The base commander attended both the in-brief and the out-brief.
- During the in-brief, the ANG representative stressed that there would be three visits to each shop: safety, environmental, and industrial hygiene.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.				X		
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			X			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.				X		
8. Recorded findings daily.				X		
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).					X	
10. Technically knowledgeable.					X	
11. Displayed professional and courteous attitude.					X	
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NA
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.			X			
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).				X		
20. Before departing, explained the potential findings to the senior person at each facility.				X		
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).			X			
22. Investigated for "root causes" of deficiencies/findings.		X				
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				X		
24. Informed other team members of potential concerns related to their assigned media protocols.				X		
25. Kept team leader informed of problems encountered by the team members.				X		
26. Used protocol checklists, either prior to site visit as a review or during site visit to ensure no compliance issues were overlooked.			X			
27. Information provided will help focus on problem areas.						NA
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				X		
29. New findings were discovered.				X		
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.			X			
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.				X		
32. Overall performance of the assessment team.				X		
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
34. Responded to QA/QC comments on findings of noncompliance.						NA
Comments: IH assessor clearly communicated the parameters of what he wanted to look at up front in all shops visited. He interacted well with shop personnel, both supervisors and workers, seemingly putting them at ease and asking good, open-ended questions. All assessors did a good job of introducing themselves personally. Environmental assessors did not look at paperwork in the shops visited on Wednesday AM. Paperwork that should have been looked at was documentation for hazardous waste training and spill response training. IH and Safety assessors were both observed checking applicable paperwork in all shops visited. Assessors were not observed asking the "why" questions that get to root cause. No QA of each other's findings was observed by assessment team members or the ANG representative. Assessors told the QA person that finding review was conducted after the assessment at the contract office. Assessors reviewed final findings with the media area managers on Thursday afternoon.						

* NA = Not Applicable, NO = Not Observed

PART 2. CONTRACTOR TEAM LEADER						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.						NA
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.				X		
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.			X			
8. Coordinated daily assignments to ensure each site team is not excessive.				X		
9. Effectively out-briefed installation commander/staff.				X		
10. Overall performance of Team Leader.				X		
11. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.			X			
12. Held daily team meetings.						NA
13. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).				X		
14. Ensured copies of TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.	X					
16. Ensured positive findings were "above and beyond" compliance.				X		

PART 2. CONTRACTOR TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		X				
Comments: • No documentation of what areas were visited by who. • The contract TL met with the environmental manager early on Tuesday morning to discuss various programs and facilities on base. • Little QA/QC of findings was performed during the assessment. However, assessors told the QA person that finding review was done back at the office by a supervisor before the report was finalized.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).			X			
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.			X			
4. Attended daily out-briefings and participated in discussions of findings.						NA
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings.						NA
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).				X		
7. Effectively coordinated the in-briefing and out-briefing.				X		
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.				X		
9. Acted effectively as liaison between the assessment team and installation personnel.				X		
10. Resolved problems encountered by the assessment team members.						NO
11. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
12. Objectively recommended assessment sites/facilities/operations.				X		
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).				X		
14. Appropriate installation personnel were available to the assessment team.				X		
15. Overall performance of Environmental Coordinator/Staff.				X		
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings, and notification of tenants.					X	

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
17. Provided a complete PVQ to the assessment team.				X		
18. Reviewed assessor root cause selection/justification for accuracy.						NO
Comments: Paperwork was not available as the assessment team got to their conference room. Environmental assessors had to ask for copies of specific plans, even though a list was provided on the PVQ. One sign of base awareness of ECAMP was the sign at the gate that said "The 181st FW welcomes the ECAMP team." "ECAMP" was also designated on calendars in several shops. When interviewed after the assessment, all shop supervisors commented that they had been provided adequate information about what the assessors saw wrong. No one expected any surprises during the out-brief or when the report was received. All shop personnel and supervisors interviewed commented that they felt like there was good interaction during the assessments. To prepare for the ECAMP, base personnel sought out findings from other bases done recently. Base personnel were observed closing findings during the assessment. Quick, easy fixes were addressed right away. The media area managers accompanied the assessors to shops for all visits. This helped the shop personnel know what to expect from each group of assessors. All three media area managers took notes as to what the potential findings were. In general, the Safety and Industrial Hygiene managers were very proactive and had very good programs. All installation people interviewed referred to ECAMP as an inspection rather than an assessment. When discussing the difference with media area managers, all commented that if it was not handled as an inspection, it would not get the attention it deserves. IH manager felt that there is a perception among the shop people that ECAMP is a program only for the media managers. Two of the three shop supervisors interviewed said that they don't have any type of checklist or other information that provides what they will be assessed on. One shop supervisor had a checklist from the NGB (ANG Directory 90-2120, dated March 17, 1997). The safety manager stated that he felt that the assessment should encompass a weekend drill to include the traditional guardsmen. He felt confident that the folks there all week received adequate information and training, but was less sure of the weekend folks. The CE personnel felt that the assessment was rushed and that they could have been served better by a longer visit.						

Comments on the Terre Haute, IN Draft Report

Finding Number	Comment
01.001	No comment.
03.001	How many cylinders of each gas were not secure and how many were inadequately secured? What made it inadequate? What is proper security?
03.002	What requirement don't they meet?
03.003	How many portable ASTs, what is the capacity of the ASTs? What does "In accordance with contents" mean? Is it supposed to just be labeled "JP-8" or is something else required?
03.004	I don't think "diesel" has to be capitalized. What is the pertinence of the phrase "as well as smaller quantities of other hazardous materials"? Is it something other than fuels that needs to be reported because it exceeds the 10,000 lb storage trigger? Or, were they extremely hazardous substances and they exceeded the 500 lb limit? If not, delete the sentence.
04.001	What kind of paint waste? What is generating the paint waste, cleaning of brushes? Why are there two cans — are they different waste streams? If the requirement for the cabinet to be labeled as an SAP is based on the Hazardous Waste Management Plans, this should be written up under HW.10.2. ANG Supplement, not HW.35.1.TEAM. The U.S. regulation cited in HW.35.1.TEAM does not require this labeling. How do you know the site is an SQG — did they have an ID number, amounts observed onsite; what?
04.002	Where? Throughout the facility does not tell me how frequently the problem was encountered and where it was encountered. HW.280.2.TEAM talks about exceeding accumulation time limits — was there any evidence that universal waste was being accumulated for more than 1 year? Would a better checklist item number to use be HW.300.1.TEAM Employees who handle or have responsibility for managing universal wastes are required to be trained (40 CFR 273.16)? Write the finding with the focus that, because they are not trained, all of these incorrect things are happening. Is the issue the facility said that fluorescent light bulbs and the batteries are universal waste, or is the issue the facility is handling them as hazardous waste and the assessor is suggesting they should be handled as universal waste? If it is the latter situation, this is not a finding. It is the prerogative of the facility to choose whether they handle these items as hazardous waste or universal waste.
04.003	See comments on 04.002.
04.004	Why was the aisle space not adequate? Is this a 90-day or a 180-day accumulation point? How much waste was there; what kind of waste? What size generator is the facility and how do you know that?

Finding Number	Comment
04.005	How are they being managed? What is not happening that should be happening according to the HWMP. Are these SAPS at which these rags are being accumulated?
04.006	What processes are generating these rags and where?
04.007	Two out of how many? This is needed as an indicator of severity of the problem.
04.008	Who is transporting the waste?
07.001	From this finding, it is not clear if pesticides are even being applied.
08.001	"Bucket" does not need to be capitalized. Where was the used oil container — how big was it, what is the source of the used oil going into it? When I read "bucket" I think of open container. Is that what is being discussed here — what is the bucket used for?
08.002	No comment.
08.003	Was the diesel spill the full 50 gal? Please clarify. Were the spills reported? PO.5.5.TEAM addresses the recertification of the plan, not the accuracy of the contents. It would be better to use PO.5.2.TEAM.
08.004	How big are the tanks and how many are there? How much fuel is stored? This should be written up under the secondary containment requirement under ST.5.1.TEAM.
08.005	No comment.
08.006	Should this be two findings — one for not having the plan and one for lack of spill response training? Use PO.5.7.TEAM "All installation/ CW facility personnel involved with the management and handling of oil must take part in periodic training in spill prevention and response (40 CFR 112.1(d) and 112.7(e)(10)" to address the training issue and PO.5.1.TEAM for implementation.
10.001	When was the removal done? "Over one year" could be anything from 13 months to 5 years ago or more.
12.001	Industrial waste from what?
12.002	I am not sure it is a good idea to include guidance to reduce sampling in a report that can become publicly available. While I agree they are needlessly going above and beyond their permit, it does not sound good to document in writing a philosophy of only do what you have to.

Finding Number	Comment
14.001	What is considered timely? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the checklist item number.
17.002	Did the assessor see instances when respirators are assigned but not needed?
24.001	The correct checklist item number for this is AC.10.1, not ANG.10.1. The AFOSH reference is not a part of the official citation for this checklist item number. How many are several? Were the Tire Shop and NDI the only places this was observed?
24.002	The correct checklist item number for this is AC.10.1, not ANG.10.1. The AFOSH reference is not a part of the official citation for this checklist item number.
26.001	The AFOSH reference is not a part of the official citation for this checklist item number.
29.001	Check on use of plurals in the second sentence.
38.001	How many is several? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the checklist item number.
40.001	Suggested action missing. What is the face shield used for? How is it defective? Should have used PE.10.1. Installations must provide, ensure the use of, and maintain protective equipment wherever circumstances require (29 CFR 1910.132(a) and 1910.132(b)).
41.001	Suggested action missing. Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the checklist item number.
41.002	Why isn't it stable?
41.003	Suggested action missing. How are they out of specification?
42.001	Suggested action missing. This should have been written under ME.10.12. Specific facilities and equipment must be kept continuously in proper operating condition (29 CFR 1910.36(d)(2)).
42.002	Suggested action missing.

Finding Number	Comment
45.001	Suggested action missing.
45.002	Suggested action missing. Why do they need it? What is the confined space of concern?
45.003	Suggested action missing.
47.001	Suggested action missing. How should it be identified? Is this just one fire extinguisher or all fire extinguishers across the base?
47.002	Suggested action missing. How do you know they are fighting fires? Is there a fire department? Until a placeholder is added to the OSHA manuals use HM.2.1.TEAM as the check-list item number.
48.001	Suggested action missing. How many hoists are there? How do you know they are not being inspected/maintained? What is properly maintained?
49.001	No comment.
49.002	Suggested action missing. How far? Is the saw being used?
50.001	Suggested action missing. How were they defective? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
42.003	Suggested action missing. Highlighted how? With what material? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.001	Suggested action missing. Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.002	Suggested action missing. Should indicate which problem was wrong with each box. Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.

Finding Number	Comment
52.003	Suggested action missing. What is the exposed area? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.004	Suggested action missing. Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.005	Suggested action missing. Blocked with what? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.006	Suggested action missing. Is it not being conducted regularly, or is it being conducted but not documented? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.
52.007	Suggested action missing. What kind of projects? How do you know? Until a placeholder is added to the OSHA manuals, use HM.2.1.TEAM as the check-list item number.

General Comments

- Include the building number on the report printout for clarification as to the location of the finding. If this can't be done, assessors should include the building number in the finding details.
- Only 3 of the 24 safety findings include a suggested corrective action.
- Numerous safety findings have "Not in Protocol" designated in the area where the protocol question belongs. There is no "blank" question in the safety protocol to address these issues. Until one is provided, the findings should be written up under HM.2.1 of TEAM guide. ANG should determine if they want issues not included in the protocols assessed.

Reviewers' Suggested Corrective Actions

- Develop shop-specific manuals or checklists so that individual shops have information about what they will be assessed against. These could be made

available via a web site with links to the protocols and regulations for reference purposes.

- Improve the written report by including the building number on the finding printout.
- Consider extending the length of the assessment. Assessors could travel on Sunday afternoon and be ready to go on Monday morning. This would allow for a more thorough assessment. Also, consider encompassing the traditional guardsmen in the assessment process by holding part of the assessment over a drill weekend.
- Better define the scope of the safety protocol. This will ensure that the various safety assessors are looking at the same issues across installations and looking at them with the same degree of thoroughness.
- A large number of findings in the OSHA part of the report are based on requirements not in Vol 2 of the ANG Supplement. Add a placeholder checklist item in the OSHA manual so that these types of additions are always written up in the same place.

Appendix I: Process QA/QC Form for Smoky Hill, KS

Installation Name: Smoky Hill ANG Range, Detachment 1, 184 Bomb Wing,
Salina, KS

Installation Environmental POC: Major Rohn H. Hamilton

Phone: (316) 687-7534

ANG Team Leader: Chuck Smith

Reviewer's Name: Don Cropek

Phone: (217) 352-6511 **Email:** d-cropek@cecer.army.mil

Dates of assessment: 27-28 April 1999

Dates of onsite review: 27-28 April 1999

Other Major POCs present (Representative from ANG HQ, other observers,
etc.): None

Activities observed (Examples include in-brief, out-brief, daily findings review
meetings, assessments of particular protocols).

Tuesday:

AM

- Attended in-brief.
- Observed post-brief discussions between SAIC team members and base shop personnel attendant at the in-brief.

- Observed assessor's review of supplied paperwork. This paperwork included: Integrated Land Use Management Plan, Ground Mishap Logs, OSHA Respiratory Protection Standard for each shop, base maps and personnel lists, folder of permits and manifests, Hazardous Waste Management Plan, Spill P2 Plan, Pesticide Management Plan, Hazardous Communication Training Program, Hearing Conservation Plan, Confined Spaces manual, previous ECAMP reports (internal and external), Hazardous Waste Accumulation Log.

- Observed open detonation onsite.

PM

12 – 2:15 Accompanied safety assessor to facility management shop, range operations, fire department, heavy equipment maintenance.

2:15 – 3:15 Accompanied environmental assessors to fire department, heavy equipment maintenance.

3:15 IH already done.

3:30 – 4:25 Accompanied environmental assessors to lagoons, facility management shop.

4:45 Depart to hotel.

Wednesday:

AM

- Observed discussions among SAIC team members during findings writing and report creation.

- Interviewed Land Manager, Environmental Manager, BEE Tech, Fire Chief, Vehicle Maintenance personnel.

- Accompanied Environmental assessors and Chuck Smith on cultural / natural resources tour.

PM

- Observed findings writing by SAIC contractors.

- Interviewed SAIC team members for ECAMP input.
- Attended out-brief.
- 4:00 Depart to hotel.

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

SAIC team members:

Bob Reisdorf, Health, Team Leader

Mike Brown, Environmental

Bonnie Carson, Environmental

Gayla Anderson, Safety

Smoky Hill is a geographically separate unit (GSU) for McConnell AFB, Wichita, KS, approximately 100 miles south of Smoky Hill. There is, therefore, the additional effort required for sharing of personnel, maintenance of records, and dissemination of information. Coordination efforts were required between these two during the performance of the ECAMP process. One member of McConnell required to travel to Smoky Hill on both of these assessment days indicated that time management could have been better by SAIC so that all ECAMP business was complete in 1 day.

During the in-brief period, the Smoky Hill Commander stated that a letter told him the out-brief would be on Wednesday at 3 PM. How did this information get to the Commander, and shouldn't Chuck Smith have been aware of this beforehand as well? This information was critical to the assessment scheduling and time management. Several issues were then forced by this 1-day turnaround. Evening work had to be done on Tuesday night. The shortened time prevented me from accompanying the health assessor on his walkthroughs. The out-brief did not go smoothly and the report was not finished by the out-brief. This may also have prevented QA of each other's findings.

Good introduction of Smoky Hill by the Commander. His presentation was made possible by the wait for McConnell personnel to arrive at the facility.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				x		
2. Was organized.				x		
3. Interviewed appropriate personnel.				x		
4. Asked pertinent questions.			x			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			x			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.			x			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.			x			
8. Recorded findings daily.					x	
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				x		
10. Technically knowledgeable.				x		
11. Displayed professional and courteous attitude.				x		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).			x			
13. Visited sites that were of environmental concern to the installation/facility.						x
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.		x				
15. Immediately notified installation POC of "significant" findings.						x
16. Provided meaningful corrective actions.			x			
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.		x				
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				x		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			x			
20. Before departing, explained the potential findings to the senior person at each facility.				x		
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).		x				
22. Investigated for "root causes" of deficiencies/findings.			x			
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				x		
24. Informed other team members of potential concerns related to their assigned media protocols.		x				
25. Kept team leader informed of problems encountered by the team members.						x
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.		x				
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				x		
28. New findings were discovered (findings different than those identified in the previous ECAMPs).				x		
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		x				
30. Overall performance of the assessment team.			x	x		
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				x		
Comments: All team members took advantage of the opportunity of questioning and approaching Smoky Hill personnel present at the in-brief. Did not seem that pre-site or onsite review of protocols took place. They relied on memory and just looked at protocols to find a hook for findings. Did not observe use of internal and external ECAMP findings. In fact, the findings did not indicate repeat or carryover findings.						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med		High	Other
	1	2	3	4	5	NA/NO*
Both the walkthroughs and the records inspections seemed cursory. Too little time spent onsite. Did not observe a great deal of team member interaction or cross-talk among the three areas. Did not observe a great deal of note taking for future reference. Safety assessor took it as a personal challenge to find something wrong. Environmental assessors willing to provide assistance and interpretation of permits to ensure new washracks won't invalidate the permit. Safety assessor willing to further research finding issue upon return to home office. PVQ not very helpful for health and safety assessors. One SAIC team member indicated that suggestions for ECAMP improvements were solicited from them in the past (several years ago) but it seemed to go nowhere. Did this information get lost somewhere? Observed both the health and the safety assessors sit with the responsible individuals from Smoky Hill to go over the findings with them before the out-brief. Did not observe the environmental assessors doing this. One interesting issue encountered: Although the PVQ indicates no UST, I found that there is one abandoned UST on site, only used for water, abandoned for years. I believe SAIC did not discover this tank and there may or may not be a finding here. Is there the possibility that SAIC relies too much on the PVQ? Is the Smoky Hill EM aware of this UST? There is a box of "BAD Hg vapor bulbs" in the storeroom outside the facility maintenance shop, which was not observed to be investigated by any assessment team. Issues surrounding this hazardous waste should have been questioned. I observed what I thought would be commended as a positive finding. Smoky Hill has created an internal website on installation health and safety issues, which even the safety assessor admitted she had never encountered before. This did not receive a positive rating although it seems to fit the "above and beyond" description. SAIC expressed dissatisfaction with the database, but they just need more time for comfort and familiarity. It seems that little QA is performed on findings before they go into the report. The expectation seems to be that the SAIC home office will supply the QA check on the final version. This may be too late to amend certain problems that are installation specific.						

* NA = Not Applicable, NO = Not Observed

This section is to evaluate the performance of either the Contract team leader or ANG team leader — evaluate whichever operates as team lead predominantly and indicate whether the evaluation is for the ANG or Contract team leader.

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.			x			
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.			x			
3. Familiar with the ECAMP process.					x	
4. Present and available throughout the assessment.			x			
5. Effectively performed as liaison between installation staff and assessment team.			x			
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.		x				
7. Coordinated daily assignments to ensure each site team is not excessive.		x				
8. Effectively out-briefed installation commander/staff.			x			
9. Overall performance of Team Leader.			x			
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						x
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						x
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.						x

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
13. Ensured positive findings were "above and beyond" compliance.		x				
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		x				
Comments: According to interviewed Smoky Hill personnel, they enjoyed previous ECAMP visits because of Joy's presence as she also went through the shops, indicating she had more interaction and involvement in the assessment process. Chuck only observed to accompany environmental on the cultural / natural resources tour. Not adequately prepared for in-brief. He should know team members before arrival and name pronunciations before introductions. Not adequately prepared for out-brief. Communication problems between the computer and projector prevented the out-brief slide show. Did not give the installation enough time to complete the PVQ. Smoky Hill indicated they received the PVQ on Tuesday and Wednesday the week before. Time wasted on Tuesday AM due to lack of directions to the installation and no knowledge of base opening time. Extensive discussions took place between Chuck Smith and Smoky Hill environmental people on Wednesday PM regarding the possibility of an additional hire to help environmental office at Smoky Hill, as well as promises to support and initiate this issue.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).				x		
2. Recommended sites/facilities/operations to be assessed.						x
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.				x		
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).				x		
5. Effectively coordinated the in-briefing and out-briefing.			x			
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.		x				
7. Acted effectively as liaison between the assessment team and installation personnel.			x			
8. Resolved problems encountered by the assessment team members.						x
9. Solicited ideas from assessors that could enhance the installation's environmental program.				x		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					x	
11. Appropriate installation personnel were available to the assessment team.				x		
12. Overall performance of Environmental Coordinator/Staff.				x		
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings, and notification of tenants.				x		
14. Provided a complete PVQ to the assessment team.			x			

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
Comments: Time was wasted waiting for the Environmental Manager to deliver paperwork on Tuesday AM. The in-brief was postponed until their arrival at 9:30 AM. This paperwork could have been delivered Monday so that SAIC could use this time wisely for paper review. Excellent attendance at the in- and out-briefs; only 26 people on installation, but >10 attended the in-brief and 18 attended the out-brief. Must have had good publicity on ECAMP visit. They tried to stress the "assessment" aspect over the "inspection" aspect. Installation Staff comments: - Little feedback from the assessors during the walkthroughs. - Assessors very knowledgeable. - Too heavy on plans that they think are useless anyway. - Need more lead time to assemble documents and gather information. - Use of contractors is better than using Guard personnel because people are more on their toes. - Didn't dig as deep as expected or desired. - Likes the three assessment teams to arrive at different times in order to concentrate on one area. - Want some time allotted to ask the assessors questions during their walkthroughs.						

Comments On the Draft Report

Finding Number	Comment
02.001	How many are "several"? Are there any resources that have currently been identified as a cultural resource through interaction with the SHPO? While I agree this is probably a finding, why isn't there a separate finding about potentially eligible resources being reviewed and, if needed, nominated. This second issue should have been written up under CR.5.1.TEAM. All Federal agencies are required to establish a program to locate, inventory, and nominate to the SOI all properties under the agency's ownership or control that appear to qualify for inclusion on the National Register of Historic Places (36 CFR 60.9).
04.001	In the database this is written up against HW.10.1. It should be written up against HW.1.3.AG. ANG installations are required to follow the methodologies outlined in the ANG Hazardous Waste SOP (ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997) [February 1997]. What was at the SAP? How was the range identified as a CESQG? Paperwork? Quantities on hand? An ID number?
04.002	How much is a "small quantity"? The comment said the Range's copy of the plan was not signed. Were any copies of the plan signed? If not, that is possibly another finding under HW.10.2.AG. Installations that generate hazardous waste are required to have a Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2).
05.001	Is there a date when the developing BASH plan can be expected? What is missing in the existing plans?
05.002	Is there a completion date for the contracted T&E survey?
05.003	The comment on this finding makes it sound like there is not an adequate INRMP, a finding under NR.1.2.TEAM. When military installations are required to prepare an INRMP, the INRMP must meet certain standards (Sikes Act, 42 USC 670 et. seq.) [Added March 1998].
08.001	According to the database, this was written up against PO.10.2.TEAM. That checklist item is about response plans, not SPCC plans. The correct citation should have been PO.5.2.TEAM. The SPCC plan is required to contain specific information (40 CFR 112.1(d) and 112.7). The requirements in 40 CFR 112.20 apply when a facility could be expected to cause substantial harm. And, as the note in the checklist item indicates "(NOTE: A facility could, because of its location, reasonably be expected to cause substantial harm if it meets any of the following criteria: - the facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 gal - the facility's total oil storage capacity is greater than or equal to 1 million gal and one of the following is true: - the facility does not have secondary containment for each above-ground area sufficiently large to contain the capacity of the largest

Finding Number	Comment
	AST within each storage area plus sufficient freeboard to allow for precipitation - the facility is located at a distance such that discharge from the facility could cause injury to fish and wildlife and sensitive environment - the facility is located at a distance such that a discharge from the facility would shut down a public drinking water intake - the facility has had a reportable oil spill in an amount greater than or equal to 10,000 gal within the last 5 yr.)"
08.002	This is not a finding and inaccurate information on this issue was passed on to Smoky Hill. The checklist item used was PO.55.1.TEAM Onshore tank car and tank truck loading/unloading racks are required to meet specific structural standards (40 CFR 112.7(e)(4)(ii) and 112.7(e)(4)(iii)) [Revised October 1998]. This finding was written based on the filling of an AST, which is not a "tank truck loading/unloading rack" and does not require these protective measures.
12.001	• No comment.
12.002	• No comment.
14.001	• What does "several" months mean? When was the last one done?
16.001	• This does not seem to satisfy the "above and beyond" requirement for a positive finding. It merely shows compliance.
17.001	• Since there are only four shops, it should be easy and beneficial to state which shops are complete and which are not. There are two separate issues here. One is the lack of an assessment being done, which should be written up under PE.10.3. Installations must assess workplaces to determine whether hazards are present or are likely to be present that necessitate the use of PPE (29 CFR 1910.132(d)(1)). The second issue has to do with documentation, which should be written up under PE.10.4. Installations must have a written certification of the workplace hazard assessment that meets specific requirements (29 CFR 1910.132(d)(2)).
17.002	• Is the example given the only observed inadequacy? Otherwise, since it directly affects human safety, it would be beneficial for the expert assessor to list every observed inadequacy. The cited AFOSH is not a part of the citation in the manual PE.10.2. All PPE used by the installation should be of safe construction and design for the work being performed (29 CFR 1910.132(c)). [Revised - November 1998]
29.001	• From the finding, it is not obvious why there is a concern for methylene chloride at all. Is there evidence that methylene chloride is present?
38.001	• Information regarding specific observed deficiencies would be helpful. What training was not listed? This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.

Finding Number	Comment
38.002	This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.
41.001	This was written up under the correct checklist item number, but the citation listed in the report is incorrect. It should be WS.60.1. All ladders must be maintained in a safe condition and inspected regularly (29 CFR 1910.27(f)).
42.001	This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now. "annully" is spelled incorrectly.
42.002	This finding seems to be a piece of 42.001. This should not be a separate finding.
45.001	Was there a situation where confined space entry by a contractor occurred and the contractor was not informed? This was written up under the correct checklist item number, but the citation listed in the report is incorrect. It should be PS.10.6. Installations must meet specific requirements with regard to contractors whose work requires them to enter permit spaces (29 CFR 1910.146(c)(8) and AFI 91-301, para 9).
45.002	What does it mean to "evaluate" a space? Were the personnel working in the areas aware these are confined spaces? If not, maybe the following is a better place to write this PS.10.2. Installations with permit spaces must inform exposed personnel of the existence and location of and the danger posed by such spaces (29 CFR 1910.146(c)(2)).
47.001	What is the actual finding here? Lack of documentation or lack of training? In the database, this is listed as being written up against FP.10. Not only is this not a checklist item number, the section is about fire extinguishers, not training from Fire Brigade personnel. It would appear that the cited requirement is not in the manual.
47.002	Why does there have to be a fire extinguisher with the forklift? Without the details, it is impossible to determine if perhaps the following would have been a better citation: FP.10.2. Installations must select and distribute portable fire extinguishers according to certain requirements (29 CFR 1910.157(d)). The listed citation is not in the manual.
47.003	Was this at one site in particular or throughout the installation?
48.001	No comment.
49.001	What is wrong here - did the assessors see equipment requiring such devices that did not have them?
49.002	Were the guards not operating properly when the assessors saw the equipment?

Finding Number	Comment
49.003	Is there a guard on one side and not the other or no guards at all? In the database the assessor did not specify which checklist item was violated, he/she just indicated MG.10. Need to specify the checklist item.
50.001	In what way was it damaged, how did it make the tool unsafe to use? This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.
52.001	The finding does not state the deficiency, but it is assumed that some markings are missing. It would be helpful to state the frequency of the deficiency: are there no markings anywhere, about 50% are marked, or only one place lacks? This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.
52.002	Is there an installation date? This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.
52.003	This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.
52.004	This citation does not appear to be in the manual. Use checklist item number HM.2.1.TEAM as a placeholder for now.

General Comments

- Some of the findings are quite sparse in the wording. More details would make the report more helpful to the responsible individual.
- There is no indication on whether any finding is a repeat or carryover. This makes it difficult to determine whether the previous ECAMP findings were consulted.

Reviewer's Suggested Corrective Actions

Send out the PVQ and list of required documents at least 2 weeks beforehand.

ANG Team Leader must do a better job of acquiring and disseminating information before the site visit. At a minimum, team composition, directions, and contingency plans in cases of problems should be known.

ANG Team Leader should accompany teams periodically to observe the assessment process for completeness, relevance, etc.

Even at a small facility such as this, the SAIC team was rushed. Spend an extra day for completeness and allow more interaction between shops and assessors.

Appendix J: Process QA/QC Form for Pease, NH

Installation Name: 157th Air Refueling Wing New Hampshire Air National Guard, Pease ANGB, NH

Installation Environmental POC: LTC Roger Clements

Phone: 603-430-2336

ANG Team Leader: Joy Hoyle

Reviewer's Name: Michelle Hanson

Phone: 217-352-6511 **Email:** m-hanson@cecer.army.mil

Dates of assessment: 25 – 28 May 1999

Dates of onsite review: 25 – 28 May 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.):

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday:

AM

- In-brief
- Environmental assessors review paperwork Tuesday morning. Paperwork available for review was: Spill Response Plan, Air Emissions Inventory (1993), HW Manifests (1996, 1997, 1998, and 1999), HW Annual Activity Report, PDA Drinking Water Results and NPDES Results, P2 Plan, Title V

Permit, Air Permit, HW Management Plan, 1998 Internal ECAMP, 1996 External ECAMP, State Inspection Letter.

PM

- Accompanied IH assessor to vehicle maintenance, AGE, fuel cell, fuels lab, liquid fuels.

Wednesday:

AM

- Accompanied environmental assessors to the heat plant. Accompanied safety assessor to welding shop, sheet metal shop (including paint booth), survival shop, combat supply support and maintenance (CSSM), pneudraulics, fuel cell, AGE, and a hangar occupied by contractors.

PM

- Accompanied environmental assessor to AGE, avionics, NDI, security police weapons cleaning, hazardous material pharmacy, communications squadron, and a hangar occupied by contractors.

Thursday:

AM

- Interviewed shop POCs who were ECAMPed: liquid fuels, BCE, vehicle maintenance, fuel cell, and aircraft maintenance.

PM

- Interviewed base personnel: Risk Management Officer, Industrial Hygiene and Bioenvironmental Program Managers, and Safety Manager.
- Attended informal briefing to base personnel by ANG TL.
- Present during writing of findings and creation of report.

Friday:

AM

- Out-brief

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

- This installation has a Risk Management Office, the head of which is LTC Clements. Each of the program managers (environmental, hygiene, and safety) works for him.
- Once per month the installation commander has a closed circuit television conference that is broadcast base-wide and called "Coffee with the Commander." On Tuesday morning of the assessment, the NGB team leader appeared as a guest on this show. This informal chat with the commander was an excellent means of introducing the ECAMP.
- Both the in-brief and the out-brief were well attended. Major General Blair from the JAG office, along with a Brigadier General from the same office, attended the out-brief.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			X			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.				X		
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.			X			
8. Recorded findings daily.				X		
9. Viewed a cross section of sites (i.e., non-industrial vs. industrial).				X		
10. Technically knowledgeable.					X	
11. Displayed professional and courteous attitude.					X	
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NA
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.				X		
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.		X				
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).			X			
22. Investigated for "root causes" of deficiencies/findings.			X			
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				X		
24. Informed other team members of potential concerns related to their assigned media protocols.				X		
25. Kept team leader informed of problems encountered by the team members.						NA
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.		X				
27. Information provided will help focus on problem areas.						NA
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				X		
29. New findings were discovered.				X		
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.			X			
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.			X			
32. Overall performance of the assessment team.				X		
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
34. Responded to QA/QC comments on findings of noncompliance.				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
Comments: • IH assessor clearly communicated the parameters of what he wanted to look at up front in all shops visited. However, he only summarized findings in one of the five shops visited on Tues. PM. The other assessors were not observed summarizing findings. • All assessors did a good job of introducing themselves personally. • Only two of the six shop supervisors interviewed after the assessment felt that they had been provided good feedback about what the assessors saw wrong. These same people felt that there was very little interaction between themselves and the assessors. • No assessor was observed asking shop personnel if they had any questions. • Assessors were not observed asking the "why" questions that get to root cause. • All installation personnel interviewed after the assessment felt that it was rushed. • Findings are written in inconsistent styles, some are in present tense, some past; some start with an overarching broad statement, others start with the details.						

* NA = Not Applicable, NO = Not Observed

PART 2. NGB TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.				X		
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.					X	
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.			X			
7. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.				X		
8. Coordinated daily assignments to ensure each site team is not excessive.				X		
9. Effectively out-briefed installation commander/staff.			X			
10. Overall performance of Team Leader.				X		
11. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.			X			
12. Held daily team meetings.						NA
13. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).	X					
14. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.			X			
16. Ensured positive findings were "above and beyond" compliance.		X				

PART 2. NGB TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.				X		
Comments: - During the in-brief, the NGB TL went into considerable detail at the programmatic level (database, reports, etc.). This information is probably not of concern to most of the shop supervisors who were in attendance. - No documentation of what areas were visited by who. - The NGB TL took a very active role in the assessment, accompanying assessors to the shops and reviewing findings. - During the out-brief, the NGB TL spent a significant amount of time reviewing the ECAMP process, including what occurs after the actual assessment. Also included in the out-brief were explanations and web site locations of where the installation could get the assessment manuals (DENIX) and other environmental information (PRO-ACT). No slides were used for this portion of the briefing, making it difficult to follow.						

PART 3. INSTALLATION RISK MANAGEMENT STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).			X			
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.				X		
4. Attended daily out-briefings and participated in discussions of findings.						NA
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings.				X		
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
7. Effectively coordinated the in-briefing and out-briefing.				X		
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.				X		
9. Acted effectively as liaison between the assessment team and installation personnel.					X	
10. Resolved problems encountered by the assessment team members.						NO
11. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
12. Objectively recommended assessment sites/facilities/operations.				X		
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					X	
14. Appropriate installation personnel were available to the assessment team.					X	
15. Overall performance of Environmental Coordinator/Staff.				X		
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop					X	

PART 3. INSTALLATION RISK MANAGEMENT STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
briefings and notification of tenants.						
17. Provided a complete PVQ to the assessment team.					X	
18. Reviewed assessor root cause selection/justification for accuracy.						NO
Comments: - Paperwork was not available as the assessment team got to their conference room. Environmental assessors had to ask for copies of specific plans. - To prepare for the ECAMP, base personnel sought out findings from other bases done recently. - The media area managers accompanied the assessors to shops for all visits. This helped the shop personnel know what to expect from each group of assessors. However, the environmental manager was observed answering many of the assessor's questions, rather than letting the shop personnel answer for themselves. - The industrial hygiene personnel were disappointed that the assessors did not ask any water quality questions or review their water quality program.						

Comments On The Draft Report

Finding Number	Comment
01.001	Where is the paint booth?
03.001	The correct citation is "(29 CFR 1910.1200(b)(3)(i), 1910.1200(b)(4)(i), 1910.1200(b)(5), and 1910.1200(f)(5) through 1910.1200(f)(7))." The AF references are not a part of TEAM checklist item HM.1.3.
Comment 1	Why isn't this a finding under HM.35.4. Storage cabinets used for the storage of flammable/combustible liquids must meet specific requirements (29 CFR 1910.106(d)(3)) [April 1995] since it sounds like there is not a 2-in. sill at the bottom of the flammables cabinet if it cannot contain 5 gal?
Comment 2	Was the SAP indoors or outdoors, where would a spill go? What secondary containment was in place if it was inadequate? Is this an MP that ANG was to promote across the board?
04.003	According to the database, the assessor used TEAM HW.10.3 to write this finding — HW.10.3. Facilities that claim that a particular material is not a solid waste or is conditionally exempt from regulation as a hazardous waste are required to provide specific documentation (40 CFR 261.2(f)) [February 1995]. But the citations listed by the assessor are more appropriate to HW.10.1. Federal facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11) [Revised April 1999]. The latter is the more appropriate citation. But the assessor does not indicate whether any of these waste streams have <i>ever</i> been characterized either by testing to process knowledge.
04.004	Weapons cleaning waste from where? At which SAP?
04.005	Originals is misspelled. How do you know the site is an LQG?
04.006	The assessor used two checklist item numbers to write a single finding — only use one. TEAM HW.75.1. Generators may accumulate as much as 55 gal of hazardous waste or 1 qt of acutely hazardous waste in containers at or near any point of initial generation without complying with the requirements for onsite storage if specific standards are met (40 CFR 262.34(c)) and HW.10.5.NH. Hazardous waste generators must meet procedures for storage of hazardous wastes (NHCAR Env-Wm 507.01(a) through (f) [Revised April 1998]. A decision on which citation to use needs to be made. Not enough information is provided in the finding to make that determination. How do you know the site is an LQG?
04.007	- What has changed? - Conditions is misspelled.
04.008	Why is this an SAP? From the description, this sounds like a storage, not something at or near the point of generation of the waste?
04.009	No comment.

Finding Number	Comment
06.001	How far along are they?
06.002	How have they achieved this reduction?
08.001	What has changed? The citation is incorrect, it should be PO.5.3. Each SPCC plan must be reviewed at least once every 3 yr (40 CFR 112.1(d) and 112.5(b)).
08.002	- Where? - Is this really an area where bulk loading is done? How large are the tanks, what are they loading/unloading into and from? This regulation applies to Onshore tank car and tank truck loading/unloading racks, not an individual UST or AST.
Comment 1	Consider writing this as a finding under ST.125.1. Tanks storing used oil produced by used oil generators are required to meet specific criteria (40 CFR 279.22(b) and 279.22(c)).
Comment 2	Regarding comment 2, are heating oil tanks exempt from content labeling requirements? If not, this should be a separate finding.
09.001	I do not see a requirement in the cited NH checklist item for a manifest and/or return copies of manifests. Ensuring that waste is disposed of at an authorized facility can be done through the contracting process as well.
09.002	No comment.
16.001	Did these shops have non-routine tasks? This is confusing. The cited regulations have to do with having a HAZCOM program. Is that the same listing of non-routine tasks? Or is this listing something that should be a part of the written HAZCOM program. If that is the case, than HC.30.3. The written hazard communication program must meet specific requirements as to its contents (29 CFR 1910.1200(e)(1) and AFOSH STD 161-21, para 5a(1) and 5a(2)). is a better choice. Checklist item number does not belong in citation field.
16.002	- Checklist item number is in the citation field instead of the checklist item number field. - What did he do that indicated that he did not understand the program?
17.001	How do you know that only face shields are used? Were none available? What were the splash hazards observed? Checklist item number does not belong in citation field.
17.002	Are written operating instructions in any of the shops? Checklist item number does not belong in citation field.

Finding Number	Comment
17.003	Is the alarm not there? Or is the alarm present, but located in an improper location? If so, where is the alarm located? Checklist item number does not belong in citation field. The citation is incorrect. PE.60.2. Installations that use cylinders or air compressors to supply breathing air to respirators must meet specific standards (AFOSH STD 48-137, para 8.3.3. through 8.3.3.3, 29 CFR 1910.134(i)(5) through 1910.134(i)(8)). [Revised November 1998]
17.004	Were the gloves in the R&R shop the only instance? If not, how many shops had this deficiency? The phrase "in some instances" sounds like multiple occurrences. Checklist item number does not belong in citation field.
17.005	Provided is misspelled. 11 out of how many? This will help show the severity of the finding. The citation is incorrect PE.40.1. Supervisors of workplaces where respirators are used must meet specific responsibilities (AFOSH STD 48-137, para 2.5.2). [Revised November 1998]
17.006	How do you know this? Was the person improperly trained or did he/she just not clean the respirator properly? The citation is incorrect. PE.100.2. The storage of respirators must meet specific criteria (29 CFR 1910.134(h)(2) and AFOSH STD 48-137, para 8.2.2). [Revised November 1998]
17.007	The listed checklist item number, PE.90.7 was deleted in November 1998. The correct choice is PE.90.1. Installations must meet specific requirements with regard to respirator fit-testing (29 CFR 1910.134 (f)(1) through 1910.134(f)(3) and AFOSH STD 48-137, para 6.2.1). [Revised November 1998]
18.001	- Why are they required in these shops? What are the sources of noise? 11 out of how many? This will help show the severity of the finding. The listed checklist item number of NO.50.1 is incorrect. The correct choice is NO.50.9. Installations must obtain an audiogram at least annually for personnel exposed to noise at or above an equivalent dose of 8-h at 85 DBA (29 CFR 1910.95(g)(6) and AFOSH STD 161-20, para 3-5a).
18.002	What are the sources of noise in these shops?
18.003	How many employees have had an STS hearing loss? How many have not been notified? Have they been notified at all? Or were they notified but not within the required time period? While the correct checklist item number was used, the citation is incorrect. NO.50.13. Installations must notify affected individuals in the event that an STS occurs (29 CFR 1910.95 (g)(8)(i)).
38.001	- Suggested action missing. - How many is several?

Finding Number	Comment
	Use checklist item 38.2.2 to write this finding.
41.001	Suggested action missing. "Building" is misspelled. Should the finding be that the areas are not posted correctly and the suggested action is to do the testing? What is in these areas that causes a load concern? While the correct checklist item number was used, the citation is incorrect. WS.10.7. Approved loads for roofs and floors must meet be posted in accordance with certain requirements (29 CFR 1910.22(d)(1) and 1910.22(d)(2)).
41.002	Suggested action missing. Has an evaluation ever been done? If yes, when? The assessor wrote this against WS.60.1, which does not include the AFOSH citations listed, nor does it stipulate that inspections have to be done every 3 yr.
41.003	Suggested action missing.
41.004	- Suggested action missing. - How is it faulty? Why is this written up under a different citation and checklist item than the finding in 41.003?
42.001	- Suggested action missing. - Is the maximum occupancy known and just not posted? Or is it unknown? This is an important distinction because ME.20.4 does not require the occupancy to be posted.
42.002	Suggested action missing.
45.001	- Suggested action missing. - Who is not on the permit that should be? One person, multiple people? While the correct checklist item number was used, the citation is incorrect. PS.10.22. Entry permits must contain specific information (29 CFR 1910.146(e)(6) and (f)).
45.002	- Suggested action missing. - What tests? While the correct checklist item number was used, the citation is incorrect. PS.10.22. Entry permits must contain specific information (29 CFR 1910.146(e)(6) and (f)).
45.003	Suggested action missing. The second sentence in the finding details states the requirement, not the current conditions.
45.004	Reword the finding such that the current conditions and details are first, followed by the requirements. This finding is not written against a single checklist item, but an entire section of checklist items. The assessor needs to decide what is wrong and write a finding

Finding Number	Comment
	against a single checklist item number.
47.001	• Suggested action missing. • In which shops? • Whose responsibility is this? What does majority mean — more than 50%, 75%, 90%?
47.002	• Suggested action missing. • Why is it not visible? Is it blocked by something?
47.003	• Suggested action missing. • Does the assessor mean that it was on the floor?
48.001	• Suggested action missing. • What items? How many?
48.002	• Suggested action missing. • The finding details state what should be done, not the current conditions.
49.001	• Suggested action missing. • For how many is the guard missing and for how many is the gap too large? This was not written up against the correct checklist item number. Instead of MG.40.7, it should be written against MG.40.2. Bench and floor stand grinders must satisfy certain guard exposure angle requirements (29 CFR 1910.215(b)(3) and 1910.215 (b)(9)).
49.002	• Suggested action missing. • Sentence 2 in the finding details paragraph is an incomplete sentence. This finding was written against MG.20.2 which is specific to woodworking equipment — is this woodworking equipment?
49.003	• Suggested action missing.
51.001	• Suggested action missing. Write finding against 51.2.2 for missing checklist items.
52.001	• Suggested action missing. • What is the current condition of the nozzles? Write finding against 52.2.2 for missing checklist items.
52.002	• Which panels had which problem? Write finding against 52.2.2 for missing checklist items.
52.003	• Suggested action missing. • For all personnel or only a portion? Is the training being conducted and not documented, or not being conducted at all?

Finding Number	Comment
	Are they using the fall protection? Write finding against 52.2.2 for missing checklist items.
52.004	Suggested action missing. Write finding against 52.2.2 for missing checklist items.
52.005	- Suggested action missing. - Where? - Is the fall protection used? - What aspects of the design/performance criteria are not within standards? Write finding against 55.2.2 for missing checklist items.
52.006	- Suggested action missing. - Which areas have eye wash bottles? Write finding against 52.2.2 for missing checklist items.
52.007	- Suggested action missing. - Where is the box? - Why is there no clearance? Is the box blocked? If so, with what? Write finding against 52.2.2 for missing checklist items.
52.008	- Suggested action missing. - It is unclear from the details provided what the finding is. Write finding against 52.2.2 for missing checklist items.
52.009	- Suggested action missing. - Are the eyewash and shower needed in this area? What hazardous materials are present? Write finding against 52.2.2 for missing checklist items.

The following possible noncompliance issues were observed while accompanying the assessors, but not written as findings in the report.

- The PVQ states that the installation is located in a geographic area where high levels of radon are found. It also states that the installation has not been monitored for radon.
- There was an overflowing dumpster outside the AGE hangar. Approximately three garbage bags of trash were laying on the ground next to the dumpster, which was so full the lid would not close.

General Comments

- Include the building number on the report print out for clarification as to the location of the finding. This was not always included in the details.
- Only 2 of the 29 safety findings included a suggested corrective action.
- Numerous safety findings have "Not in Protocol" designated in the area where the protocol question belongs. There is no "blank" question in the safety protocol to address these issues. Until one is provided, the findings should be written up under HM.2.1 of TEAM Guide. ANG should determine if they want these issues assessed.
- The findings were written in a variety of styles. Some included many details, others almost none. Some included information on the requirement the finding was written against, others did not.

Reviewers' Suggested Corrective Actions

- Consider extending the length of the assessment. Assessors could travel on Sunday afternoon and be ready to go on Monday morning. This would allow for a more thorough assessment.
- Better define the scope of the safety protocol. This will ensure that the various safety assessors are looking at the same issues across installations and looking at them with the same degree of thoroughness.
- Remind assessors that ECAMP should be an interactive process. They should not put the shop supervisor in the position of giving a guided tour. They should also be talking to more than just the shop supervisors, asking personnel how they think things works.
- Develop some type of guide sheet for assessors to consult when writing findings. Include examples of "good" write ups as well as "bad."
- As part of the report, include a site visit log. This would document the shops/offices the assessors visited.
- Set up a web site for ANG ECAMP where the following things are posted:
 - * link to the manuals

- * a running list of the 15 most common findings in environmental, IH, and Safety areas for the last 6 mo so the installation does not have to call around to find this out
- * any associated guidance documents
- * a forum for info exchange on ECAMP so that there is a place to ask questions about what people find in internal assessments.

Appendix K: Process QA/QC Form for Toledo, OH

Installation Name: 180 FW (Ohio Air National Guard — Toledo)

Installation Environmental POC: Maj William Antoszewski

Phone: (419) 868-4270

ANG Team Leader: Chuck Smith

Reviewer's Name: David A. Krooks

Phone: (217) 373-3432 **Email:** d-krooks@cecer.army.mil

Dates of assessment: 29 June 1999 through 2 July 1999

Dates of onsite review: 29 June 1999 through 2 July 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): ANGRC: MSgt Wills (Bio), SMSgt Don Williams (Safety)

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

A third environmental assessor is added when an important GSU is part of the scope of the assessment. I do not understand the reason for having three persons assess the environmental protocols together when on the Main Operating Base (MOB), and I do not understand why they do not assign individuals responsibility for particular protocols. Fortunately, the three assessors did not ask questions at the same time, even though all three went to every shop on the MOB. In the case of the Toledo assessment, three environmental assessors, one QA person, and two installation personnel made the shop visits on the first day.

That is simply too many persons at one time. One would think that assigning protocol responsibilities directly and dividing up the shops that need to be visited would allow for interviews to be conducted in greater depth.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.				X		
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.						NO
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.						NO
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.						NO
8. Recorded findings daily.						NO
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).			X			
10. Technically knowledgeable					X	
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).					X	
13. Visited sites that were of environmental concern to the installation/facility.					X	
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NO
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.						NO
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.		X				

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		
19. Demonstrated effective interviewing skills and techniques. (i.e. open-ended questions, did not answer own questions)		X				
20. Before departing, explained the potential findings to the senior person at each facility.		X				
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).						NO
22. Investigated for "root causes" of deficiencies/findings.						NO
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				X		
24. Informed other team members of potential concerns related to their assigned media protocols.				X		
25. Kept team leader informed of problems encountered by the team members.				X		
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.	X					
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.			X			
28. New findings were discovered (findings different than those identified in the previous ECAMPs).						NO
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
30. Overall performance of the assessment team.			X			
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
Comments: IH assessor was excellent; safety assessor was very good. IH was the only person to introduce himself, set the scope and tone of the assessment, and provide feedback prior to leaving the shop. Safety assessor asked good questions and had good interviewing style, but did not introduce himself, did not set the scope and tone of the visit prior to starting the interview, and did not give feedback prior to leaving.						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med		High	Other
	1	2	3	4	5	NA/NO*
The environmental assessors routinely failed to introduce themselves or establish the scope and purpose of their interview (1 intro in 15 shops). They likewise routinely did not provide feedback prior to leaving the shop. In general, the interview style showed a lack of focus. It is rather more stream-of-consciousness. Ms. Grillon was the exception; her interview technique is routinely good. Assigning protocol responsibilities would likely help solve focus issues. Environmental assessor called waste JP-8 in initial accumulation point "Flammable" and recommended storage in a flammables cabinet. To the best of my knowledge, JP-8 is combustible rather than flammable; in addition, one wonders whether it is kosher to mix HM and HW in the same flamm cabinet. IH assessor was particularly good in the course of an interview dealing with two badly broken programs. He was tactful but direct when confronted with long-neglected programs. He showed appropriate deference to ANG Team Leader on questions of how to encourage the development of the deficient programs. Also, his recollection of prior assessments was particularly useful in this context as way to provide info on knowledgeable person for staff assistance visit to help get the program moving. Having noted a cart carrying oxy/acetylene tanks without caps, the Safety Assessor was heard to remark, "Save some ink and put the caps on." To the best of my knowledge, he wrote no finding in the report.						

* NA = Not Applicable, NO = Not Observed

PART 2. ANG TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.						NA
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.					X	
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.						NA
6. Reminded team of essential elements (i.e., goals and objectives of ECAMP, interviewing techniques) prior to the start of the assessment.	X					
7. Coordinated daily assignments to ensure each site team is not excessive.						NO
8. Effectively out-briefed installation commander/staff.						NO
9. Overall performance of Team Leader.				X		
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.				X		
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						NO
12. Ensured copies of TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.						NO
13. Ensured positive findings were "above and beyond" compliance.						NO
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.		X				

PART 2. ANG TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
Comments: ANG POC's QA of findings occurs after they've all been written and edited by the assessors. Chuck does a quick review prior to pre-briefing the installation commander. I would think that earlier involvement in the writing process would be useful. The installation safety POC acknowledged the budgetary constraints but also expressed the thought that it would have been useful to have a construction safety person here for Red Horse, since their mission is construction. However, it should be noted that Red Horse's actual construction projects occur when the unit is TDY; they would, therefore, never fall within the scope of an ECAMP of 180FW.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).					X	
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.	X					
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
5. Effectively coordinated the in-briefing and out-briefing.				X		
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.						NA
7. Acted effectively as liaison between the assessment team and installation personnel.						NO
8. Resolved problems encountered by the assessment team members.						NA
9. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					X	Did not observe out-brief
11. Appropriate installation personnel were available to the assessment team.					X	
12. Overall performance of Environmental Coordinator/Staff.					X	
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings and notification of tenants.				X		
14. Provided a complete PVQ to the assessment team.					X	
Comments: Installation's support of the ECAMP was good. A wealth of documentation was present when the assessors arrived. Installation personnel were well aware of the assessment and expecting the ECAMP assessors to visit them. There were no glazed looks at all. Approx. 50% of the time, the installation personnel who accompanied the assessors on shop visits would						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
provide answers to the assessors' questions rather than letting the shop personnel answer. As an example, the installation Safety POC who accompanied the Safety assessor was noted asking questions; indeed, she was functioning about 25% of the time as an assessor. I recommend having HQ personnel suggest that installation personnel limit their activity to observing and only answer questions or ask them when the assessor requests it. There should be a clear line drawn around what the external assessor is doing. External ECAMPs should not provide occasion for shop visits by installation personnel who have their own agendas.						

Comments on the Draft Report for Toledo

Finding Number	Comment
01.001	What has changed that the inventory is no longer up to date? I do not have the database to check, but this should be written up under?
Air Emissions Comments	The meaning of the comment to the Air Emissions protocol is unclear to me. Is the assessor recommending that the installation give up its permit?
03.001	Why is a HazMat finding using an Air Emissions checklist item? This should be finding 01.002 and the protocol listed should be Air Emissions, using checklist item AE.1.4. A risk management program (RMP) is required when there are processes involving regulated substances above specific threshold levels (40 CFR 68.2(c), 68.150. and 68.190).
03.002	It would be helpful to know if the cabinet at issue is made of wood or of metal and in what respect it is deficient. The finding includes this observation: "At AGE, there is a 1-gallon metal can of waste JP-8 which is not stored in a flammable storage area." This is not a finding as there is no regulation requiring hazardous materials (whether flammable or combustible) to be stored in a cabinet. I do not have the database to check, but this should be written up under HM.35.4. Storage cabinets used for the storage of flammable/combustible liquids must meet specific requirements (29 CFR 1910.106(d)(3)).
03.003	The finding detail should not include a description of what the plan needs to contain; the certification of the plan should be noted in the Suggested Action: "Completed plan must be certified by a PE." What specifically is not in the Annex that should be in the plan? I do not have the database to check, but this should be written up under HM.1.4.AG. Each installation is required to publish a HAZMAT Plan and a HAZMAT Appendix to Annex A to O Plan 32-1 (AFI 32-4002, para 3.3) The Suggested Action refers to an Appendix 3-1. I know that means Appendix 3-1 of TEAM, but doubt other readers would.
HM Comments	Why isn't comment 1 a finding under HM.30.1. Federal facilities that are required to prepare or have available an MSDS for a hazardous chemical under OSHA, are required to meet specific MSDS reporting requirements for planning purposes (EO 12856; 40 CFR 370.20(a) through 370.20(c), 370.21, and 370.28) and the suggested action is to get a process in place to prevent it from happening again in the future? Comment 3, are these drums solid waste — it sure sounds like it from the description. If yes, this would be a finding under SO.10.1. All solid wastes and all materials separated for recycling are required to be stored according to specific guidelines (40 CFR 243.200-1).
04.001	I do not have the database to check, but this should be written up under HW.45.2. When an SQG is managing a waste or soil that does not meet treatment standards, a notice must be issued to the TSDF in writing of the appropriate treatment standards and prohibition levels (40 CFR 268.7(a)(2), 268.7(a)(3) and 268.7(a)(10)). The citation listed in the report looks incorrect. Why are the forms incorrect?

Finding Number	Comment
04.002	I do not have the database to check, but this should be written up under HW.10.1. Federal facilities that generate solid wastes must determine if the wastes are hazardous wastes (40 CFR 261.3, 261.4(b), 261.21 through 261.24, and 262.11)
04.003	I do not have the database to check, but this should be written up under HW.1.3.AG. ANG installations are required to follow the methodologies outlined in the ANG Hazardous Waste SOP (ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997).
04.004	Spelling error in the Suggested Action. I do not have the database to check, but this should be written up under HW.1.3.AG. ANG installations are required to follow the methodologies outlined in the ANG Hazardous Waste SOP (ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997). Where was this found? Every SAP on base?
04.005	I do not have the database to check, but this should be written up under HW.1.3.AG. ANG installations are required to follow the methodologies outlined in the ANG Hazardous Waste SOP (ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997). What does the cited 40 CFR have to do with the finding?
04.006	The finding detail and the checklist item itself suggest that the SOP is permissive with respect to the establishment of SAPs, but the suggested solution is written as if establishing an SAP is required by the SOP. It is not clear to the reviewer that this is a valid finding. The language in which it is written suggests that this is instead merely an assessor's recommendation. Is the issue here that Front Line Avionics is operating a satellite accumulation point that is not officially designated? Or, is the issue that they are operating an SAP but there is something wrong with the containers or the markings, or the amounts being stored? I can see where the former could be a finding under the SOP if the SOP requires SAPs to be designated. But the latter is regulated under 40 CFR 262.34(c), See HW.35.1. All SQGs may accumulate as much as 55 gal of hazardous waste or 1 qt of acutely hazardous waste in containers at or near any point of initial generation without complying with the requirements for onsite storage if specific standards are met (40 CFR 262.34(c)). Pick either the CFR or the SOP and state clearly what is wrong.
04.007	I do not believe it is appropriate to write this as a hazardous waste finding; it is not clear that waste acid is stored in the battery shop. Perhaps the finding should be written against WA.25.2, which prohibits discharges to a POTW/FOTW with a pH below 5.0.
HW Comments	Should it not be a finding when the HWMP is not up-to-date? See HW.10.2.AG. Installations that generate hazardous waste are required to have a Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2).
06.001	A continuity book is handy, to be sure, but above and beyond? If this really is a positive, it should be written up against O5.2.2.AG. Installations should go above and beyond environmental statutory and regulatory compliance (MP).

Finding Number	Comment
06.002	It is unclear from the finding whether or not ANG has actually issued guidance related to noise complaint procedures. If they have, it would be useful to cite that document and indicate what requirements are not being met. Is the finding against the MAJCOM for not issuing procedures or the installation for not following issued procedures? This appears to have been written under checklist item O2.3.2.AG. Installations are required to follow MAJCOM procedures for researching and responding to noise complaints (AFI 13-201, para 3.3.).
06.003	I do not have the database to check, but this should be written up under O4.5.1. Pollution prevention plans are required to be developed by 31 December 1995 (EO 12856, Section 3-302(d)).
Other Issues Comments	Comment 1. Why is it unclear? Nonparticipation is a finding under O4.17.1.AG. The hazardous materials pharmacy program (HPP) is required to be operated according to specific procedures (AFI 32-7086, para 2.3). Comment 2. Minimization is a finding under O4.11.1.AG. Installations are required to develop procedures to centrally control the purchase and use of hazardous materials (AFI 32-7080, para 2.4.1), which states "Verify that hazardous materials are issued in the smallest quantity necessary to meet the customer's need."
07.001	The finding detail should be more specific. Is the problem that there is no pest management plan at all or only that it is not complete? The suggested solution implies that there is none at all, but the finding detail should state that clearly. I do not have the database to check, but this should be written up under PM.1.2.AG. Each installation is required to have a comprehensive pest management plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 3.4.5)
08.001	I do not have the database to check, but this should be written up under PO.20.2. Drainage of rainwater from diked areas must be controlled by a valve which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)).
08.002	Collection buckets at parts washers can reasonably be considered part of a process rather than storage if an integral part of the machinery. I do not believe that this finding is legitimate. Plus, it is pretty unusual for the stuff coming out of an aqueous parts washer to pass the classification for Used Oil. Has it ever been tested? It usually ends up going as hazardous waste once collected. We need a better description of what is going on here.
08.003	Where are the tanks located? How big are the tanks? The stationary tank should be written up under ST.5.1 and the mobile tank under ST.5.5. If either tank is under 660 gal, use ST.5.4.AG.
POL Comments:	If the text is incorrect, the plan is not up to date and this is a finding under PO.5.1.

Finding Number	Comment
10.001	How big are the USTs and what is in them? This is crucial since heating oil USTs are exempt. Need to provide more guidance about where in TEAM Guide other record retention requirements are provided. Did they meet the other requirements? What is the purpose of the strategy letter citation? I do not have the database to check, but this should be written up under ST.90.2. Specific recordkeeping requirements must be met in relation to USTs (40 CFR 280.10(c), 280.34(b), 280.34(c), 280.45, and 280.74).
10.002	How big are the USTs and what is in them? This is crucial since heating oil USTs are exempt. Also, this is a different checklist item number depending on if it is a POL UST or a hazardous substance UST. Cathodic protection testing is found in ST.50.1. The testing of the piping and tank is ST.65.1. or ST.70.1 depending on the type of tank it is.
16.001	The first and last sentences of the finding description contradict each other.
16.002	The finding is poorly written. The first sentence makes it sound as if there needs to be one base-wide inventory of HM that includes all work areas. The real problem is that two specific shops do not have current inventories. Both sentences 1 and 3 should be deleted in the interest of clarity.
17.001	Were all of them damaged, some, what?
17.002	The finding cites CFR references and checklist items that are inconsistent with the text of the manual. 29 CFR 1910.134(e)(4) addresses medical questionnaires and examinations as they relate to PPE and is cited at checklist item PE.80.6 rather than PE.100.2 as the finding indicates. In addition, I do not think this condition is properly addressed under the inspection checklist item, which is actually PE.100.3 (citing 1910.134(h)). If indeed no inspections are being conducted, that should be a separate finding. The respirator in question in 17.002 either failed an inspection or was otherwise found to be defective and was not removed from service and subsequently discarded/repaired/adjusted in accordance with required procedures. The correct checklist item in this instance is PE.100.5 and the citation is 1910.134(h)(4).
17.003	The last sentence of the finding is the Suggested Action, not a part of the finding.
17.004	I am not quite sure what version of the manual is in use here. The PPE chapter was updated in November 1998, and that might account for the problems with citations and checklist numbers in these findings. The relevant checklist item is PE.100.2, and the appropriate citations are 29 CFR 1910.134(h)(2) and AFOSH STD 48-137, para 8.2.2.
17.005	Again, an apparent version problem. 29 CFR 1910.132(d)(2) addresses the documentation of hazard assessments. The finding should be written against PE.20.1, citing 29 CFR 1910.133(a)(1). The same problem with clarity found in 16.002 is found here. Concluding a finding with "Appropriate X was used throughout the base except as noted" confuses the issue. The problem is selection of PPE in two particular shops; there is no reason to write the finding as if it is addressing a base-wide condition. List two particular shops, and then say that the PPE problem doesn't exist anywhere else on base. Simply write the finding to address the two particular shops

Finding Number	Comment
	where the condition at issue exists. Why do they need chemical splash goggles — what is going on at the shops that makes this a requirement?
17.006	The version problem again. The correct checklist item for this finding is PE.60.2, which makes specific reference to keeping asphyxiating gases such as CO out of air supplied to respirators.
17.007	The version problem again. The checklist item number is correct, but the citation is wrong.
17.008	The version problem again. The checklist item number is correct, but the citation is wrong. What does "Many" mean? Is it 30% of the employees, 50%, 80%? Same issue for numerous.
18.001	See comments on 16.002 and 17.005 with respect to clarity. Write findings so that they address the shops at issue. If the assessor takes that approach, there is no need to discuss the base as a whole or to indicate where the problem in question is not found. The requirement at NO.40.1 is that installations must develop and implement a monitoring program when any individual's noise exposure exceeds an equivalent dose of 8-h at 85 DBA. The finding seems to address a condition in which it is unclear what the noise levels actually are. Therefore it should be written against checklist item NO.10.2, which requires that the health effects of noise be evaluated as part of baseline workplace surveys, annual workplace surveys, and when operations change or new operations start.
19.002	Should be finding number 18.002. What does "numerous" mean?
26.001	Checklist item PB.10.1, which addresses the Permissible Exposure Level for lead, is not the best checklist item for this finding, nor does it cite the relevant portion of the lead standard. Failure to establish exposure levels should be addressed using checklist item PB.20.2, which requires that employers establish whether any personnel might be exposed to lead at or above the action level and cites 29 CFR 1910.1025(d)(2).
29.001	No comment. It is not clear to the reviewer that it is useful to include comments such as the following in a finding of noncompliance: "In general, the Base has done an excellent job of eliminating methylene chloride and methylene chloride products from shops. Methylene chloride was not identified elsewhere at either Camp Perry or Toledo."
Only 5 of the following 25 safety findings contain suggested solutions.	
38.001	The checklist item against which this finding is written (BA.10.6) was moved to chapter 39, item number LG.45.6, in November 1998. The safety assessor also appears to be using a manual that is not up-to-date. The correct checklist item for the condition is actually BA.10.4, which uses the citation that the finding indicates. What used to be BA.10.6 addresses the retention of reports on workplace inspections.

Finding Number	Comment
38.002	The finding begins "At both locations..." Presumably, this means both Toledo and Camp Perry, but the finding should state that explicitly. The checklist item number is correct, but the citation was revised in November 1998 to AFI 91-202, para 1.6.14.4, more evidence that an out-of-date manual was in use.
38.003	Checklist item BA.10.2 requires each installation to establish a program to abate hazards and deficiencies. The finding is addressing the fact that six deficiencies listed in the HAP log had not yet been abated at the time of the assessment. Timely abatement of hazards is not covered by this checklist item. Instead, one might consider writing the finding under BA.10.12 (The procedures for correcting unsafe or unhealthful working conditions must include a follow-up, to the extent necessary, to determine whether the correction was made (29 CFR 1960.30(b))) or BA.10.15 (Spot inspections must be used to ensure that corrective action is taken and that hazards are mitigated (AFI 91-202, para 3.1.4.5).)
39.001	This finding was written citing 29 CFR 1904, for which 29 CFR 1960 was substituted in November 1998. The finding should be written using an up-to-date manual and checklist item LG.45.7.AG, citing 29 CFR 1960.73. Were any logs of any date available?
40.001	Although common sense is clearly on the side of the assessor, there is actually no CFR face protection requirement that mandates clean face protection. This cannot legitimately be written as a finding but could be included as a comment.
40.002	"Both locations" must again be understood to mean Toledo and Camp Perry, in this instance in particular, clarity is necessary and can be achieved with a listing of the sites at which noncompliant eyewash/shower stations are found. The recommendation of a base-wide assessment of need is a sound one, but it does not relieve the assessor of the obligation to list the sites where s/he found deficiencies.
40.003	No comment.
40.004	The assessor is using a broad requirement for deluges, etc., to address a particular deficiency. A better checklist item would be SP.2.1 (for missing items), as in 40.003 above.
41.001	The assessor suggests a solution, but instead of using the "Suggested Solution" slot, he includes it in the finding detail.
41.002	No comment.
42.001	This finding does not tie to any checklist item. It could tie to ME.10.2 (Every building or structure must be so constructed, arranged, equipped, maintained, and operated as to avoid undue danger to the lives and safety of its occupants from fire, smoke, fumes, or resulting panic during the period of time reasonably necessary for escape from the building or structure in case of fire or other emergency). The grave deficiencies manifest in these buildings vis a vis the NFPA Life Safety Code certainly need to be noted, but NFPA 101 is not part of the ANG's ECAMP manuals.

Finding Number	Comment
42.002	No comment.
43.001	No comment.
43.002	NFPA 54 para 3.1.2 cannot be used for this finding, because it applies to piping underground only. Some other citation must be found, IF this is to be considered an ECAMP finding.
47.001	This finding should be written against FP.2.1 (missing checklist items) and should cite the AFOSH STD, chapter and verse. It is deceptive to cite 29 CFR 1910.157(e)(2), which requires only an annual maintenance check.
47.002	29 CFR 1910.37(m) requires periodic inspections and tests, but does not incorporate NFPA 25. Neither it nor the AFOSH STD is not in the scope of the manual. The finding cites checklist item MS.20.16, which would be in Chapter 48, Materials Handling and Storage, if a checklist item by that number existed. What the assessor means is ME.20.16, which refers to 29 CFR 1910.165(d). The assessor should use FP.2.1, since the actual basis for his finding is not part of the manual.
47.003	29 CFR 1910.37(n) requires maintenance and tests IAW 29 CFR 1910.165(d), but neither 37(n) nor 165(d) incorporates NFPA 72. Neither it nor the AFOSH STD is not in the scope of the manual. The finding cites checklist item ME.20.16, but the assessor should use FP.2.1, since the actual basis for his finding is not part of the manual.
47.004	See 47.003. The finding cites checklist item MC.20.16, which is in the Methylene Chloride chapter. The assessor should use FP.2.1, since the actual basis for his finding is not part of the manual.
47.005	The assessor uses checklist item FP.2.1 for this finding, even though 29 CFR 1910.156(b)(10) was included in the November 1998 updates to Volume 2 of the ANG Supplement at FP.30.1. In addition, the suggested solution that is included as part of the finding detail is not identical to the suggested solution that is included under the proper heading.
49.001	The finding uses checklist item MG.40.7; the requirement at issue is actually found at MG.40.2.
49.002	The finding uses checklist item MG.20.5, which is not relevant, but refers to the section of CFR cited at MG.20.4. Neither MG.20.4 nor the citation from the CFR to which both it and the finding refer addresses anti-kickback or safety hold-down devices. What the assessor wants is MG.20.8 (citing 29 CFR 1910.213(h)).
49.003	No comment.
49.004	29 CFR 1910.213(b)(3) relates to applications where injury to the operator might result if motors were to restart after power failures, and it requires that provisions be made to prevent machines from automatically restarting upon restoration of power.

Finding Number	Comment
	This is not the same as undercurrent protection, and it therefore appears that MG.20.2 cannot be used as the basis for this finding.
49.005	MG.10.3 addresses the requirements that point-of-operation guarding must satisfy, it does not require the presence of such guarding. MG.10.1, citing 29 CFR 1910.212(a)(1) does require the presence of such guarding and should be used as the basis for the finding.
49.006	29 CFR 1910.213(h) does not specifically mention "spring back devices." The reviewer does not know enough about such saws to know whether that term is synonymous with "nonkickback" but he suspects that the terms are not in fact synonymous. ME.20.8 may not be the correct checklist item against which to write this finding.

Appendix L: Process QA/QC Form for Bangor, ME

Installation Name: 101st Air Refueling Wing, Bangor, Maine

Installation Environmental POC: Maj Eric Johns **Phone:** 207-990-7407

ANG Team Leader: Joy Hoyle

Reviewer's Name: Carolyn O'Rourke

Phone: 217-328-1019 **Email:** c-orourke@cecer.army.mil

Dates of assessment: 13 - 16 July 1999

Dates of onsite review: 13 - 15 July 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): Joy Hoyle, Chief MSgt Scott Grimshaw, LtCol Ng, SST Gould (RI ANG), and Norman Rivad (Internal Review Office, Maine TAG).

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

In-brief--Tuesday AM

Tuesday AM — Observed an Environmental assessor and contractor discuss draft SPCC plan. Observed other Environmental assessors review hazardous waste paperwork with Maj Johns. Observed an Environmental assessor review storage tank paperwork with Maj Johns.

Tuesday PM — Observed the IH assessor visit vehicle maintenance, POL, and AGE.

Wednesday AM — Observed Environmental assessors visit Vehicle Maintenance, POL, AGE, CE, Security Police and CE storage yards, flight line hazardous waste accumulation site, Fuel Cell (542), NDI, and Security Police.

Wednesday PM — Observed Safety assessor visit the Fire Department, AGE, and Vehicle Maintenance.

Thursday AM — Visited Vehicle Maintenance, AGE, POL, and CE to follow-up assessors' visits.

Interviewed Bio, Safety, and Environmental to gather comments and observations of ECAMP team and process.

Thursday PM — Worked on my report and sat in on discussions of findings and report. LtCol Ng and ANG Team Leader read findings in preparation for the out-brief.

Out-brief — Friday PM

General Comments (Insert here comments which do not fit in comment boxes elsewhere in the form.)

Comment from interview with Bio and Env staff. Previsit questionnaire needs to be updated to reflect what is actually covered in ECAMP visit or ECAMP needs to include everything that is in questionnaire. Another possibility would be to indicate in questionnaire that these are areas that "may" be covered. Misleading to suggest that all areas will be covered in ECAMP.

Too much emphasis placed on environmental end of assessment with assessors in Env versus one assessor in IH and Ground Safety. This leaves no time for Bio paperwork. Pointed out that Env program depends on Bio for fundamental parts of the program that do not get enough attention in ECAMP.

Indicated that one ENV assessor seemed to have more practical experience than other assessors and could make practical recommendations for shop personnel.

Indicated need for specific pollution prevention help rather than looking in every flamm cabinet. ECAMP should allow for customized support tailored to the needs of the base.

Assessors need to know how EMIS works and do risk management based on EMIS reports from chemical usage and waste stream inventories. Assessors are

asking "old" questions. If assessors do not learn EMIS, they are going to get hoodwinked. Need to ask for printout from AF Form 2761. Seems that assessors should have been learning this, if they were asking the right questions about the pharmacy process. AF Form 2761 uses WPID (work place identifier) as a locator — this must be included in database.

ECAMP needs to be able to handle a finding as an example and apply it base-wide.

ENV POC voiced that a lot of money was spent on ECAMP with little result. More time and money needs to be spent on fixes.

Comments from Ground Safety POC. Indicated that ECAMP was a good experience. Asked if Safety is in Pre-Visit Questionnaire. Indicated need for basic clarification between AFOSH and OSHA. POCs liked having access to scrubbed ECAMP reports for ideas for ECAMP prep and for continuous improvement.

Commented that it was beneficial to hear give and take between Safety assessor and HQ Safety Officer to understand thinking process behind answers/recommendations. Safety assessor's clarification of reasons behind regulations was also considered beneficial. POCs ask where is the checklist and how is it used?

Offered the following suggestions for future ECAMPS: be careful that Safety ECAMP does not become "gamed" by personnel; focus should shift on subsequent ECAMPS; and rotate assessors so that the same person(s) do not visit same bases.

Comments from shop personnel interviewed after ECAMP visits. Several shop supervisors said that ECAMP is positive reinforcement that should continue. Another "set of eyes" seen as a good check and that there is always something to be learned. Seen as a continuing good because of new personnel and new processes and as a way to improve. Several commented that adding safety and bio to ECAMP is a plus.

Several voiced awareness of difficulties between Env POC and assessors during ECAMP visit. Shop supervisors were so experienced that they knew the "right" answer even if the question was asked badly or the question was interrupted.

Comments on out-brief. The briefer completely lost the slide giving overview of the totals on findings. Briefers sounded apologetic about having any findings. Humor was probably overdone rather than used effectively. These approaches

undermine the worth of the ECAMP process. The use of first names for base military personnel was unprofessional and may give the impression that ECAMP is not important enough for military rank.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.			X			
2. Was organized.			X			
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.				X		
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			X			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.				X		
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.		X				
8. Recorded findings daily.						NO
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.					X	
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.						Yes-- GSU
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NO
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.			X			
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).			X-1			
19. Demonstrated effective interviewing skills and techniques. (i.e., open-ended questions, did not answer own questions).			X-2			
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).		X				
22. Investigated for "root causes" of deficiencies/findings.		X				
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.			X			
24. Informed other team members of potential concerns related to their assigned media protocols.						NO
25. Kept team leader informed of problems encountered by the team members.						NA
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.						NO
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				X		
28. New findings were discovered (findings different than those identified in the previous ECAMPs).				X		
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
30. Overall performance of the assessment team.				X-3		
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.						NO-4
Comments:						
1. Average---High rating if one considers interviewing supervisors, but low if one considers that at times it is more						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO*
appropriate to interview shop personnel. At times, it may have been useful to interview the newest shop personnel to see if training and procedures were known and practiced. 2. Several assessors had very good interview skills; several had marginal skills. Dennis Smith (IH) was identified by base personnel and this observer as having superior interview skills. Environmental assessors missed several items at vehicle maintenance because of failure to ask questions or failure to ask effective questions. This may have occurred because of the almost adversarial situation created by the Environmental POC. The assessors did not appear to have the experience to handle this situation effectively. 3. An overall rating is difficult because of the spread of expertise and effectiveness in the ECAMP team. 4. Assessors were not observed checking regulations or checklists other than one instance of checking for a requirement in the Maine state supplement.						

* NA = Not Applicable, NO = Not Observed

This section is to evaluate the performance of either the Contract Team Leader or ANG Team Leader. Evaluate whoever operates as team lead predominantly, and indicate whether the evaluation is for the ANG or Contract Team Leader.

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.						NO
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.		X-1				
3. Familiar with the ECAMP process.				X		
4. Present and available throughout the assessment.				X		
5. Effectively performed as liaison between installation staff and assessment team.		X				
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Coordinated daily assignments to ensure each site team is not excessive.						NO
8. Effectively out-briefed installation commander/staff.						NO
9. Overall performance of Team Leader.		X				
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NO
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						NO EVIDENCE OF THIS
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.						NO-2

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
13. Ensured positive findings were "above and beyond" compliance.						NO
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.			X			
Comments: While, in this case, neither the contract team leader nor the ANG team leader demonstrated consistent, effective leadership, the evaluation is for the ANG team leader. Both Bio and Env in the QA interview expressed the need for an active, senior leader who defines roles and goals for team members. 1. Comments by assessors and base-personnel that in-brief was confusing. Inclusion of data base information, DENIX as a source of protocols, and budgeting not necessary for most personnel at the in-brief. In-brief was rambling and obscure. 2. As noted, this was mentioned in the in-brief. This was not observed at any other time, although the ANG team leader discussed the need for training on location and use of TEAM Guide and the supplements.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
2. Despite comment number 1, the staff was well prepared and had the base well prepared for ECAMP. While ECAMP preparations were evident, it was also clear that compliance was a daily part of base operations.						

Comments On The Draft Report

Finding Number	Comment
There is inconsistency in how the checklist item number is entered into the database. For example, a reference to checklist item number HW.55.5 might appear as HW.55.5 or HW.055.5 or HW.55.05.	
01.001	What are the air emissions sources that lead to this finding? This is written up against the wrong checklist item. Use AE.5.1.ME. Minor sources of air emissions must be licensed (DEP, 06-096, Chapter 115, Section 1(B)).
01.002	This is really confusing.
Air Emissions Comments	No comment.
03.001	This is written up against the correct checklist item number, but the citation is wrong. HM.45.1. The in-plant storage, handling, and utilization of all compressed gases in cylinders, portable tanks, rail tankers, or motor vehicles must be done according to the Compressed Gas Association Pamphlet P-1-1-1965 (29 CFR 1910.101).
03.002	There is a typo in the checklist item number and citation is wrong. Should be HM.30.1. Federal facilities that are required to prepare or have available an MSDS for a hazardous chemical under OSHA, are required to meet specific MSDS reporting requirements for planning purposes (EO 12856; 40 CFR 370.20(a) through 370.20(c), 370.21, and 370.28) [Revised April 1999].
03.003	This is poorly written. Please start the finding with a statement like "The base does not have a HAZMAT response team." That is what HM.25.2.AG is about.
04.001	How did this finding get closed?
04.003	This should be written up under HW.10.1.
04.004	Any idea of when the draft will go final?
04.005	This should be written up under HW.10.1.
04.006	How many boxes? Is this policy really a requirement, or a suggestion? <u>Policy is not found in ME Regulations as compiled in ENFLEX.</u>
04.007	Incorrect citation. Use HW.1.3.AG. ANG installations are required to follow the methodologies outlined in the ANG Hazardous Waste SOP (ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997) [February 1997].
04.008	See 04.007.
04.009	What size generator is the South Portland GSU? If an SQG, training should be written up under HW.25.1; if an LQG, it should be written up under HW.60.1. I do not understand what the issue is associated with paragraph c. Does paragraph d mean that they were accumulating more than 55 gal total or 55 gal

Finding Number	Comment
	of a single waste stream? The latter is Federally and state-regulated and should be written up as such if that is the situation. Paragraph e is a Federal finding for SQGs and LQGs.
Hazardous Waste Comments	Comment 1 has been a Federal and an AF requirement for a couple of years. See O4.5.2.AG and O4.5.1. This is a finding, not a comment. Comment 2 indicates that inappropriate characterization has been done — this is a finding under HW.10.1. No comment — <u>You did comment on the Klamath finding about the same thing.</u> If no one is trained, this is a finding. SQG training should be written up under HW.25.1; LQG training should be written up under HW.60.1. This is a regulatory requirement, see HW.10.3. Facilities which claim that a particular material is not a solid waste or is conditionally exempt from regulation as a hazardous waste are required to provide specific documentation (40 CFR 261.2(f)) [February 1995].
08.001	This tank should have been written up under ST.125.1. How big is the tank?
08.002	How big are these tanks? Do these areas truly meet the definition of an "onshore tank car and tank truck loading/unloading racks"? This regulation is not applicable to general fuel dispensing from a truck.
08.003	No comment.
POL Comments	Comment 1. Why isn't this a finding under PO.65.6? The label USED OIL must be clearly marked on containers used to store used oil and fill pipes used to transfer used oil into underground storage facilities (40 CFR 279.22(c)).
10.001	How many are "several"?
11.001	No comment.
11.002	How did the assessor know the wrapping contained asbestos? And if it was really friable asbestos, there are several Federal regulations that come into play.
12.001	No comment.
12.002	No comment.
12.003	Is the storm drain discharging to the oil/water separator the only storm drain? Or is there another one and where does it discharge to?
Wastewater Comments	Comment 1. Were all of these sites addressed in the NPDES permit issue? If any of these separators is discharged to a treatment works, this is a finding under WA.25.2. Specific pollutants shall not be introduced into a POTW/FOTW (40 CFR 403.5(b)). Comment 2. Shouldn't this be written as a finding under WA.25.2. Specific pollutants shall not be introduced into a POTW/FOTW (40 CFR 403.5(b))?

Finding Number	Comment
14.01	No checklist item listed in the database. Should be BE.10.2. Comprehensive periodic evaluations of all potential health hazards in each workplace and ancillary facilities must be conducted (DODI 6055.5, para F.1.a.(1)).
14.02	No checklist item listed in the database. Should be BE.10.1. Work areas and processes must be free from recognized hazards that cause or are likely to cause death or serious physical harm (29 CFR 1960.8(a) and 1960.9). According to the NOTE in BE.10.1 (NOTE: A "General Duty" finding should not be used where specific OSHA or AFOSH Standards exist that cover the hazard. This finding is used for musculo-skeletal disorders, heat stress, cold stress, or other hazards that have no specific regulatory standard.) So there should be separate findings on an inadequate HAZCOM program, an inadequate Occupational Noise findings, etc.
Basic Program Comments	No comment.
16.01	No checklist item listed in the database. Should be HC.40.1. Installations must ensure that each container of hazardous chemicals in the workplace is labeled, tagged, or marked with specific information (29 CFR 1910.1200(f)(5) through (f)(7), and AFOSH STD 161-21, para 5d(1)).
17.01	No checklist item is listed in the database. Should be PE.30.6. BE/PH must review and certify the adequacy of each shop OI on an annual basis (AFOSH STD 48-137, para 9.5.3). [Revised November 1998]. The citation in the database is incorrect as well.
PPE Health Comments	Comment 1 - Why? What did the assessor see that leads him/her to believe the current baseline is not adequate? If it is not adequate, isn't that a finding?
18.01	No checklist item listed in the database. Should be NO.30.3. Hazardous noise areas must be clearly identified (AFOSH STD 48-19, para 2.1.4.).
24.01	No checklist item listed in the database. Should be AC.10.1. Installation personnel must not exceed the exposure limits specified for the air contaminants in Appendix 24-1 (29 CFR 1910.1000(a)). Listed citation is wrong. When referring to Appendix 24-1, indicate where in Appendix 24-1.
24.02	No checklist item listed in the database. Should be AC.10.1. Installation personnel must not exceed the exposure limits specified for the air contaminants in Appendix 24-1 (29 CFR 1910.1000(a)). Listed citation is wrong. When referring to Appendix 24-1, indicate where in Appendix 24-1.
24.03	No checklist item listed in the database. Should be AC.10.1. Installation personnel must not exceed the exposure limits specified for the air contaminants in Appendix 24-1 (29 CFR 1910.1000(a)).

Finding Number	Comment
	Listed citation is wrong.
Air Contaminants Comments	Comment 1. This should be an environmental finding in the P2 arena.
26.01	No checklist item listed in the database. Should be PB.10.1. Installations must ensure that personnel are not exposed to excessive concentrations of lead (29 CFR 1910.1025(c)(i) and (c)(iii)). What percentage lead? Is the paint used?
29.01	No checklist item listed in the database. Should be MC.10.1. Employers must ensure that no employee is exposed to MC in excess of certain limitations (29 CFR 1910.1052(c)).
Methylene Chloride Comments	Comment 1. This seems like a part of the suggested solution to 29.01, not a separate comment.
30.01	No checklist item listed in the database. Should be BP.40.4. The timing of training must meet specific requirements (29 CFR 1910.1030(g)(2)(ii) and (g)(2)(v)). When was their last training?
38.001	What is most? More than 50% of the facilities assessed, more than 70%, more than 90%?
38.001	How many?
38.002	No comment.
38.003	Why and how is this above and beyond?
38.004	The cited checklist item is about follow-up, to the extent necessary, to determine whether the correction was made. Not sure that this is really tracking closure.
38.005	What are "Some" and "Several"?
38.006	Any examples of specific buildings? What percentage of sites assessed fall into this category? The checklist item does not say this is an annual requirement — where is that requirement from?
38.007	Are there more than 300 assigned personnel at this base?
39.001	Incarceration citation LG.20.1 Lists the citations 29 CFR 1960.67(a), 1960.67(c) and 1960.71(b). The citation listed in the report is for LG.15.1.
40.001	There is a disconnect between the checklist item number and the citation. The data base lists the checklist item number as SP.20.1, which has the citation 29 CFR

Finding Number	Comment
	1910.135(a)(1).
40.002	The listed checklist item number BA.40.3, is in Section 38, not 40. The listed checklist item does not really talk about what is discussed in the finding. This should probably be a new checklist item finding under BA.2.1. using the AFOSH reference because that seems to be what is really being discussed here.
41.001	The checklist item number should be WS.2.1 not 41.2.1.
42.001	This is a little paradoxical — on one hand it says great program, but on the other it says it is wrong. ME.30.1 is about the Installation Emergency Action Plan, not emergency phone stickers. The citations do not match either.
45.001	There is redundancy in the first sentence. When was it last updated? PS.10.1 is about determining whether or not there are permit-required confined spaces. The written program is addressed in PM.10.3.
46.001	If the training program is excellent, why don't people understand when LOTO is applicable?
47.001	How many buildings have the problem with the overhead doors?
47.002	How many are "several"?
47.003	What fire pumps, where?
47.004	How many are "several"?
47.005	Where is the paint spray booth?
48.001	Why not write this up under WS.10.7. Approved loads for roofs and floors must be posted in accordance with certain requirements (29 CFR 1910.22(d)(1) and 1910.22(d)(2))?
49.001	No comment.
49.002	No comment.
49.003	The citation is missing the "29".

Reviewers' Suggested Corrective Actions

Suggested actions cover several areas:

1. Follow-up on suggestion of Bio and Env staff at Bangor to modify the pre-visit questionnaire so that the questionnaire and ECAMP fit. Identify what ECAMP covers now and modify the questionnaire appropriately. This suggestion could be taken back another step to identify the coverage and expectations of ECAMP and develop standard formats for slides, verbal presentations, questionnaires, etc. for clarity of purpose and clarity of process and results.

2. Suggest a close examination of the "Comments" sections. These often included items that would have better been addressed as findings. If a "Comments" section is continued, its purpose should be clearly defined. It should not be used as a vehicle to add "findings" without running up the numbers.

2. There is a need for training and continued supervision of assessments: a need for applying consistent and accurate requirements, for clearly written findings with appropriate suggestions, and a stab at consistency in approach to IH, Safety, and Environmental. The comment from the Bangor staff about the need for assessors to understand EMIS and the usefulness of Form 2761 points out that assessors need to constantly update their knowledge of the ECAMP requirements and the processes they are assessing.

3. The most important recommendation should be the need for leadership. Consistent leadership and respect for the program from HQ is necessary for a successful program. The out-brief, with the use of first names rather than military rank and the overuse of humor, presented an apologetic, unprofessional attitude after a week of work by base personnel and a week of assessments that demanded their time and attention. Each assessment also requires leadership. A review of the base to be assessed, duties of assessors, and expectations for the assessment are important to firmly fix the specifics of each assessment, the areas of overlap and cooperation between assessors, and the overall outcome of the assessment. This kind of review of the process and the outcome must have active leadership during the entire ECAMP process.

Appendix M: Process QA/QC Form for Klamath Falls, OR

Installation Name: 173d Fighter Wing, Kingley Field, Klamath Falls, OR

Installation Environmental POC: Lt. Joe Harris Phone: 541-885-6118

ANG Team Leader: Chuck Smith

Reviewer's Name: Carolyn O'Rourke

Phone: 217-328-1019 **Email:** c-orourke@cecer.army.mil

Dates of assessment: 20 - 22 July 1999

Dates of onsite review: 20 - 22 July 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): Dale Fox, AFCEE/San Francisco RCO

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday AM

In-Brief

Observed Environmental Assessors, Safety, and IH review paperwork. Very confused, but seemed to have been effective from comments made by both base personnel and assessors as the ECAMP evolved.

Tuesday PM

Observed IH assessor visit Vehicle Maintenance, AGE, Fuel Shop, Corrosion Control, and Fuel Lab. Returned to work area to write findings.

Wednesday AM

Observed Ground Safety visit shops in Hangar 219, including Egress, Pneumatics, Electric, Sheet Metal, R&R, and Maintenance tool room. Also, visited Welding Shop, Secondary Power, NDI, and Life Support.

Wednesday PM

Observed Environmental assessor's visit to Corrosion Control, Fuel Cell, closed Hydrazine Building, AGE, Avionics, Vehicle Maintenance, Power Pro, Weapons Loading, and Hazardous Waste Storage Area.

Thursday AM

Observed Environmental assessors and ANG team leader visit Hush House, Firing Range, and Munitions Storage. Observed Environmental assessors visit Parachute Shop, Re-fueling, Wash Rack, and Flight Simulator.

Thursday PM

Interviewed Environmental, Safety, and Bio staff. Interviewed shop personnel. Attended out-brief.

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

Comments from interview with base Safety personnel. Safety is 100 percent in favor of assessments.

Staff had read six assessment reports in preparation for ECAMP. They support the sharing of information from assessment reports and feel this is an effective learning tool. Liked protocol and were familiar with its content. Felt assessor used time well during assessment. Suggest that assessors be rotated so that different assessors are part of subsequent assessments because of the differences in areas of expertise. Seem to accept that Safety assessors will continue to have considerable differences in their approach to ECAMP. Scheduling of ECAMP could be even more often — especially when mission changes. ECAMP should be part of "get well" process. Suggested that an ECAMP that produces many findings should be followed up with a small crew designed to offer correction actions and additional staff and expertise to fix findings.

Comments from interview with base Bio personnel. Felt one assessor had a good background, good interview skills, was thorough, and was effective in letting shop personnel know what was wrong. Suggested that it was time for the Environmental assessors to stop checking on HAZCOM since it is Bio's program.

Comments from interview with base Env personnel. ECAMP Environmental assessors are too narrow in their focus. The focus continues to be on HAZMAT and HazWaste when other areas need attention. Felt that assessors were not interested in Pollution Prevention and in recycling program. Assessors did not have enough time to look in "corners," walk fence line, flight line, or look at water issues. Suggested that, if all environmental areas will not be looked at, this should be made clear in in-brief. Base personnel were not clear about role of RCO representative (introduced as observer, but participated and made suggestions), role of ANG team leader, and reason for out-briefing on Thursday afternoon.

Comments on out-brief. Most findings presented in clear, firm, professional manner.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.			X-1			
2. Was organized.			X-2			
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.				X		
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.						?
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.						?
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.			X			?
8. Recorded findings daily.		X				
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.				X		
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).			X			
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NO
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.						?
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).						NO
22. Investigated for "root causes" of deficiencies/findings.			X			
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.			X			
24. Informed other team members of potential concerns related to their assigned media protocols.						NO
25. Kept team leader informed of problems encountered by the team members.						NO
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.						NO
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.						NO
28. New findings were discovered (findings different than those identified in the previous ECAMPs).						?
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.			X			
30. Overall performance of the assessment team.			X-3			
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.						?
Comments: General comment about Environmental assessment group. There was only one effective, experienced ECAMP assessor in the group. There was confusion, seemingly on everyone's part, as to the role the RCO visitor/ assessor was to play during the ECAMP and as part of the Environmental group. The team did not seem to have the time or knowledge to ask about potential water and natural resource issues. Because of the location in the Pacific Flyway and the importance of water resources in the immediate area, this failure could have an impact on the Wing.						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO*
The three parts of the assessment Team, while supportive of the Team and co-operative in planning visits, appeared to do very little coordination and sharing of information from assessment visits. The findings were presented in the out-brief in a firm, concise manner. 1-Most assessors were well prepared. New Environmental assessor could have been better prepared for first ECAMP. 2-Individual assessors were well organized. Environmental not as well organized because of new assessor and RCO visitor/assessor. 3-Environmental group had negative impact on overall rating.						

* NA = Not Applicable, NO = Not Observed

This section is to evaluate the performance of either the Contract Team Leader or ANG Team Leader — evaluate whichever operates as team lead predominantly and indicate whether the evaluation is for the ANG or Contract Team Leader.

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.						NO
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.				X		
3. Familiar with the ECAMP process.				X		
4. Present and available throughout the assessment.			X			
5. Effectively performed as liaison between installation staff and assessment team.			X			
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Coordinated daily assignments to ensure each site team is not excessive.		X				
8. Effectively out-briefed installation commander/staff.				X		
9. Overall performance of Team Leader.			X			
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NO
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						NO
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.						NO

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
13. Ensured positive findings were "above and beyond" compliance.						NO
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.						NO
Comments: This section rates the ANG Team Leader. The Contract Team Leader's role appeared to be limited to getting report and out-brief together. The ANG Team Leader did not exert consistent leadership. He did ask if specific sites had been visited by the Environmental group on Thursday morning. These questions appeared to prompt additional site visits, when time was very limited because of the Thursday out-brief. Suggest that Team Leader run through sites/location early in the assessment with all Team members to determine priorities and overlap. Wing personnel professed to not understand why the out-brief was on Thursday rather than Friday, and expressed concern that the assessment was shortened unnecessarily.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).				X		
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.			X			
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).			X			
5. Effectively coordinated the in-briefing and out-briefing.				X		
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.				X		
7. Acted effectively as liaison between the assessment team and installation personnel.				X		
8. Resolved problems encountered by the assessment team members.						NO
9. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).				X		
11. Appropriate installation personnel were available to the assessment team.				X		
12. Overall performance of Environmental Coordinator/Staff.				X		
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings and notification of tenants.						NO
14. Provided a complete PVQ to the assessment team.				X		
Comment: Installation environmental staff appeared to be well prepared and had prepared shops for ECAMP.						

Finding Number	Comment
O3.001	No comment.
O3.002	No comment.
Hazardous Materials Comments	There is a conflict in the details in this comment. On one hand it says the drain goes to the sanitary sewer, on the other hand it says the drain goes to a trough — which is it? Is the drain needed? If not, why not just block it?
O4.001	What does this mean? Is the lid open, is there no bung?
O4.002	Need to explain why you think the respirator cartridges would be hazardous waste. Have these waste streams ever been characterized? Why not use HW.10.1, which is a more direct citation. HW.10.3 addresses the requirement to have certain documentation to prove the claim that a particular material is not a solid waste or is conditionally exempt from regulation as a hazardous waste. The finding says that the waste streams have been determined to be hazardous — by who? First line should read solder-containing lead not reverse.
04.003	What is the proof that the site is an SQG? Need supporting information for choosing to use the SQG standards versus CESQG or LQG.
04.004	How are they not being managed as an SAP. By the Federal regulations cited, all they have to do is: – be at or near the point of generation and under the control of the operator of the waste generating process – have containers in good condition and compatible with the waste stored in them – keep the containers closed except when waste is being added or removed – mark the containers HAZARDOUS WASTE or other words that identify contents, and – when waste is accumulated in excess of quantity limitations, the excess container is marked with the date the excess amount began accumulating and the excess waste is transferred to a 180-day or permitted storage area within 3 days. Which of these things specifically are not happening? Or is the issue that they are meeting all the above requirements, but are not formally identified as SAPs in the Haz Waste Management Plan or perhaps they are not meeting the ANG requirements for SAP management (HW.10.2.AG and HW.1.3.AG respectively). What is a metal three-drawer container and how big is it? How big are the other containers mentioned?
04.005	Is it labeled with anything? If not, then this would be a finding under HW.35.1 for not being labeled HAZARDOUS WASTE or other words that identify contents. The citation for HW.1.3.AG is "ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997" not what is listed. If you want to specify the paragraph in the SOP, list it in the Other citation field.
04.006	The citation for HW.1.3.AG is "ANG/ CEV Policy Letter, Hazardous Waste SOP, 3 February 1997" not what is listed. If you want to specify the paragraph in the SOP, list it in the Other citation field.
Hazardous Waste Comments	Comment 1: Is this exemption verbal or written?
06.001	Training shop personnel on haz waste and spill response is compliance — not above and beyond. What specific P2 and training initiative have shop personnel taken? Haz waste binders are not uncommon in the Active Air Force. Are they really unusual in the ANG? Why is it apparent there is a good working relationship?

Finding Number	Comment
	This should be checklist item number O5.2.2.AG as discussed at the June meeting.
07.001	What activities are going on that they are required to have a plan?
08.001	What is there at the Fire Department that creates a potential for discharge? Was the Fire Department the only site at the installation that is occupied for at least 8 h a day and with the potential for a discharge that did not have a copy of the plan? Was the plan certified, contents correct, etc? Did the storage capacity on the base actually require them to have an SPCC?
08.002	What types of loading and unloading operations are at this facility? This regulation applies ONLY to onshore tank car and tank truck loading/unloading racks. This is NOT fuel being transferred from a tank truck to an AST used for vehicle fuel dispensing.
08.003	This is not a finding. The used oil/sludge collection bucket is a part of the process, not a separate collection container.
POL Comments	Comment 1: If the contents of the SPCC are not correct (i.e., the name of the base is wrong), why isn't this a finding under O.5.2. The SPCC plan is required to contain specific information (40 CFR 112.1(d) and 112.7)?
12.001	What is the permit number and the date of the permit? Any estimate of when the required report will be ready?
12.002	What are the permit number and the date of the permit?
16.001	The citation says HC.30.1, the listed question number is HC.60.1, which is it? The requirement that the written hazard communication program be accompanied by a copy of AFOSH STD 161-21 is a separate finding under HC.30.2. If the issue is no HAZCOM program, then HC.30.1 is a good place to write the finding, but if the issue is that there is a HAZCOM program but not everything is addressed that needs to be addressed, then HC.30.3 is possibly the better choice. The question number format is "HC.60.1", not "ANG HC.60.1."
16.002	What specifically was not understood? Do you know if what was not being understood was trained? The question number format is "HC.60.1," not "ANG HC.60.1."
16.003	The question number does not belong in the citation field. The citation in the manual is not the citation entered in the finding.
Hazard Communication Comments	If the impact card purchases are not reported to the pharmacy, that is a finding under O4.17.1.AG. The hazardous materials pharmacy program (HPP) is required to be operated according to specific procedures (AFI 32-7086, para 2.3).
17.001	There is a conflict in tense. Is there more than one compressor or not? The question number format is "PE.60.1," not "ANG PE 60-2."
17.002	The question number format is "PE.130.2," not "ANG PE 130.2." Why are latex surgeon's gloves inappropriate?
17.003	Why is it inappropriate to store chemical protective gloves in a cabinet with buckets used for fuels in Fuels Shop? Inappropriate question number format. What is the [R] in the citation field? Any idea of how long an "extensive period" is? <u>How about long enough to be worn, dirty or unserviceable?</u>
17.004	What date was the available OI? Inappropriate question number format. The citation and the question number do not match. The citation goes with PE.30.6, which is what I think the desired question number really is.

Finding Number	Comment
	Does "outdated" mean the content was wrong, or does it only refer to not having an annual review? If content was wrong, that is a finding under PE.30.6; if annual review, then PE.30.5.
17.005	Inappropriate question number format. What is the [R] in the citation field?
18.001	Any projected date by when the remaining six will be done?
18.002	Why does it need this sign? What is the [R] in the citation field? Inappropriate question number format.
21.001	What is "a significant quantity"?
30.001	Did they <u>ever</u> provide BBP training? No question number provided. I think the appropriate number is BP.40.4.
32.001	The correct question number is not being cited. The listed number is "BP.10.2. Installations where occupational exposure is possible must establish a written exposure control plan designed to eliminate or minimize personnel exposure (29 CFR 1910.1030(c)(1)(i))." Which has nothing to do with the consumption of food and beverages in work areas. Perhaps what is really meant is "SN.100.1. Consumption and storage of food or beverages is prohibited (29 CFR 1910.141(g)(2) and (g)(4))." What toxic materials were around? This only seems to apply when toxic materials are used.
38.001	No comment.
38.002	What specifically is wrong with how they are stored?
40.001	This finding tells me what the facility should do, not what was observed wrong.
40.002	For a finding, this should read "The work areas of Building 325 have not been evaluated by the Safety Office and the Bioenvironmental Office for eyewash station needs." Why do they need to be evaluated? Are there any eyewashes there now?
41.001	This is confusing. The first sentence talks about a roof, but the regulation is about Open-sided floors or platforms 4 ft or more above adjacent floor or ground level. What is really at issue here? The ladder is a separate finding. Where it should be written up depends on whether it is a wooden or a metal ladder. See WS.40 and WS.50.
41.002	What specifically is wrong with the ladders?
41.003	If it "was not clean and free of debris," what did you see? Was there anything unsanitary?
44.001	No comment.
45.001	What percentage have or have not been evaluated?
45.002	Better finding structure would be something like "Entry permit for building 333 does not document all periodic test requirements for permit required confined spaces." Did it document any test requirements? The listed citation does not match the checklist item number listed. PS.10.22. Entry permits must contain specific information (29 CFR 1910.146(e)(6) and (f)). I am confused. The checklist text in the manual does not seem to require periodic test requirements to be documented on the entry permit. Instead it states the entry permit must contain "the results of initial and periodic tests performed under 29 CFR 1910.146(d)(5), accompanied by: - the names or initials of the testers - an indication of when the tests were performed." Do you maybe want PS.10.11?

Finding Number	Comment
46.001	Rewrite so this is a documentation of what is wrong rather than a statement of requirements. Citation is incomplete. Should be 29 CFR 29 1910.147(c)(4)(i). What equipment needs to be evaluated?
47.001	What are they blocked by?
47.002	No comment.
48.001	When the assessor says the load rating "was not plainly marked," does that mean it was marked, but it was not readable, or does it mean it was not marked at all?
49.001	Rewrite so this is a documentation of what is wrong rather than a statement of requirements.
49.002	When the assessor says "does not have the proper guard," does that mean there was a guard of some kind, but it did not meet standards, or there was no guard?
49.003	No comment.
49.004	How much greater? I am confused, the manual does not say anything about 1/4 in. It says "the exposure of the grinding wheel periphery is as small as possible and does not exceed 60 degrees."
49.005	Need more description of what is wrong versus how it is required to be. Put the details on how to fix it in the suggested action.
50.001	No comment.
50.002	No comment.
52.001	When the assessor states "breaker panel boxes throughout the Base," what percentage of the assessed facilities does that mean – where?
52.002	No comment.
52.003	No comment.
52.004	What is in the area so that this is not a clear radius?
52.005	Why are they not readily accessible?

Appendix N: Process QA/QC Form for Selfridge AB, MI

Installation Name: Selfridge Air Base, MI

Installation Environmental POC: Col. Barnes **Phone:**

ANG Team Leader: Joy Hoyle

Reviewer's Name: Donna J. Schell

Phone: (217) 398-5544 **Email:** d-schell@cecer.army.mil

Dates of assessment: August 1999

Dates of onsite review: August 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): None

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

QA person was onsite for the second week of a 2-week assessment, the majority of interviewing had already been accomplished.

- Tuesday: Accompanied environmental assessor
- Wednesday: Observed assessment team doing final write ups. Interviewed Environmental Office personnel, AFRES, and Supply. QA'd assessment report.
- Thursday: Interviewed base personnel about their perspectives. Interviewed the following:
 - EOD

- AFRES
- SEE BEES
- Fuel Cell Maintenance

General Comments (Insert here comments which do not fit in comment boxes elsewhere in the form.)

Comments by interviewed personnel:

Environmental Office

- Wish there was a 2-yr cycle instead of the current cycle. It would be great if it was the opposite year of the ORI.
- Would like an overall grade for compliance.
- Wish the in-brief clarified who is liable for what.
- Wish the finding would ID the responsible organization for fixing the finding.
- Wants a benchmarking function incorporated into the process.
- Would like a log to know where people visit so the base can get to the sites not visited.
- Need enough detail in the finding so that layman can understand.
- The time of year was bad. August/September are bad for everyone — do not do ECAMP those months.
- Wish we had more fluidity in schedule.
- Likes the external documentation.
- The assessors did a good job in how they presented themselves.
- The two environmental assessors looked at different issues and focused on different issues.

AFRES

- The assessment was not well coordinated with the Reserve. Because of this, no IH or safety review of Reserve and so they will have to go through again with a Reserve team.
- Would like to see 2 more days added to the process. Then they would have time to look for benchmarks and dig past the surface details.
- Want more advance coordination. Did not see PVQ or visit list.
- Would like to see this be a bottom-up process, not top down.
- Would like to see closure of findings as a measure of merit, but also how closure was done.
- Wondered if there is any training for Safety people to do audit or how to do an internal.

Supply

- Saw the environmental assessor, felt he was polite and Supply knew what the potential findings were when the assessor left.
- Expected a more thorough inspection than what they received. No one looked at training records or any paperwork of any kind.
- Assessors were good listeners.
- The operational/structural review was good.
- Heard rumor that there was going to be an ECAMP, but did not find out for sure until the Wednesday before the assessment team arrived.

Sea Bees

- Did not feel the review was very in-depth.
- Specifically pointed out issue they had with a mobile fuel tanker to assessor. This did not get written up until after the QA person returned to the team and asked about it.

- Thought the Environmental Assessor from the first week was the EPA.
- Was unaware ECAMP was happening until the assessment team showed up.

Fuel Systems

- Felt the Safety assessor did not know what she was talking about and was expressing a great deal of opinion versus fact.
- Felt IH assessor was very thorough and helpful.

AGE

- Felt the assessors were fair and thorough. Had an IH and an environmental assessor.
- Assessors were polite and provided suggestions.
- But, they ended up with questions about whose responsibility it was to fix what.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			X			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.				X		
8. Recorded findings daily.			X			
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).			X			
10. Technically knowledgeable.					X	
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).						NO
13. Visited sites that were of environmental concern to the installation/facility.						NO
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.		X				
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.			X			
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.			X			
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).						NO
22. Investigated for "root causes" of deficiencies/findings.						NA
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.			X			
24. Informed other team members of potential concerns related to their assigned media protocols.			X			
25. Kept team leader informed of problems encountered by the team members.				X		
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.	X					
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.			X			
28. New findings were discovered (findings different than those identified in the previous ECAMPs).				X		
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.						NO
30. Overall performance of the assessment team.			X			
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
Comments: - The IH assessor did not have the current copy of the manual. - The IH assessor was unaware that he was required to fill in the question number on the finding form. - The inconsistencies in how assessors write finding was finally resolved. The decision was to first document what is wrong at the installation, then a short phrase on what is required, extensive details on what is required would go in the Suggested Action. - Assessors were referring to old reports for correct checklist items numbers to use. This would be fine if the correct numbers have been used in the past, but they weren't.						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med		High	
	1	2	3	4	5	NA/NO*
• The Environmental assessor who was observed did a good job of introducing himself and ensuring the people being assessed knew what ECAMP was and thanking them for their time. The focus though was Hazardous Materials and Waste, although they did catch an interior drain that could be a problem and outside washing of equipment.						

* NA = Not Applicable, NO = Not Observed

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.			X			
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.						NO
3. Familiar with the ECAMP process.				X		
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.						NA
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Coordinated daily assignments to ensure each site team is not excessive.						NO
8. Effectively out-briefed installation commander/staff.						NO
9. Overall performance of Team Leader.				X		
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NO
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						NO
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.			X			
13. Ensured positive findings were "above and beyond" compliance.						NO
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and		X				

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
provided comments to assessors.						
Comments: • Team leader did a good job of checking up on were the assessment team was in the process. • Also, did a good job in transferring information on changing guidance.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).					X	
2. Recommended sites/facilities/operations to be assessed.						NO
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.			X			
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
5. Effectively coordinated the in-briefing and out-briefing.						NO
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.			X			
7. Acted effectively as liaison between the assessment team and installation personnel.						NO
8. Resolved problems encountered by the assessment team members.						NO
9. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).						NO
11. Appropriate installation personnel were available to the assessment team.					X	
12. Overall performance of Environmental Coordinator/Staff.					X	
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings and notification of tenants.		X				
14. Provided a complete PVQ to the assessment team.					X	
Comment: ANG personnel at the installation were notified well in advance of the ECAMP, but tenants seem to not have received notice until 1 week prior to the ECAMP. Some of the disconnect can be explained because tenants are not on the ANG LAN.						

Comments On The Draft Report

NOTE: The Environmental and IH findings underwent preliminary QA by the QA observer onsite at Selfridge.

Finding Number	Comment
01.001	• Which three paint booths are the problems?
03.001	• HM.1.3, which is used for this finding, does not include the AFOSH citations.
03.002	• How many cylinders?
03.003	• No comment.
03.004	• No comment.
Hazardous Materials Comments	• No comment.
04.001	• How big is the container in 1449?
04.002	• No comment.
04.003	• No comment.
04.004	• No comment.
04.005	• No comment.
04.006	• How are they not labeled? Are they missing the start date, the contents, or both?
04.007	• No comment.
04.008	• No comment.
04.009	• Sentence 2 does not make sense.
04.010	• No comment.
04.011	• All the needed info is there – but it is a bit organizationally challenged.
04.012	• No comment.
Hazardous Waste Comments	• No comment.
05.001	• No comment.
Natural Resources Comment	• No comment.
06.001	• The finding number is entered incorrectly as 06.01.
07.001	• No comment.
07.002	• No comment.
Pesticide Management Comments	• Housekeeping is one word, not two.
08.001	• What kind and size of tanks are the trucks being loaded from?
POL Management Comments	• No comment.
09.001	• Get rid of the word numerous; not needed since the assessor indicates it is a partial list.
10.001	• No comment.
10.002	• No comment.
10.003	• No comment.
10.004	• No comment.
11.001	• No comment.
12.001	• No comment.

Finding Number	Comment
12.002	• No comment.
Wastewater Comments	• No comment.
13.001	• No comment.
13.002	• What percentage of the transformers were leaking?
14.001	• What percentage of the shops visited had not had the results provided? The "in all cases" leads me to think some did and some did not.
14.002	• No comment.
Basic Program Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
16.001	• How many is "Some"? • This is the same finding as 03.001. Should be written in one place.
16.002	• No comment.
16.003	• What is "many"?
16.004	• No comment.
16.005	• No comment.
Hazard Communication Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
17.001	• What percentage of the shops visited is "some"? • Was does "not well documented" mean?
17.002	• No comment.
17.003	• No comment.
17.004	• No comment.
17.005	• This finding was written under PE.70.1, but the comment on specifying the correct respirator seems to be PE.50.6.
17.006	• How were they improperly stored?
17.007	• No comment.
17.008	• The listed checklist item number is PE.100.2. The storage of respirators must meet specific criteria (29 CFR 1910.134(h)(2) and AFOSH STD 48-137, para 8.2.2), but the citation is for PE.90.8. and PE.120.1. Need to figure out the correct place to write this.
17.009	• What are several? many?
PPE Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
18.001	• How many are "some"? • The requirement for identifying areas where hazardous noise levels are is not a part of NO.40.1. Is this a separate finding?
Noise comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
19.001	• When was the last time it was reviewed?
Radiation Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
20.001	• No comment.
22.001	• No comment.
24.001	• How many are "numerous"?
24.002	• Where was this?
Air Contaminants	• If the comment is directly related to a written finding, is there a field available in

Finding Number	Comment
Comments	which you can put the comment in the finding itself?
26.001	• No comment.
29.001	• Citation is incorrect for the checklist item number listed MC.20.1.
Methylene Chloride Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
32.001	• No comment.
32.002	• How many are "many" and "some"?
34.001	• No comment.
Ergonomics Comments	• If the comment is directly related to a written finding, is there a field available in which you can put the comment in the finding itself?
38.001	• No comment.
38.002	• This is not a valid checklist item number; it was moved to LG45.2.
38.003	• How many are "several"?
40.001	• No comment.
40.002	• No comment.
40.003	• No comment.
40.004	• What specifically is occurring in these buildings that makes it so a bottle is not sufficient?
40.005	• What is the problem being documented in the first sentence?
40.006	• No comment.
40.007	• No comment.
41.001	• Are there any railings at all?
41.002	• No comment.
41.003	• The finding does not indicate that the problem is areas were not marked.
41.004	• The finding does not indicate that the problem is areas were not marked.
41.005	• No comment.
41.006	• No comment.
41.007	• What is wrong with putting a piece of wood to replace the missing rung?
41.008	• Any idea what percentage are not being inspected?
41.009	• Right citation if these are fixed ladders, but wrong checklist item number; should be WS.60.23.
42.001	• No comment.
42.002	• No comment.
42.003	• No comment.
42.004	• No comment.
44.001	• Are these pipes and conduit overhead?
45.001	• Where specifically was this identified?
45.002	• No comment.
45.003	• Approx. what percentage have not been trained?
45.004	• No comment.
45.005	• No comment.
46.001	• What types of operations need such a program?
46.002	• What does majority mean?
46.003	• No comment.

Finding Number	Comment
47.001	• Where were the fire extinguishers located that were not mounted?
47.002	• What does majority mean?
47.003	• No comment.
47.004	• How was it blocked?
47.005	• Why are the fire extinguishers already there inadequate?
48.001	• What is being stored? • Are the stored items currently secured in a way that is inappropriate, or not secured at all?
48.002	• No comment.
48.003	• No comment.
48.004	• There is a grammar problem with the first sentence.
49.001	• No comment.
49.002	• Sentence 2 is incomplete.
49.003	• At what sites was it missing and at what sites is the gap too big?
49.004	• Is the gasoline in it, or is it in a container next to the equipment?
49.005	• What equipment was being used?
49.006	• No comment.
49.007	• What specifically is wrong with the existing guarding?
50.001	• The MG prefix does not belong in Chapter 50.
50.002	• No comment.
50.003	• No comment.
52.001	• Which problems were in what areas?
52.002	• No comment.
52.003	• No comment.
52.004	• What is in the way in each of these areas?
52.005	• Why are they not accessible?
52.006	• No comment.
52.007	• No comment.

Appendix O: Process QA/QC Form for Portland, OR

Installation Name: 142nd Fighter Wing Oregon Air National Guard, Portland ANGB, OR

Installation Environmental POC: Major Roger Rein

Phone: (503) 335-4476

ANG Team Leader: Rick Weston

Reviewer's Name: Don Cropek

Phone: (217) 352-6511 **Email:** d-cropek@cecer.army.mil

Dates of assessment: 2 – 6 Aug 1999

Dates of onsite review: 2 – 6 Aug 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.):

Shannon Wright – ANG / SG Public Health – being groomed to take over as ANG Team Leader.

Wing Commander Col. Larry Kemp NOT present on site until Thursday.

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday:

AM

- In-brief

- Assessors reviewed assembled paperwork for missing items. Paperwork available included: maps and personnel list, Hazardous Waste Management Plan, Hazardous Waste Training Records, Spill and Countermeasure Plan, Stormwater Plan, Pollution Prevention Plan, Solid Waste Management Plan, Manifests for 1998, HW Generator Reports, Air Permits and Inventory, Asbestos Management Plan, NPDES Permit, Wetlands Survey, A-106, NOV, Solid Waste Contract, last External ECAMP. Missing paperwork according to SAIC: EPCRA, Pesticides, UST Records, Solid Waste Sampling Records, Manifests 97 and 99, last Internal ECAMP.
- Accompanied Environmental assessors to meeting with Maj. Rein, Environmental Manager.

PM

- Accompanied Environmental assessors to Civil Engineering training facility, mobility storage, POL facility.

Wednesday:

AM

- Accompanied IH assessor to metal fabrication, fuel cell maintenance, AGE.

PM

- Accompanied safety assessor to fire station, civil engineering.

Thursday:

AM

- Accompanied Environmental assessor to Combat Command, photo lab, fuel cell maintenance, operations.
- Interviewed base IH manager, fire chief, vehicle maintenance personnel.

PM

- Interviewed base Environmental Manager, AGE personnel, base Safety manager.

Friday:

AM

- Did not attend out-brief.

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form)

- The Team: Rick Weston, ANG Team Leader

Dave Dishner, SAIC Team Leader, Env

Bonnie Carson, Env

Jack Templeton, Env

Hal Cohen, Safety

Fernando Padilla, IH

- Air Force Reserve is on base, Army Reserve is on base, wetlands present on base.
- Portland ANG has separate permits from Portland Airport and no combined liability. They have a combined permit for deicing washwater but still separate liability.
- The in-brief was well attended. The Base Commander Lt. Col. Bruce Marshall gave a very informative introduction to the facility.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.				X		
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.			X			
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.				X		
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.			X			
8. Recorded findings daily.						NO
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable					X	
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.						NA
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						NO
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.			X			
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.		X				
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).			X			
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).		X				
22. Investigated for "root causes" of deficiencies/findings.		X				
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				X		
24. Informed other team members of potential concerns related to their assigned media protocols.						NO
25. Kept team leader informed of problems encountered by the team members.						NA
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.		X				
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.				X		
28. New findings were discovered (findings different than those identified in the previous ECAMPs).				X		
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
30. Overall performance of the assessment team.				X		
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
Comments: The Environmental assessors looked at some paperwork on Monday PM. Environmental: good note taking, some immediate feedback, detailed questions regarding paperwork, some summarization afterwards, too much letting them lead rather than looking on their own (for instance, they walked right by the fuels lab). Base personnel tried to quickly "fix" the findings immediately – will findings still be written on these quick fixes? One assessor, although quite knowledgeable, quickly went off on tangents, hard to keep him on course. a lot of extraneous issues. He had a personal interest in chaff, which occupied his time. One assessor						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med		High	Other
	1	2	3	4	5	NA/NO*
was willing to help answer questions regarding the bulk POL system by calling the contractor – extra. With three people in Environmental, they were able to discuss issues and findings together. IH always introduced himself and summarized his observations, some note taking, walked through rather than led through, but the look seemed cursory – maybe not much to look at in IH. He didn't say much during the assessment and, according to base personnel, that tended to put people on edge. First time I have seen IH ask base personnel to find a random chemical in MSDS (he couldn't do it). Since S. Wright, ANG, was also an expert in health, he also had someone to discuss issues with. Safety: always introduced himself and summarized, cursory pass through – maybe not much to look at in Safety, little note taking. Plenty of leading questions, but in detail. He was a fire protection expert and I believe he spent more time wearing this hat than the ECAMP hat. In this regard, he was very helpful to the Fire Chief and helped with contract rewording for inspection and cleaning of their kitchen hoods to save them money. Also helped get CE and Fire Dept straightened out as to work responsibilities and offered suggestions for perceived deficiencies. Comments about the SAIC team from base personnel: all helpful, very knowledgeable, and professional, much better than last ECAMP visit. Still some comments about moving from the commonplace to dig deeper into problems and too focused on programs and paperwork. There were some ECAMP discussions over dinner in a public restaurant. The SAIC team likes the database with the protocols listed and its ability to search, but still used the protocols to find places to put problems.						

* NA = Not Applicable, NO = Not Observed

This section is to evaluate the performance of either the Contract Team Leader or ANG Team Leader — evaluate whichever operates as team lead predominantly and indicate whether the evaluation is for the ANG or Contract Team Leader.

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.			X			
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.				X		
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.				X		
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Coordinated daily assignments to ensure each site team is not excessive.						NO
8. Effectively out-briefed installation commander/staff.						NO
9. Overall performance of Team Leader.				X		
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NO
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).						NO
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.			X			

PART 2. ANG/Contract TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO
13. Ensured positive findings were "above and beyond" compliance.		X				
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.				X		
Comments: Best in-brief of the two QA/QC trips I have taken; stressed "assistance" mode. Rick is people-oriented so he seemed to spend more time talking to base personnel and becoming more familiar with the team. Present during some meetings and provided good recommendations. Checked all findings actively with each SAIC team member. Printing and technical problems again on Thursday PM prevented him from giving me a copy of the report before I left. These technical problems should be solved in advance or during the week.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).				X		
2. Recommended sites/facilities/operations to be assessed.			X			
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.				X		
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).				X		
5. Effectively coordinated the in-briefing and out-briefing.				X		
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.						NO
7. Acted effectively as liaison between the assessment team and installation personnel.				X		
8. Resolved problems encountered by the assessment team members.						NA
9. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).			X			
11. Appropriate installation personnel were available to the assessment team.			X			
12. Overall performance of Environmental Coordinator/Staff.				X		
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings, and notification of tenants.				X		
14. Provided a complete PVQ to the assessment team.				X		
Comments: Well prepared for the ECAMP including voicemail for the team, special passes at the gate, ECAMP badges, and presentation preloaded. 70 – 100 people present at in-brief. Despite late request for PVQ and paperwork, SAIC was pleasantly surprised by the completeness of the						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
documentation. Real emphasis on fixing findings immediately by the responsible individual. Much more willingness to discuss findings and problems to obtain dollars. Safety commented (complained) that the SAIC Safety person benchmarked everybody else in relation to the best safety person on the facility. He said that that one person was almost obsessive in his safety role and no one else can hope to measure up. Interesting note: SAIC (4 out of 5 members at dinner) said that they can tell that Portland ANG was just paying them "lip service" and they haven't really bought into the ECAMP process. Does this feeling come out in their findings report? The Fire Chief mentioned that he would have liked more time with the SAIC Safety person to pick his brain more on fire protection issues.						

Comments On The Draft Report

Finding Number	Comment
03.001	Numerous misspellings of "unlabeled, flammables, bituminous, and obliterated." Good location identification. (1) What regulation requires the pesticide applicator to be labeled "Pesticide Herbicide Use Only"? Not the one cited in this finding. (5) If this is waste paint chips, why isn't this a hazardous waste labeling finding since it is not a HAZMAT? (7) This sounds like an unknown, a characterization issue under HW.10.1. (8) While the suggestion to change "waste" to used is good, it is not based on the regulations cited. (11) Why was it labeled as "waste" in the first place and why isn't it waste now? The checklist item number used was HM.1.3, the AFOSHs listed there are not a part of the citation of the TEAM Guide checklist item. The Suggested Action does not indicate that to be in compliance you have to have both the contents and the hazard warning on the container.
03.002	Good location identification. The first sentence says this is a management practice – it is not. The correct place to write this finding is HM.35.9. Areas where flammable/combustibles are stored must meet certain fire protection standards (29 CFR 1910.106(d)(7)). If there was no other place to write this finding, the regulations listed in the citation have nothing to do with the checklist item actually used for the finding (HM.35.1), which has a citation of MP.
03.003	These comments don't seem to correspond to this positive. More information on this positive would be helpful. Specifically, what policies have been instituted to do this? The positive is of no value to share with other installation unless there are details provided.
04.001	It doesn't seem that the "Alternative" suggested action would meet the requirement. Do they mean "In addition"? Misspelled "identified". Which SAP locations "throughout the base"? Why isn't the training for the SAP monitor a separate finding under HW.25.1. SQG personnel are required to be thoroughly familiar with proper waste handling and emergency procedures (40 CFR 262.34(d)(5)(iii))?
04.002	Why is this a major? What does the assessor mean that the location is not designated as an SAP? If they mean it is not listed in the plan, then that is a finding under the plan that is written up under HW.10.2.AG. Installations that generate hazardous waste are required to have a Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2). As an inadequate plan, the checklist item number used "HW.35.1 says nothing about "designation", nor does it say anything about training or recordkeeping, inspections etc.... For an SAP, those issues are all ANG policy issues. Why isn't the training for the SAP monitor a separate finding under HW.25.1. SQG personnel are required to be thoroughly familiar with proper waste handling and emergency procedures (40 CFR 262.34(d)(5)(iii))?
04.003	Why is this a major? Were there any labels at all on the drum indicating what it contained? Is the Central Accumulation Point the 180-day storage area, and is it the only one on base? Is everything else an SAP that then feeds into here? This information would be helpful.
04.004	In suggested action, there are missing commas making it harder to read.

Finding Number	Comment
04.005	Why is this a major? Unless no one at the site knew how to call for help, which is not indicated in the finding, there is not much of a reason for this to be a major. There may be an interpretation problem here. The regulation says that the site must have "internal communications or alarm system capable of providing immediate emergency instruction to personnel." It does not say that emergency instructions have to be posted on the phone. Does "SQG storage area" mean the Central Accumulation Point? Be consistent in how the same sites are identified.
04.006	This overlaps with the last paragraph in 04.001 and 04.002 regarding another SAP monitor without training. These should be combined. This was written up against HW.60.1, which applies to LQGs and earlier the report says the installation is an SQG, which is it? For SQGs the correct checklist item is HW.25.1. SQG personnel are required to be thoroughly familiar with proper waste handling and emergency procedures (40 CFR 262.34(d)(5)(iii)).
Hazardous Waste Comments	Was this waste stream identified in the waste stream inventory? If not, this is a finding under HW.10.1.AG. Installations are required to characterize their hazardous waste streams through a waste analysis plan, a waste stream inventory, and hazardous waste profile sheets (AFI 32-7042, para 2.4.2, 2.4.3, and 2.4.4; AFI 48-119, para 9.3). This could also be addressed in a finding on an inadequate HW plan.
06.001	In the database this is listed as "O5.25," which is not a correct number. They should have used O5.25.1.AG. Installations are required to have an EPC that fulfills specific functions (AFI 32-7005, para 4.3 and 5.5). The citation is not correct for the required checklist item number.
06.002	Does this really fit the definition of a positive? They were doing what they are supposed to do with the internal.
08.001	It might have been helpful to examine the draft for missing components and completeness. Was there significant change in facilities, etc from the prior plan? If no, why is this a major? The first sentence is incorrect. It could lead a reader to believe that the 1,320 minimum only applies to ASTs, which is not true. Plus the 1,320 number applies to "capacity," not "total storage volume." The checklist item number listed in the database is PO.20.2 — which is PO.20.2? Drainage of rainwater from diked areas must be controlled by a valve that is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)). This is not correct. What does the assessor mean that the plan "expired"? I've never seen an expired SPCC plan. This is not like a permit. I have seen plans that were out of date because they were not reviewed in the 3-yr time period as required in PO.5.3. Each SPCC plan must be reviewed at least once every 3 yr (40 CFR 112.1(d) and 112.5(b)). Why isn't the draft in effect? What still needs to be done?
08.002	Deicing fluid is not a POL product and therefore is not covered under 40 CFR 112. What does "numerous" mean? About how much, what kinds of containers? What kinds of POL are stored outside Bldg. 170? The statement that the "base is required to have secondary containment at any location where POL is stored" is incorrect. 40 CFR 112 does NOT apply to buildings (i.e., the POL house) or indoor storage. There must also be proof that there is a chance that the discharge will impact a "navigable water course." Where is the 110% figure coming from, it is not in 40 CFR 112.

Finding Number	Comment
	The non-working valve is better written up under PO.20.2. Drainage of rainwater from diked areas must be controlled by a valve, which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)).
08.003	Is the filter crusher used to store used oil? If not, the regulation does not apply. The storage tank is to be written up under ST.125.1. Tanks storing used oil produced by used oil generators are required to meet specific criteria (40 CFR 279.22(b) and 279.22(c)). How big is the tank and how big is the drum?
POL Comments	Why isn't the information about the SPCC a part of the finding 08.001? The comment sounds like it is routine practice to drain diked areas without inspection of the rainwater. If that is the case, for non-tank areas this is a finding under PO.20.2. Drainage of rainwater from diked areas must be controlled by a valve which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)). And for tank areas under ST.5.2. Drainage of rainwater from diked areas must be controlled by a valve, which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)). The second paragraph in the comments on the used oil storage tank is confusing. Is this an AST or a UST? The start of sentence 2 "Oil is automatically pumped from the oil into ..." makes no sense. What is the assessor looking for as an "indicated method"? Isn't this a regulatory requirement depending on the size of the tank and whether it is an AST or UST?
10.001	The second sentence sounds like the pipe is leaking. If that is the case, why isn't this a significant and has it been reported? Where is the navigable water course? Is the piping above or below ground? How much piping are we talking about (diameter and length)? Is the trench drain connected to the oil/water separator? The paragraph does not provide a description that creates a visual picture of the site. I am unsure about whether there is secondary containment for the tank itself. Is the finding about the piping or the tank? The suggested action infers that spill response materials were not available, but the finding does not document that. Does 40 CFR 112 really apply to PD-680 storage?
11.001	"Develop" misspelled. In the database, the checklist item number is listed as 2.1.2 AG, which is incorrect format. Use T2.1.2.AG. What is the date of the existing plan and what changes does the assessor know about that were not documented?
12.001	Was there significant change in facilities, etc from the prior plan? If no, why is this a major? What does the assessor mean that the plan "expired"? Does the permit require the plan be updated at a certain frequency?
12.002	It doesn't seem that the "Alternative" suggested action would meet the requirement. Paragraph 1 sounds like a violation of ST.5.2. Drainage of rainwater from diked areas must be controlled by a valve which is closed when not in active use (40 CFR 112.7(e)(1) and 112.7(e)(2)(iii)). What is at the C-130 test pad such that there is secondary containment? If the discharge is not contaminated, why is this improper stormwater discharge? Now, if there is POL storage (other than in the engine of an aircraft) within this storage area,

Finding Number	Comment
	it is not impervious secondary containment if the valve is not shut (see above). Is the listed permit a wastewater permit or a stormwater permit? Does the facility need a stormwater permit?
Wastewater Comments	Why aren't these comments a part of 12.001?
In findings 16.001 – 32.002 the assessor puts in the prefix "ANG" as a part of the checklist item number. This is not necessary.	
16.001	The word "available" is misspelled. For which substances were MSDS not available? What is the [R] in the citation?
16.002	A repeat finding. The word "available" is misspelled. The checklist item number should not be repeated in the citation. Bad grammar in sentence 1, would read better if it said "The Base is not maintaining a complete copy of the written hazard communication program in each work area." The checklist item cited by the assessor (HC.30.1) does not reference the items listed by the assessor, but HC.30.2 does.
16.003	This finding could use a better qualitative measure of how often this problem occurred. No checklist item number is listed in the database.
16.004	The word "training" is misspelled. Does a "few" mean two?
17.001	Why are splash goggles needed at the listed sites? Clarify the reason as to why the goggles in use are incorrect. Why not use PE.10.5 for this finding; it seems more specific to the situation.
17.002	The word "inappropriately" is misspelled. What is the [R] in the citation? How were they inappropriately stored?
17.003	The word "gloves" is misspelled. Why aren't the gloves appropriate? While the ECAMP people understand why they aren't, the finding should detail why they aren't for those readers who may not have the same knowledge as the ECAMP team.
17.004	Is this statement due to a lack of documentation, based on information from interviewed personnel, or what?
17.005	The word "training" is misspelled. Is Propulsion the only place this occurred?
In the database, the checklist item numbers listed in 17.006 through 32.002 appear to have an inappropriate space in them.	
17.006	Check tense in the first sentence.
17.007	What was the date of the existing OI and how was it incomplete?
17.008	The word "employees" is misspelled. How much overdue?
17.009	What do they need? Are they wearing the wrong respirator or a respirator that has not been required or recommended by BE/PH? There is a disconnect here between the checklist item number listed and the citation listed. The correct citation for PE.50.6 is PE.50.6. No respirator may be worn unless required or recommended by BE/PH (AFOSH 48-137, para 3.1.3 and 3.2.3).
18.001	What is the [R] in the citation? What is numerous?

Finding Number	Comment
24.001	Is A/C Metals the only shop where this occurs? Typo in citation. What substances are present that are required to be sampled? Without that information it is impossible to tell if this regulation actually applies in this situation.
25.001	The words "maintenance" and "exposures" are misspelled. What is the [R] in the citation? No checklist item number is listed.
32.001	Would this be serious? What is the [R] in the citation? Where exactly was this seen? What kinds of chemicals are being talked about here? How close of a proximity? This regulation applies to toxic materials, which are defined as follows: Toxic Material - a material in concentration or amount which exceeds the applicable limit established by a standard, such as 29 CFR 1910.1000 and 29 CFR 1910.1001 or, in the absence of an applicable standard, which is one of such toxicity so as to constitute a recognized hazard that is causing or is likely to cause death or serious physical harm (29 CFR 1910.141(a)(2)).
32.002	The word "installations" is misspelled.
38.001	• No suggested action indicated. What do "some" and "most" mean? The citation in the database is not the citation in the OSHA manual.
38.002	• No suggested action indicated. The citation in the database is not the citation in the OSHA manual. Give some examples of the types of things not being reviewed.
39.001	• The suggested action is not strong enough. The base must use the OSHA 200 log; "should" reflects a good idea, not a requirement. What details are missing in the log being used?
40.001	• Is this really a finding? Besides, it seems to fit into 17.002. Are these findings written by two different assessors? No suggested action indicated. There is a disconnect between the checklist item number assigned (SP.10.1) and the citation. The indicated citation has no relation to SP.10.1. Installation employees must use appropriate eye or face protection when exposed to certain hazards (29 CFR 1910.133(a)(1)).
40.002	No suggested action indicated.
40.003	The fact that a worker was observed not wearing required PPE is a finding under PE.10.1 Installations must provide, ensure the use of, and maintain protective equipment wherever circumstances require (29 CFR 1910.132(a) and 1910.132(b)). And as such, it belongs in section 17, not 40. The rest of the description relating to a disconnect between the assessment-required equipment and AF55 required/issued equipment is a finding under PE.10.5. Installations must take appropriate actions when hazards requiring the use of PPE are present at the workplace (29 CFR 1910.132(d)(1)). Because the part of the program ensuring correct PPE is present is obviously not well implemented, this finding also belongs in section 17, not 40.
41.001	The database indicates 41.2.1 as the checklist item number, the correct number is WS.2.1. Is this base-wide or was it found only at certain facilities?
41.002	The word "receptacles" is misspelled.

Finding Number	Comment
	How many are "several"? "most"?
41.003	No suggested action. Where does the every 3 yr number come from? It is not in the text of WS.60.1, which is based on the CFR citation. Is the installation doing any inspections? If yes, and the AFOSH is what is mandating the every 3 yr, then write the finding under WS.2.1 with the AFOSH citation for not doing the inspections every 3 yr. If the installation is not doing inspections at all, use WS.60. and in the Suggested Action indicate that AFOSH requires the inspections every 3 yr.
41.004	No suggested action, although the last sentence of the description seems to be one. What are the ladders being used to access? This was written up under WS.30.1. Fixed stairs must be provided for access to certain areas which are routinely used (29 CFR 1910.24(b)). But that checklist item contains the following "(NOTE: These requirements are not intended to preclude the use of fixed ladders for access to elevated tanks, towers, and similar structures, overhead traveling cranes, etc., where the use of fixed ladders is common practice.)". So, in order to determine if this is written under the correct checklist item, we have to know what the ladders go to. The citation does not match the citation for WS.30.1. Is there a way to write this under one of the checklist items in WS.60 to highlight why the ladders are not fixed or why the situation requires a fixed ladder and not a portable ladder?
41.005	No suggested action listed. WS.20.25 tells you what toeboards have to look like if they are present — you need a checklist item that tells you when toeboards are required.
42.001	Is Corrosion Control the only area where this occurred? No suggested action indicated. Was any of the equipment observed self-testing/self-diagnostic, battery-operated emergency lighting equipment.
43.001	No comment.
45.001	The word "required" is misspelled. No suggested action indicated. PS.10.1 is not the best place to write this finding, or there are multiple findings clumped together. PS.10.1 only addresses the need to evaluate the workplace to determine whether any spaces are permit-required confined spaces. It does not talk about training or entry permits. Training seems to be addressed in PS.10.23 and entry permits in PS.10.22.
46.001	The word "guardsmen" is misspelled. No suggested action indicated. Would LT.10.18 or LT.10.19 be more specific to the situation?
46.002	It seems that the excess shops that have a LOTO program are not relevant to this finding. No suggested action indicated.
47.001	No suggested action indicated. This is assigned checklist item number MS.20.16. The first problem is there is no MS.20.16, the second is that even if there was, the MS prefix is used in Section 48, not 47. A correct checklist item number is needed.
47.002	It would be helpful to indicate the reasons why the program does not comply with all the parameters of NFPA 72. No suggested action indicated.

Finding Number	Comment
	This is assigned checklist item number MS.20.16. The first problem is there is no MS.20.16, the second is that even if there were, the MS prefix is used in Section 48, not 47. A correct checklist item number is needed.
47.003	Identify the buildings with these hoses.
52.001	No suggested action indicated. Could WP.50.12 have been used instead of creating WP.2.1 here?

In relation to the feeling that Environmental assessors were being led rather than looking, in one instance (HW storage facility, 140A), a glance behind the storage facility uncovered a dark stain coming from the corner of the shed. Portland said they have had no spills here but it looks like, at a minimum, their secondary containment is failing. I did not bring this to their attention.

Portland bulk POL operators were completely stymied by the question: Do your tanks have automatic leak detection? SAIC agreed to call the contractor / manufacturer on this to help out. The fact still remains, however, if they do not know, things could be happening that Portland does not even know about and they certainly are not checking for correct operation of the system.

The base IH mentioned two positives, which he hoped would be mentioned in the report. They are the only ANG facility to have established breathing air regulations. They are currently participating in a study undertaken by the local OHS University to perform neurological testing of workers for JP8 effects.

It would be useful to include information in this report regarding carryovers.

Reviewers' Suggested Corrective Actions

According to the base Environmental staff, call this process anything you want, to the people on the base this is an inspection; they don't see anything else. Since this is the only feedback these guys get for doing the extra environmental work, it would be nice to get positives or at least gradations of good news for morale purposes. Currently the only things they hear are bad news (findings).

According to the base Safety Manager, everything ECAMP looks at is written in OSHA standards, but they need to also think about AFOSH standards.

According to the base IH, it would be helpful to see the results of ECAMP at other installations.

Since every facility seems to have a deficiency in one documented plan or another, is it possible to accumulate the "best" plans from among all the bases so that each facility can know what a good plan looks like? Each base can then use and personalize the plans to their particular facility. Much of the observed deficiencies stems from a lack of knowledge on what should be included.

One problem mentioned by SAIC: they never have an ANG Team Leader with any knowledge of IH or Safety.

Appendix P: Process QA/QC Form for Fort Worth, TX

Installation Name: 136 Airlift Wing at Naval Air Station (NAS) Fort Worth

Installation Environmental POC: Col. Greg Perry **Phone:** 853-3589

ANG Team Leader: Chuck Smith

Contract Team Leader: Bob Reisdorf

Reviewer's Name: Donna Schell

Phone: 217-398-5544 **Email:** d-schell@cecer.army.mil

Dates of assessment: 16 Aug 1999

Dates of onsite review: 20 Aug 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): Major Rehme, Chief Public Health and Prevention Officer of the Air Surgeons Office NGB. This is a new person on staff.

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

- **Tuesday AM:** In-Brief, accompanied IH assessor to Maintenance Squadron (Structural Repair and Metal Tech)
- **Tuesday PM:** Accompanied Environmental Assessors to POL, Transportation; CE, AGE
- **Wednesday AM:** Accompanied Safety to Hangar, Fuel Cell, Life Support, Electro-environmental; Hydraulics, Survival, Life Support; AGS

- Thursday AM: Interviewed the following personnel on their opinion of the ECAMP process: Environmental Officer, BEE, Safety Officer, R&R, Structural shop, Pneudraulics, Electro-Environmental, Fuel Cell, NDI.

General Comments (Insert here comments which do not fit in comment boxes elsewhere in the form.)

One of the reasons the AF is so successful with the ECAMP program is when submitting a funding request in the A-106 Process, a funding request backed by an ECAMP finding is weighted heavier than a funding request without an associated ECAMP finding.

Base hours are 6:30 AM to 5:15 PM, Tuesday - Friday.

Assignment of OPR for the findings in the database is done by the installation, not the assessor.

Three installation personnel expressed the desire to have another external ECAMP in about 18 mo. They felt that, because of the recent move, some of what was identified was "low hanging fruit" and there could be more fine tuning done if property transfer were completed, a building occupied, etc.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
1. Was prepared.			X			
2. Was organized.			X			
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.			X			
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.		X				
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.						
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.			X			
8. Recorded findings daily.			X			
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.			X			
11. Displayed professional and courteous attitude.						
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).						
13. Visited sites that were of environmental concern to the installation/facility.						
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.						
15. Immediately notified installation POC of "significant" findings.						
16. Provided meaningful corrective actions.						
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.						
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).			X			

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).		X				
20. Before departing, explained the potential findings to the senior person at each facility.		X				
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).			X			
22. Investigated for "root causes" of deficiencies/findings.						NA
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.		X				
24. Informed other team members of potential concerns related to their assigned media protocols.						NO
25. Kept team leader informed of problems encountered by the team members.						NA
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.		X				
27. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.		X				
28. New findings were discovered (findings different than those identified in the previous ECAMPs).				X		
29. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.				X		
30. Overall performance of the assessment team.			X			
31. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.			X			
Comments: IH assessor did a good job of introducing himself and telling interviewees not to worry about the note taking when they seemed concerned. Did check paperwork, but would answer his own questions "That's done annually, right?" As the morning wore on the assessor seemed to be feeling some pressure to up the pace a bit. Instead of asking personnel to look for an MSDS themselves, he would ask "If I looked in the MSDS book for this item, would I find it?" and relied on their yes/no answer. Does a good job on "Tell me what you do" with shop personnel. Does the best of all observed assessors of asking shop personnel other than those conducting the tour about how they						

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
operate in the shop. Environmental assessors. When accompanied by QA person, there were three working together. This was too many people trying to cover the same material. They talked over each other and/or interrupted each other. I wondered if the number of people also influenced some of the follow through on the assumption another person would ask it or do it. For example, at POL he was told that spill kits are kept in the vehicles and in a box off to the side. The box was looked at, but not the material in the trucks. Also, no one walked down to actually look at the containment pond where a spill would go to see what the pond looked like. They did a good job at joint use facilities of asking for clarification of what joint use meant at that facility. At facilities that were not joint, the assessors did not ask shop personnel to explain what they did. They did not ensure that personnel they were visiting always knew they were with ECAMP. They did not look in cabinets or closets other than yellow flammable cabinets. No dumpsters were looked in. Environmental assessors did not seem to be aware of Air Emissions regulations that have been in the manual since January pertaining to the painting/depainting of aircraft. Also, were not familiar with the current contents of the ANG Supplement, Vol 1. There was no review of paperwork at any of the shops visited by the assessors with QA personnel. Paperwork that should be in the shops, when applicable, includes the following (this is not a comprehensive list): • 3952s, or equivalent form, requesting participation in the pharmacy (O4.17.1.AG) • documentation of spill response training when the site meets SPCC criteria (PO.5.7.) • a copy of the SPCC plan when the facility is normally attended at least 8 h/day and there is a potential for a discharge (PO.5.6.). For example, at AGE where they were storing used oil in an approx 600-gal used oil bowser outside or at POL where the fuel tankers are kept. • hazardous waste profile sheets (HW.10.1.AG and HW.10.3.AG) • documentation designating an individual responsible or an accumulation point (HW.10.5.AG) Safety Assessor. Presents a friendly face and introduces herself well. Did review the Form 55's in about 70% of the shops visited. In about 50% of the shops she did not ask the people to talk about what they did. She also did not sum up what would be findings before leaving each shop. Does take time to listen and ask questions when personnel had questions or concerns. There seems to be some disagreement among assessors as to whether or not they are required to have an escort. One assessor said that, while it was a good idea, an escort was not required. Another assessor expressed the opinion that they could not go to the shops without an escort. Which is accurate? All installation personnel interviewed felt the assessment team was polite, friendly, and introduced themselves pretty well. The also felt that people were technically capable. Three of the six shop personnel interviewed said they were unsure of what specifically the findings were when the assessors left their areas, but they figured they would find out in the report. Four of the six shop personnel commented that the assessment was not as in-depth as they thought it would be. Three of the six shop personnel and all program managers expressed appreciation for the suggestions offered by assessors.						

* NA = Not Applicable, NO = Not Observed

PART 2. Contract Team Leader						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.						NA
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.						NA
3. Familiar with the ECAMP process.					X	
4. Present and available throughout the assessment.					X	
5. Effectively performed as liaison between installation staff and assessment team.						NO
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.						NO
7. Coordinated daily assignments to ensure each site team is not excessive.						NA
8. Effectively out-briefed installation commander/staff.						
9. Overall performance of Team Leader.				X		
10. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						NA
11. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).	X					
12. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel know how to obtain copies to aid in developing the corrective action plan.						NO
13. Ensured positive findings were "above and beyond" compliance.						
14. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and						NA

PART 2. Contract Team Leader						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
provided comments to assessors.						
Comments: In this situation, NA refers to the task not, at this time, being identified as a task for the contract team leader. The team leader did do a good job of checking with individuals on their status.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).			X			
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.			X			
4. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).			X			
5. Effectively coordinated the in-briefing and out-briefing.				X		
6. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.						NA
7. Acted effectively as liaison between the assessment team and installation personnel.				X		
8. Resolved problems encountered by the assessment team members.						NO
9. Solicited ideas from assessors that could enhance the installation's environmental program.				X		
10. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					X	
11. Appropriate installation personnel were available to the assessment team.				X		
12. Overall performance of Environmental Coordinator/Staff.				X		
13. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop briefings, and notification of tenants.					X	
14. Provided a complete PVQ to the assessment team.		X				
Comments: A PVQ was not provided to the assessment team, but the installation did an excellent job of in-briefing the team about the status of various programs on the installation. Interviewed installation personnel all stated they had known the ECAMP was coming "for months."						

Comments on the Draft Report for Fort Worth

Finding Number	Comment
03.001	HM.1.3 was used to write this finding, but the citation in HM.1.3 does not include all the AFOSH stuff, nor does it include the HSC reference. The suggested action falls a bit short. The regulation stipulates that the container be labeled with the identity of the hazardous chemical (same as MSDS) and appropriate hazard warnings.
03.002	How many cylinders? Where does the 25 ft come from? In HM.45.1 it says "Verify that flammable compressed gas cylinders stored inside a building with other occupancy are kept at least 20 ft from flammable liquids, highly combustible materials, and oxidizers."
03.003	No comment.
HAZMAT Comments	Comment 1. Why not write this up under O4.17.1.AG, which requires ANG to participate 100% in their pharmacy. It also requires that all local purchases be reported to the pharmacy and in the shop interviews the QA person observed, some did, and some did not. Even though this is a Navy pharmacy, the commander stipulated in the in-brief that there was an agreement that the most stringent requirement, whether Navy or AF, would apply. Comment 2: No comment.
04.001	How are they not being managed as an SAP? By the Federal regulations cited, all they have to do is: • be at or near the point of generation and under the control of the operator of the waste generating process • have containers in good condition and compatible with the waste stored in them • keep the containers closed except when waste is being added or removed • mark the containers HAZARDOUS WASTE or other words that identify contents, and • when waste is accumulated in excess of quantity limitations, the excess container is marked with the date the excess amount began accumulating and the excess waste is transferred to a 180-day or permitted storage area within 3 days. Which of these things specifically are not happening? Or is the issue that they are meeting all the above requirements, but are not formally identified as SAPs in the Haz Waste Management Plan, or perhaps they are not meeting the ANG requirements for SAP management (HW.10.2.AG and HW.1.3.AG, respectively)? How big are the other containers mentioned? Where does the gauze from Survival go now?
04.002	The assessors used HW.10.1 to write up the finding, but also included the citation from HW.10.1.TX. Why include both?
04.003	The assessors used HW.60.1 to write up the finding, but also included the citation from HW.55.1.TX, which refers the assessor back to HW.60.1. Why include both?
	HW.60.1 addresses having training. HW.60.2 addresses recordkeeping for that training. The EM did state that he had not done annual HW training. Therefore, there may be two findings here, one that hazardous waste training is not being done, the second that there is not 3 year's worth of training records. The QA person had gotten the impression, perhaps wrongly, that hazardous waste training had been occurring before the move, it is just since the move that this did not get done. So there should have been historical records of some kind.
Haz Waste Comments	Why isn't this a finding that the waste stream inventory is inaccurate under HW.10.1.AG. Installations are required to characterize their hazardous waste streams through a waste analysis plan, a waste stream inventory, and hazardous waste profile sheets (AFI

Finding Number	Comment
	32-7042, para 2.4.2, 2.4.3, and 2.4.4; AFI 48-119, para 9.3)?
Other comments	No comment.
Pesticide Comments	Why isn't this a finding under PM.1.2.AG. "Each installation is required to have a comprehensive pest management plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 3.4.5) [Revised April 1999]"? The ANG commander stipulated in the in-brief that there was an agreement that the most stringent requirement, whether Navy or AF, would apply. In this case, the requirement even has a DOD basis.
Solid Waste Comment	Why isn't this a finding under SO.1.2.AG. "Installations are required to have a complete Solid Waste Management Plan (AFI 32-7042, para 3.2)"? The ANG commander stipulated in the in-brief that there was an agreement that the most stringent requirement, whether Navy or AF, would apply.
10.001	Good finding.
11.001	Do they also need an operating plan (T2.1.3.AG)?
14.001	The listed citation is very confusing. The Title 29 portion comes from BE.10.1 "Work areas and processes must be free from recognized hazards that cause or are likely to cause death or serious physical harm (29 CFR 1960.8(a) and 1960.9)." The DOD citation is from BE.10.2. "Comprehensive periodic evaluations of all potential health hazards in each workplace and ancillary facilities must be conducted (DODI 6055.5, para F.1.a.(1))." Which one is the one that really should be used? In the suggested action what does "few years" mean? 2? 3? 5?
14.002	Are they just not kept with the medical records, or are they not kept at all?
15.001	Is there a log, but it isn't accurate, or is there no log? There is a disconnect here. The LG prefix is not associated with Chapter 15, it is associated with Chapter 39. And, while checklist item LG.20.1 seems to be the accurate checklist item number, the wrong citation is listed in the report.
16.001	How many are several? What percentage of facilities assessed was this observed at? What is the [R] in the citation?
16.002	What is the [R] in the citation?
17.001	The Title 29 citation is from PE.30.16. The AFOSH citation is from PE.30.5. Which one should it be?
17.002	No comment.
17.003	No comment.
17.004	How many are "Some"? How many are "Several"?
17.005	No comment.
17.006	What is wrong with them? The database lists PE.10.1 as the checklist item number. But the listed citation is for PE.10.6. Which is it?
18.001	How many are "several"?
18.002	How many are "numerous"? Checklist item number should be NO.40.4 not NO.4.4.
18.003	The finding is listed as being written against NO.60.4. But the listed citation is for NO.60.5. Which is it?
20.001	The finding is listed as being written against NR.10.1. But NR.10.1 does not include the AFOSH citation and the CFR citation listed in the database is incomplete. Maybe the survey requirement is inferred, but NR.10.1 does not specifically require it.
24.001	No comment.

Finding Number	Comment
	No suggested action provided.
26.001	No question number listed for finding.
30.001	What is the date of the existing document?
38.001	No comment.
38.002	No comment.
40.001	No comment.
41.001	What kind of stuff is being stored?
41.002	No comment.
41.003	No comment.
41.004	No comment.
42.001	Approximately how big are these unposted assembly areas?
44.001	No comment.
45.001	No comment.
45.002	Does this mean they have received some kind of training, if yes, what?
46.001	Where did the assessor see this?
46.002	Where did the assessor see this?
47.001	Where were the fire extinguishers?
48.001	What were the materials and how exactly were they stored?
48.002	Where did the assessor see this?
49.001	No comment.
49.003	No comment.
50.001	No comment.
50.002	No comment.
51.001	No comment.
52.001	No comment.
52.002	No comment.
52.003	What is in the way?

- Even when the finding is marked as being a repeat or a carryover, the "Previous Finding Number" field is not filled out.
- What is the purpose of the location field? In similar systems it is used for information like "North exterior side of building" or "Maintenance Bay 2." Here it just seems to hold the base name.

Comments On The Draft Report For Garland

Finding Number	Comment
01.001	The Texas regulation only applies to stationary sources located in Texas or on waters within 25 mi of the shoreline submit emissions inventories to the Commission: • major stationary sources • stationary sources in ozone nonattainment areas, emitting one of the following: – 10 tons or more of VOCs per year – 25 tons or more of NO_x per year – 100 tons or more of CO per year • any stationary source in an attainment area or unclassified area that emits 100 ton/yr or more of any contaminant (including VOCs) for which a national ambient air quality standard has been issued • any major source of hazardous air pollutants. Does this GSU really meet these minimum requirements? Why are both the AFI and the Texas regulations cited — use one or the other.
03.001	The finding says the containers were not labeled as to contents; how about hazard?
04.001	Where was the sludge disposed of? How do you know it did not go to an appropriate place?
04.002	Does "may" mean that they might or might not generate waste? Whether they are or are not generating hazardous waste?
07.001	No comment.
08.001	What is the sentence about waste diesel about? It does not usually qualify as a used oil. There is no regulatory requirement to label that drum Used Diesel.
11.001	No comment.
12.001	Please indicate that one of the reasons this is a problem is because Simple Green is an emulsifier.

Reviewers' Suggested Corrective Actions

- Need to evaluate the balance of quantity versus quality. The seeming goal is to see "all" the facilities and churn out the report as quickly as possible. This contributes to poorly written findings and, in some cases, completely inaccurate findings. Consideration must be given to designating an individual to be responsible to review all findings prior to the out-brief for the following:
 - ◇ Is there sufficient detail to support the finding?
 - ◇ Is the finding detail attached to the correct checklist item? This requires comparing every finding with the complete text of the checklist items in the manuals to determine if the cited regulation actually applies and/or is the best option.
 - ◇ Is the finding written in the required style/format (are all necessary fields completed; are all fields completed in a correct format)?

For this to work, though, the buildings and shops within buildings that are visited must be documented, and it must be stressed to the installation that they are responsible to determine if common findings appear in shops other than those assessed. Also, the installation will have to participate more in the process of helping the assessment team focus their assessments. Instituting a more thorough onsite QA will also require the assessment team to print findings daily that were written the night before, or else the QA person will be swamped on Thursday afternoon. NGB will also have to identify the required fields and the required format for those fields.

- Get the slides for the in-brief done by the installation and set up a standard format of questions to ask installations to have prepared for the in-brief at every installation.
- Develop a PVQ for IH and Safety.
- Develop a promo packet for installations (a letter, a newspaper article, etc.).
- Train assessors on expectations for written findings.
- Consider using Guard personnel as a part of the team. This might work for Environment since the two Environmental assessors do not typically "divide and conquer" but always stick together.

- Environmental assessors are using an out-of-date cheat sheet that references requirements (i.e., a refrigeration plan) that are no longer requirements. Somehow, a system needs to be instituted by the contractor to ensure assessors are aware of changes in the manuals each quarter. This includes additions, deletions, and revisions. These are highlighted in the introduction of TEAM Guide and the ANG Supplement Vol 1 each quarter, but the individual assessors do not seem to be tracking this. For example, the refrigeration management plan was only ever an MP under O4.10.12. This MP was deleted and replaced in February 1997 by the requirement for a Halon 1301 Management Plan. Also, environmental assessors were unaware of the requirements added to U.S. TEAM Guide in January 1999 for air emissions standards at aircraft rework facilities (see topic numbers AE.170 through AE.172).
- Assessors should do a complete read through of the manual sections other than Haz Waste and HAZMAT to make sure they know the requirements, both operational and paperwork.

Appendix Q: Process QA/QC Form for Battle Creek, MI

Installation Name: 110 Fighter Wing, Battle Creek ANGB, Michigan

Installation Environmental POC: Major Fred Volmerhausen

Phone: 609-383-6328

ANG Team Leader: Joy Hoyle

Reviewer's Name: Tina Hurt

Phone: 217-373-3441 **Email:** t-hurt@cecer.army.mil

Dates of assessment: 14-17 September 1999

Dates of onsite review: 14-17 September 1999

Other Major POCs present (Representative from ANG HQ, other observers, etc.): LTC Jan Stritzinger, Don Williams, SAIC

Activities observed (Examples include in-brief, out-brief, daily findings review meetings, assessments of particular protocols).

Tuesday

AM

- In-brief
- Environmental/IH/Safety reviewed paperwork. Environmental met with Maj Volmerhausen to look up reports/permits/plans/documentation, which was readily available. I observed Environmental review of disposal contract, integrated contingency plan, air emissions inventory, solid waste/recycling

plan, spill plans, the hazardous waste management plan, pollution prevention plans, and previous external ECAMP.

PM

- Accompanied Environmental assessors to BCE shops and yard, Base Supply, and POL Storage.

Wednesday

AM

- Accompanied IH assessor to NDI, Engine Shop, Weapons, Pneudraulics, Electrical.
- Observed IH paperwork review.
- Interviewed IH POCs.

PM

- Accompanied safety assessor to BCE shops and yards and dining facility/kitchen.
- Observed Safety discussions.
- Interviewed Environmental POC.

Thursday

AM

- Interviewed Safety POC.
- Met with IH POCs to discuss concerns.
- Interviewed BCE.

PM

- Observed report preparation.

Friday

AM

- Observed out-brief.

General Comments (Insert here comments that do not fit in comment boxes elsewhere in the form.)

- Environmental assessors worked quite well together indirectly being responsible for certain media areas and efficiently reviewing paperwork and conducting site inspections. Due to time constraints and POC availability, separating would have been helpful, although the single Environmental POC was the escort.
- Concern was brought to my attention about the observed lack of Public Health review.
- A Comment section for each finding would allow for added information to be documented that does not fit in the Condition statement. The current Comment section is for the entire section, not the individual findings within a section.

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
1. Was prepared.				X		
2. Was organized.			X			
3. Interviewed appropriate personnel.				X		
4. Asked pertinent questions.				X		
5. Wrote findings in such a way that, without having been at the site, the issues of noncompliance are clear.		X				
6. Cited a true finding, rather than someone's perception/application of a regulation in an inappropriate manner.			X			
7. Recommended immediate corrective actions/solutions as well as long-term corrective actions/solutions.		X				
8. Recorded findings daily.			X			
9. Viewed a cross section of sites (i.e., nonindustrial vs. industrial).				X		
10. Technically knowledgeable.				X		
11. Displayed professional and courteous attitude.				X		
12. Adequately reviewed installation documents (i.e., permits, operating records, plans).				X		
13. Visited sites that were of environmental concern to the installation/facility.				X		
14. Conducted effective daily findings review meetings for site and environmental supervisors/managers.				X		
15. Immediately notified installation POC of "significant" findings.						NA
16. Provided meaningful corrective actions.		X				
17. Clearly explained the goal and objectives of ECAMP to each interviewee when applicable.		X				
18. Interviewed appropriate installation/facility personnel (i.e., supervisors/site managers, shop personnel).				X		

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO*
19. Demonstrated effective interviewing skills and techniques (i.e., open-ended questions, did not answer own questions).				X		
20. Before departing, explained the potential findings to the senior person at each facility.			X			
21. Conducted thorough field observations (i.e., walked fence lines, ditch-lines, outfalls).		X				
22. Investigated for "root causes" of deficiencies/findings.	X					
23. Possessed a working knowledge of protocols (TEAM and state) and Air Guard supplements.				X		
24. Informed other team members of potential concerns related to their assigned media protocols.		X				
25. Kept team leader informed of problems encountered by the team members.						NO
26. Used protocol checklists, either prior to site visit as a review or during site visit, to ensure no compliance issues were overlooked.			X			
27. Information provided will help focus on problem areas.						NA
28. Supplemented protocol guidance with their own knowledge and experience and/or interpretations obtained from regulatory agencies.		X				
29. New findings were discovered.						NA
30. Optimized use of installation personnel time by performing other tasks (i.e., document review, finding write-ups, etc.) before or after base working hours.		X				
31. Selected some sites at random to ensure observations were not planned or responses rehearsed.		X				
32. Overall performance of the assessment team.				X		
33. Assessed Air Force/Air National Guard and DoD standards in addition to Federal and state.				X		
34. Responded to QA/QC comments on findings of noncompliance.						NO

PART 1. ASSESSMENT TEAM						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO*
Comments: Assessors were observed referencing the Word version of TEAM and Nov 98 state protocol. The assessors did not research state requirements after the Nov 98 version and mentioned that, even if they did, they could not writing findings against them. I explained the concept of TEAM protocol question 2 and 3 of each section to be used as the question number when addressing Federal or state issues not included in the assessment protocols. The IH assessor was very thorough assessing shops and interactively involving shop workers in the review. He performed mock emergency situations so shop personnel could demonstrate response techniques. He addressed noncompliance issues and suggested immediate and long-term solutions to the issues. All shop personnel knew the IH POCs very well and had a good rapport with that office. The Safety assessors interactively surveyed the facilities with the shop POCs and explained deficiencies or possible noncompliance issues as they were encountered. The Environmental POC introduced the assessors and the purpose of the ECAMP visit. All POCs were well aware of the assessment and interacted with the environmental POC on a daily basis. Outfalls and installation perimeters were not observed being inspected. Medical waste activity compliance was not observed being looked into.						

* NA = Not Applicable, NO = Not Observed

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
1. Provided sufficient pre-assessment communication, guidance, and information to the assessment team.				X		NA
2. Clearly explained the goal and purpose of ECAMP during the in-briefing if required to perform the in-brief.						
3. Familiar with the ECAMP process.				X		
4. Present and available throughout the assessment.				X		
5. Effectively performed as liaison between installation staff and assessment team.			X			NA
6. Reminded team of essential elements (i.e., goals & objectives of ECAMP, interviewing techniques) prior to the start of the assessment.		X				
7. Keep installation environmental coordinator and staff periodically informed by effectively communicating findings.			X			
8. Coordinated daily assignments to ensure each site team is not excessive.		X				
9. Effectively out-briefed installation commander/staff.						NA
10. Overall performance of Team Leader.			X			NA
11. Held a preliminary team meeting at the start of the assessment and briefed late-coming team members as they arrived.						
12. Held daily team meetings.		X				
13. Obtained pertinent local regulations (i.e., pretreatment standards, local landfill restrictions) and state regulatory interpretation for controversial regulations (i.e., satellite accumulation point clarification, inclusion of mobile source in SPCC).	X					
14. Ensured copies of the TEAM Guide, State or Air National Guard supplements, and instructions on their use, were available for installation personnel or ensured installation personnel knew how to obtain copies to aid in developing the corrective action plan.		X				

PART 2. ASSESSMENT TEAM LEADER						
QUESTIONS	Ratings					
	Low		Med	High		Other
	1	2	3	4	5	NA/NO
16. Ensured positive findings were "above and beyond" compliance.		X				
17. QA/QC'd findings as they are written for completeness, correct format, appropriateness, and accuracy and provided comments to assessors.			X			
Comments: The assessment Team Leader did little to no daily coordination with the group to determine sites to be visited, areas of concern, and status of protocol areas. Daily information out-briefs were requested by the Commander and were performed by the ANG Representative. The out-brief was not rehearsed, performed in a very casual nature in the presence of the Commander, and did not clearly identify deficiencies.						

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low	Med	High	Other		
	1	2	3	4	5	NA/NO
1. Assisted team by providing/gathering documents and records (i.e., permits, plans, inventories, etc.).					X	NA
2. Recommended sites/facilities/operations to be assessed.				X		
3. Facilitated team member interviews by providing maps and list of POCs at each site/facility/operation.				X		
4. Attended daily out-briefings and participated in discussions of findings.					X	
5. Ensured critical installation personnel (i.e., SJA, facility manager, etc.) participation, especially daily out-briefings.						
6. Provided team with adequate workspace and support (i.e., telephones, printers, etc.).					X	
7. Effectively coordinated the in-briefing and out-briefing.					X	
8. Informed team leader of necessary schedule changes to ensure efficiency during the assessment.					X	
9. Acted effectively as liaison between the assessment team and installation personnel.					X	
10. Resolved problems encountered by the assessment team members.						NA
11. Solicited ideas from assessors that could enhance the installation's environmental program.			X			
12. Objectively recommended assessment sites/facilities/operations.				X		
13. Installation Commander participated in the assessment (i.e., attended in-brief and out-brief).					X	
14. Appropriate installation personnel were available to the assessment team.					X	
15. Overall performance of Environmental Coordinator/Staff.					X	
16. Publicized the ECAMP across the installation prior to the visit through the newspaper and other available media sources, shop					X	

PART 3. INSTALLATION ENVIRONMENTAL STAFF						
QUESTIONS	Ratings					
	Low		Med	High	Other	
	1	2	3	4	5	NA/NO
briefings, and notification of tenants.						
17. Provided a complete PVQ to the assessment team.					X	
18. Reviewed assessor root cause selection/justification for accuracy.						NO
Comments: The environmental manager had everything organized and ready to go upon arrival. Welcome packages were given to each team member with base information, phone lists, and maps. The environmental manager had plans, reports, inventories, and required documentation readily available for review. The IH staff was well prepared for the assessment and accommodated the team with excellent support.						

Comments On The Draft Report

Finding Number	Comment
Background	• Indention and spacing of numbered titles is inconsistent. Recommend left justifying the entire section to enhance readability. • Bulleted text has too much space between bullet and text. • The Activity Review (2.5) Section is inaccurate and incomplete. It addresses activities that did not take place and does not address the activities that did (i.e., Air Emissions Management: no asbestos activity was observed; air permits <i>were</i> reviewed; CFC recovery <i>was not</i> observed). • Major Finding definition (Table 4) should be clarified to identify that <i>all</i> environmental CFR noncompliance issues are classified as Major Findings.
Section 3	• This section does not read well. The information is bunched up and in incomplete sentences.
01.001	• This finding states what is needed, instead of what is not done or deficient. • How often is it used (might give a better picture of the noncompliance)? • What is being painted in the paint booth? • Were the Aerospace Manufacturing/Rework Facilities Federal requirements in Air Emissions Management in TEAM reviewed for this operation? • Documentation should be <i>maintained</i> to ensure limits are met.
01.002	• The <i>In addition</i> statement should be a comment — not in the finding. • The citation is not complete with paragraph numbers.
01.003	• The condition statement should read as the description of the noncompliance not as the requirement. We know what it should have in it, but what did it not have? • Where were the specifics of this requirement found? • AE.1.2.AG has been referenced — that does not include these specific requirements.
04.001	• This needs to be worded as a Condition, not a summary of the requirement. • HW.35.1 is referenced with an incomplete citation. • A container at an SAP is not required to be labeled HAZARDOUS WASTE but is required to be labeled HAZARDOUS WASTE or other words that identify contents. Were there any labels on the containers?
04.002	• Again, this is a summary of the requirement, not a Condition statement of non-compliance. • There are two separate issues. • HW.10.1: Federal facilities that generate solid wastes must determine if the wastes are hazardous wastes. How was this finding closed? Is there a procedure in place? • HW.20.3: An SQG must not offer its hazardous waste to transporters or to TSDFs that have not received a USEPA identification number. Which was stated incorrectly in the finding as: An SQG must dispose of <i>[not offer]</i> its hazardous waste to transporters or to TSDFs that have not received a USEPA identification number. Is this knowingly offering a hazardous waste and does the transporter have a USEPA identification number?
04.003	• How many batteries? • How was this finding closed?
04.004	• Again, this is a summary of the requirement, not a Condition statement of non-compliance. • What are they not doing?
04.005	• State the noncompliance issue first in the Condition statement.

Finding Number	Comment
04.006	- How were these findings closed? - HW.1.3.AG is referenced but the citation should read (February 1997).
06.001	All positives are required to be tied to checklist item number XX.2.2.AG where XX is the two letter code of the section (NR for Natural Resources, O1 for NEPA, etc.).
06.002	All positives are required to be tied to checklist item number XX.2.2.AG where XX is the two letter code of the section (NR for Natural Resources, O1 for NEPA, etc.).
06.003	- Why is this above and beyond? - All positives are required to be tied to checklist item number XX.2.2.AG where XX is the two letter code of the section (NR for Natural Resources, O1 for NEPA, etc.).
08.001	This is restating the criteria – state what the noncompliance condition is.
10.001	State the noncompliance first.
11.001	Why is it outdated – what has changed?
12.001	There is redundancy in this write up that makes it hard to figure out what has and has not been done.
12.002	All positives are required to be tied to checklist item number XX.2.2.AG where XX is the two letter code of the section (NR for Natural Resources, O1 for NEPA, etc.).
16.001	- Condition could be clearer. - The citation for HC.50.1.AG referenced is incomplete. - How was this finding closed?
16.002	- It is unclear what this finding is really about. It appears that the assessor's complaint is that AF 55s are not filled out in the same fashion in all shops; not all squares are filled in all shops. I assume that some shops do not have signatures to substantiate training. The finding seems to me questionable; the requirements that are not being met appear to derive from the shape of the form only. There is no requirement for consistency across all shops except insofar as all shops are supposed to be using the same form and are presumably supposed to be filling in all the blanks. - The comment to the finding contributes little, other than to mitigate the finding itself. I do not believe that that approach is a useful one.
18.001	- This is two separate findings. - NO.10.2.AG or NO.10.3.AG to perform noise survey. - NO.30.3.AG for warning signs. - Are there two findings? Were signs posted? - How was this finding closed? Did they both survey and post signs before the assessors left? Or did they do a survey and establish that exposure does not exceed 85dBA?
19.001	- Is this above and beyond compliance or in compliance? - The positive condition should be stated first.
38.001	- State the noncompliance issue first. - What shops do not have the required plans? - Once again, the assessor mitigates the finding. Findings are findings of non-compliance and should be written unapologetically as such.
38.002	The recommendations as to what should be included cannot be turned into a finding of noncompliance. AFI 91-202, para 3.3 does not require any of the elements that the assessor wants to have included. The requirement as to the scope of the

Finding Number	Comment
	assessment reads as follows: 3.3.3. Assessment Scope. Safety program management assessments address command and functional manager support, compliance with program directives, and the effectiveness of mishap prevention programs, including an analysis of unit mishap reports and other management indicators. There is no finding here.
38.003	• This finding must be written against BA.10.14.AG • "Some shops" is too vague. It is important to know precisely which shops have not been subject to annual inspection.
38.004	• The reader cannot tell whether uncorrected deficiencies actually exist or whether the assessor does not believe that the deficiencies were corrected quickly enough. If the latter, there is no finding. The supporting regulation requires only that there be follow-up procedures to determine whether or not corrections have been made. • State the noncompliance issue first. Do not include the statement of the corrective action in the statement of the noncompliance issue. • How many is some? What is timely, and who determines what is timely? The regulation itself says nothing about timeliness.
38.005	• How many is some? • This is not a finding, at least not under the cited regulation; the requirement is only for inspections, not for annual inspections.
38.006	• Emergency eyewash and eyewash equipment has been moved to Chapter 40, PPE. • How many is several? • This finding must be written against SP.2.1.AG; the manual as it exists contains no requirement for ANSI-approved eyewashes, and ANSI approval is actually required only if Military Specifications are not used. Therefore, it is unclear whether this is actually a finding or not. Whether or not there is a finding depends on whether or not the Mil Specs require ANSI-approved eyewash units. The proper citation is to AFOSH STD 91-32, para 2.5, which reads as follows: Acquisition. Emergency shower and eyewash equipment may be both locally and centrally procured. When Military Specifications (Mil Spec) are available, they should be used for the purchase of this equipment. When Mil Specs are not used, the procuring document shall include a requirement for the equipment to meet or exceed ANSI Z358.1 specifications.
38.007	• No question currently exists to capture this issue. • A new question can be developed to incorporate the specific requirements of the ANG's Supplement 1 to AFI 91-202 if desired.
42.001	• How many is several? What locations? • Is there a work order in, or current corrective action taking place? • The statement of noncompliance should not also include the suggested action. This redundancy contributes nothing and may indeed only confuse matters.
46.001	• How many is several? What locations? • How many employees were unsure of program elements and in what shops? • Identify which shops need the program and where there are deficiencies. • The regulation cited does not require an inventory of equipment to be included in the LOTO program; there is no finding. It would appear that the assessor is unsure of the elements required to be in a LOTO program. If there is indeed a training finding here that requires personnel to be aware of specific LOTO program elements, it would have to be written under either LT.10.18.AG or LT.10.19.AG. The finding is so vague that I cannot tell whether a training finding could/should be written.
47.001	• This requirement is not a checklist item in the OSHA protocol. If the finding is to

Finding Number	Comment
	be written, it should therefore be written under FP.2.1.AG. • A new protocol question could be developed to address the requirements of NFPA 96 if desired.
47.002	• How many are "a few" shops? Exact locations would assist in corrective action execution. • There is no such citation as 156(b)(10), and neither 156(b)(1) or (b)(2) is appropriate to the condition the assessor is trying to address. The place to write the finding is under FP.26.10.AG, but that is a training issue only, the part about the protective clothing must be addressed somewhere else, if at all. The suggested solution should read something like: Properly train personnel or remove standpipe (since the Fire Department would not use it).
47.003	• The finding should be written under FP.2.1.AG. • A new protocol question can be developed to address the requirements of 29 CFR 1910.37/AFI 32-2001 and the NFPA standards if desired.
48.001	• Locations would be helpful.
48.002	• This is not a finding at all; the regulation cited by the assessor addresses the storage of material (bags, containers, bundles, etc.) not the safe storage of equipment.
49.001	• The noncompliance issue should be stated before the requirement. • Assuming that the saw is hand-fed, this should be written against MG.20.3.AG, which addresses rip saws. 20.4 addresses crosscut saws only. • A new protocol question can be developed to incorporate requirements of AFOSH 127-12 if required.
49.002	• The suggested solution does not mention correcting the noncompliance issue in the Condition. • The condition statement could address the consequences of the noncompliance. • A new protocol question can be developed to incorporate requirements of AFOSH 91-12 if required.
49.003	• The condition statement could address the consequences of the noncompliance.
52.001	• The condition statement is not sufficient. The 3-ft radius requirement applies to the working space in front of live parts normally exposed on the front of switchboards or equipment based on voltage. These issues are not specified in the condition statement to draw a conclusion of noncompliance. • A description of what is in the 3-ft radius would give a better picture of the non-compliance. • The suggested solution should specifically state the relocation of what is within the 3-ft radius to outside the 3-ft radius. • The condition statement could address the consequences of the noncompliance. • The referenced checklist item's specific citation is 29 CFR 1910.303(g)(1).

Reviewers' Suggested Corrective Actions

- *Develop process to ensure assessors have the up-to-date manuals and software.* Assessors must come into the field with the current versions of manuals if they are expected to use the manuals as the primary tool to which findings are tied. Assessors should know the following:
 - ◇ U.S. TEAM Guide is updated quarterly; the new version is posted within the first 2 weeks of September, December, March, and June.
 - ◇ State supplements are updated yearly, usually within the month each was updated previously.
 - ◇ ANG Supplement, Vol 1 (Environmental) is updated quarterly; the new version is posted within the first 2 weeks of September, December, March, and June.
 - ◇ ANG Supplement, Vol 2 (IH and Safety) is updated quarterly.
 - ◇ Current version number of software to be used at a site, not just a copy of the software.
- *Provide reminder/refreshers training for assessors.* Assessors need to be reminded of the following:
 - ◇ Ask open-ended questions, not "you inspect this annually, right?"
 - ◇ Look at the supporting paperwork in the shops.
 - ◇ Don't put the shop supervisor in the position of giving a guided tour, this should be an interactive process. Ask questions to let them show off their knowledge, even if you know the process they are explaining backwards and forwards.
 - ◇ Talk to more than just the shop supervisors; ask personnel how they think things work.
 - ◇ Ask shop personnel if they have any questions.
 - ◇ Sum up what you saw at each shop to the shop supervisor. Sum up absolute findings, and go over the findings that need additional research.

- ◇ Review the previous internal/external reports.
- *Train assessors on how to use the manuals.* They do not appear to be comfortable with the structure or contents of any of the manuals or knowledgeable of the conventions associated with the manuals such as:
 - ◇ Use checklist item number XX.2.1 TEAM Guide (XX stands for the appropriate 2-letter section code) to write findings that are otherwise not found in TEAM Guide, ANG Supplement Vol 1, or the state supplement.
 - ◇ The presence and use of guidance pages in each section to facilitate finding the desired topic rather than paging through the manuals.
- *Develop additional tools to facilitate use of manuals.*
 - ◇ Add a "Missing Checklist Item" placeholder in both Parts 1 and 2 of the ANG Supplement, Vol 2.
 - ◇ Add a standard checklist item to write positives up under - need to decide whether to put one in TEAM and one in each of the parts of ANG Supplement, Vol 2.

XX.2.1 Installations should go above and beyond environmental statutory and regulatory compliance (MP) [Added April 1999].	Determine if the installation has gone above and beyond simply complying with environmental requirements.
---	---

- ◇ Add a suffix to the ANG Supplement checklist items so they are easily differentiated from other manuals. Suggested suffix is AG. Need to decide if this should be done for IH and Safety as the splitting of that document is starting.
- ◇ Create "cheat sheets" that identify the checklist item number to use for common findings in the three areas of assessment.
- *Develop a site visit log for assessors in which assessors document where they have been.* This type of log is valuable for both the installation and the next external team. It provides a heads up as to what was not assessed and

should be looked at more closely the next time around. It should be an appendix in the report. A possible format:

Building number	Shop name	Room number if different than building number	Assessor (IH, ENV, or SAF)

- *Develop tools to facilitate the base's preparation for ECAMP.*
 - ◊ Instead of using the vague and overwhelming list of paperwork in the current PVQ, create a specific and limited list. This list should be the most common types of paperwork actually found on an ANG base instead of all possible types of paperwork. Suggested environmental list includes:
 - * Air Emissions Inventory (AFI 32-7040, para 2.8)
 - * Air emissions permits, if applicable (usually state regulated)
 - * Cultural Resources Management Plan (if applicable), (AFI 32-7065, para 2.2 and DODI 4715.3, para D3(c) and Enclosure 7)
 - * Tier I or Tier II reports (EO 12856; 40 CFR 370.20, 370.25, and 370.28)
 - * HAZMAT Plan 1 (AFI 32-4002, para 3.3)
 - * Hazardous Waste Management Plan (AFI 32- 7042, para 2.2 and Attachment 2)
 - * Hazardous Waste Manifests (40 CFR 262.40(a), 262.40(c), 262.40(d), 262.42(b), 262.43, and 262.44)
 - * Natural Resources Management Plan, if applicable (AFI 32-7064, para 2.1 and 2.3 and DODI 4715.3, para D2(b), D2(h), and Enclosure 7)
 - * Bird/Aircraft Strike Hazard (BASH) Plan, if applicable (AFI 91-202, para 7.11.1.4 and 7.11.2)
 - * EAs or EISs produced in the last 3 yr (NEPA),

- * P² Plan (AFI 32-7080, para 2.2 and DODI 4715.4, para F2(c)(2))
- * Halon 1301 Management Plan (ETL 95-1 implementing AFI 32-7080)
- * Pesticide Management Plan (DODI 4150.7, para 5.3.22.1, Enclosure 4, para E4.1.2, and Enclosure 6; AFI 32-1053, para 2.4.5. and 2.4.7.)
- * Solid Waste Management Plan (AFI 32-7042, para 3.2)
- * Spill Prevention Control and Countermeasure Plan, if applicable (40 CFR 112.7)
- * Storage Tank Inventory (AFI 32-7044, para 3.2 and AFI 23-204, para 3.6.2, 13.1, and 13.3)
- * Asbestos Management Plan and Operating Plan, if applicable (AFI 32-1052, para 5 and 6)
- * LBP Management Plan, if applicable (HQ USAF/ CC Policy letter 24 May 1993, para 6)
- * Wastewater/stormwater permits, if applicable (40 CFR 122.1(b)(3), 122.26(c) and 122.26(g))
- * List of oil/water separators
- * Wastewater/stormwater sampling results for the last year.

A similar list should be created for the IH and Safety arenas.

- ◇ Set up a web site for ANG ECAMP where the following things are posted:
 - * link to the manuals
 - * a running list of the 15 most common findings in environmental, IH, and Safety areas for the last 6 mo so the installation does not have to call around to find this out
 - * any associated guidance documents
 - * a forum for info exchange on ECAMP so that there is a place to ask questions about what people find in internals.

- ◇ Publicize DENIX outside of the main offices; it should be being used at CE, Ops, flight line, etc.
- ◇ Shop-specific manuals. If CERL moves to using ACCESS to write its manuals, this can be done by indexing the individual checklist items with appropriate terms (e.g., Vehicle Maintenance, Painting/Depainting). Otherwise, alternatives need to be explored to find a way to provide the shops with manageable copies of what they are being assessed against.
- *Improve content and usefulness of findings.*
 - ◇ Need background information to assure validity of finding (e.g., a table of questions in the introduction that clarifies status in various areas). This will only work if the introduction accompanies the findings at all times. Types of information of interest are:
 - * Hazardous waste generator status, and why (SQG, EPA ID number; CESQG, amounts observed...)
 - * Amount of POL stored aboveground and amount stored underground
 - * Any permits.
 - ◇ On the printed copy, need to know the checklist item number used to write the finding. This helps the QA person in determining if the finding is written in the correct place. It also helps base personnel who are trying to solve the finding know where to look for some additional guidance. In addition, a Comment section for each finding would allow for added information to be documented that does not fit in the Condition statement. The current Comment section is for the entire section, not the individual findings within a section.
 - ◇ Develop a style guide to eliminate inconsistencies.
 - ◇ Straighten out the format of the boilerplate in the introduction once and for all — if this is boilerplate, there is no reason for poor formatting to show up.
- *Improve root cause analysis process.* Add a field to the database for the assessor to write a justification for the root cause they select. This does two things: (1) it makes the assessor take the issue more seriously, and (2) it tells the installation what the assessor was thinking.

- *Enhance and standardize the out-brief.*
 - ◇ Add a slide at the end summarizing the installation's responsibilities — may not have the same people at the out-brief as were at the in-brief.
 - ◇ Add a slide at the end talking about where we go from here — trend analysis, etc.
 - ◇ Use the same style and format on slides across Environmental, IH, and Safety.
 - ◇ Get the assessors to stick to the facts of what is wrong instead of trying to mitigate up front. If needed, close with mitigating comments.
 - ◇ With three different topics being out-briefed, it is important for briefers to remember that there are going to be people in the audience who have no clue about their subject area. So slides need to be explicit and clear.

Appendix R: Writing Instruction Sheet for Findings

The following is a short summary of the QA findings from Donna Schell of CERL, given to the Selfridge ECAMP team during the assessment in Detroit, MI. Please read them and start to implement them on your next ECAMP.

1. Detail, detail, detail! How much, what color, what volume, where is it located, why is it a finding? State why you are making this finding with as much detail as possible. There probably can never be too much detail. Think about writing your findings so that someone who was not there in the room with you could go back and correct the finding without any questions.
2. Within the text of the finding, separate the finding and the regulatory requirements by a paragraph (e.g., page break). The order of appearance must be first the finding/deficiency of what is wrong and then the regulatory requirement.
3. Suggested action field should include options on how the Base can get into compliance; not mechanics, but how the Base can meet the regulatory requirement. In general, add more detail than we have been putting into this field.
4. For Incompatible Compressed Gas Storage – what is the actual AFOSH standard for the compatible (Team HM.45.1)? This is a policy decision that ANG/CEV must address.
5. Abandoned Hazardous Waste – the findings for “orphan” containers of hazardous/unknown materials that are not characterized should be kept separate from known active hazardous waste streams within shops. Do not write this up as Failure to Characterize; it is abandoned hazardous waste. Still use Checklist HW.10.1.TEAM for both, but different titles.
6. Add the EPA ID No. for any hazardous waste relating to hazardous waste manifest finding, including the generator status (SQG, LQG) in the text of the finding.

7. ANG Hazardous Waste Management SOPs – *always* use the Team Guide checklist item HW.1.3.AG for these findings. Add in the requirements paragraph any additional detail from the cited source (SOP).
8. If a plan, such as a Hazardous Waste Management Plan, SPCCP, SWPPP, etc., specifies more requirements than the regulation specifies, then add the detail in the Suggested Action. Remember, implementation of the plan is a requirement.
9. Do not write up storage tanks under the POL protocol. Storage tanks are written up under the ST protocol.

Overall Finding Philosophy

1. Is there sufficient detail for someone who was not there?
2. Is there sufficient detail to support the finding? Does the regulation apply for the finding?
3. Is the regulation cited the *correct* one for the finding? If so, is the citation the optimal regulation for the finding?

EOH Protocol

1. September – all files are updated every September under the OSHA protocol with updates posted separately each quarter. The posted updates must be manually added to the protocol each quarter.
2. For OSHA regulations, the quarterly updates happen in December, March, and June. Updates **MUST** be checked every quarter.
3. Protocol numbering system for OSHA regulations – example: OH17906

17 – is the chapter of the protocol change

9 – is the last digit of the year of the update

06 – is the month of the calendar

Appendix S: Training Materials

Slide 1

ECAMP Manuals

**What They Are and How to
Use Them**

Slide 2

Manuals Used in ANG ECAMP

- U.S. TEAM Guide: reflects U.S. environmental regulations
- State Supplements to TEAM Guide: reflects state environmental regulations
- ANG Supplement, Vol 1: reflects environmental AFIs and Guard requirements and SOPs.
- ANG Supplement, Vol 2: IH and Safety: reflects OSHA and AFOSH requirements.

All are written in MSWord 6.0

Slide 3

Updating the Manuals

- U.S. TEAM Guide and the ANG Supplement Vol 1 and 2 are updated quarterly
 - For U.S. TEAM and Vol. 1, completely new manuals are posted on DENIX quarterly.
<http://www.denix.osd.mil/denix/DOD/Library/Assessment/tools.html>
 - For Vol 2, sections with changes are posted on DENIX each quarter and a completely new manual is posted each Sept.
- State Supplements are updated annually

DENIX Login Support at COMM 217-373-6790, FAX (217) 373-7270, or EMAIL acstimer@www.denix.osd.mil

Slide 4

Comment on DRAFTs

- Comments on all manuals are welcome at any time.
- Proposed changes to U.S. TEAM and Vol 1 of the ANG Supplement are posted in the DRAFTs section of DENIX within the first 2 weeks of each quarter, 6 weeks for review.
- The DRAFTs section of DENIX is not used for changes to Vol 2 of the ANG Supplement

Slide 5

Manuals File Name Conventions

- For env. manuals:
 - First two letters indicate the manual (US for TEAM, AG for Air Guard, postal code for State)
 - First number is the last digit of the FY
 - Last two numbers are the month.
- **USAE909.doc** (U.S. TEAM, Air Emissions)
- **USMM909.doc** (U.S. TEAM, Main Intro)
- **AGPM909.doc**, ANG Supp Vol 1, Pesticides Mgt.
- **NYSO907.doc**, New York Supplement, Solid Waste.

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Manual File Name Conventions (cont)

- For ANG Supp. Vol 2:
 - First two letters indicate occupational safety or occupational health
 - First two numbers indicate the chapter
 - Third number is the last digit of the FY
 - Last two numbers are the month.
- **OH14809.doc** is the occupational health chapter on hazard communication
- **OS41809.doc** is the occupational safety chapter on walking-working surfaces
- **OSMM909.doc** and **OHMM909.doc** are the main intros for the respective topics

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**Supporting Information in
the Manuals**

- All manuals contain regulatory definitions in applicable sections (*see page 6*)
- When appropriate, appendices are used to encompass standards/lists (i.e. endangered species lists, MCL standards) (*see page 23*)
- Guidance Pages (*see page 11*)
- Glossary of Acronyms and Standard abbreviations (Main Introductions)

Slide 8

**Additional Aids in
U.S. TEAM Guide**

- Descriptions of the laws/statutes which are the source legislation (Section Introductions) (*see page 1*)
- Summaries of the regulations discussed in the checklist items (Section Introductions) (*see page 6*)
- Reference lists of documents to review and types of activities to audit (Section Introductions) (*see page 8*)
- Standard Checklist Items (Section Checklists)
- Changes Chart (Main Introduction)

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Standard Checklist Items.

- **XX.2.1** is used to write environmental findings when the desired regulatory citation is not found in the U.S. TEAM Guide.
- **XX.2.1.** Federal facilities are required to comply with all applicable regulatory requirements not contained in this check list (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).
- **XX.3.1** was used to write state findings before all of the state supplements were written. DO NOT USE.
- **XX.3.1.** Federal facilities are required to comply with state and local regulations concerning xxxxx management (EO 12088, Section 1-1; FFCA, Section 102).

Slide 10

U.S. TEAM Guide Changes Chart

Summary of Changes Since September 1998

Checklist item/Section	Action Taken
	Air Emissions Management
Main Introduction	D. Key Compliance Requirements Aerospace Industry paragraph Added Jan 1999 E. Key Compliance Definitions Added definitions related to aerospace HAP emissions requirements Jan 1999
AE.1.4	Revised July 1999
AE.170 through AE.172	Added January 1999

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**Additional Aids in ANG
Supplement, Vol 1**

- Description of how the environmental auditing program is executed in the ANG (Main Intro)
- ANG pre-visit questionnaire (Main Intro)
- Changes Chart (Main Introduction)

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**ANG Supp. Vol. 1: Standard
Checklist Items**

- | | |
|---|---|
| • XX.2.1.AG is used to write environmental findings when the desired regulatory citation is not found in the ANG Supplement, Vol.1 . | • XX.2.1.AG. ANG facilities are required to comply with all applicable regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). |
| • XX.2.2.AG is used to write positive findings. | • XX.2.2.AG. Installations should go above and beyond environmental statutory and regulatory compliance (MP) [Added July 1999]. |

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Additional Aids in ANG Supplement, Vol 2

- List of CFRs included and not included in the manuals (Main Introductions)
- Table of Contents, indicates the chapter number, chapter code, chapter name, and 29 CFR reference (Main Introductions) (*see page 35*)
- Manual Chapters Listed Alphabetically by Code, indicates the chapter number, chapter code, chapter name, and 29 CFR Reference (Main Introductions) (*see page 36*)
- The zipped files that contain changes always include a "read me first" text file highlighting quarterly changes.

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ANG Supp. Vol. 2: Standard Checklist Items

- **XX.2.1.AG** is used to write environmental findings when the desired regulatory citation is not found in the ANG Supplement, Vol.1 .
- **XX.2.2.AG** is used to write positive findings.
- **XX.2.1.AG.** Installations facilities are required to comply with all applicable Federal regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).
- [Added September 1999]
- **XX.2.2.AG.** Installations should go above and beyond environmental statutory and regulatory compliance (MP).
- [Added September 1999]

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Making the Manuals Easier to Use

- **Consistency Guidance:**

The purpose of consistency guidance is to highlight the most common findings of noncompliance and ensure they are identified in a similar manner. *(see page 37)*

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14. ABSTRACT

The U.S. Air National Guard (ANG) has conducted environmental compliance assessments since the early 1990s by using contract assessors. To assure itself of the effectiveness and quality of its assessment program, the ANG Readiness Center/Civil Engineer Environmental Quality asked CERL to perform onsite process evaluations during 13 ANG Environmental Compliance Assessment Management Program (ECAMP) assessments and review the resulting assessment data for accuracy and completeness. This report summarizes the practices that should be considered for unilateral implementation, discrepancies in processes/guidance, and gaps/problem areas in the assessment process.

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