Compliance Assurance Oversight at the Missile Defense Agency

May 6, 2009

Mr. Ken Rock & Mr. Crate J. Spears
Infrastructure and Environment Directorate
Missile Defense Agency
Report Documentation Page

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE
06 MAY 2009

2. REPORT TYPE

3. DATES COVERED
00-00-2009 to 00-00-2009

4. TITLE AND SUBTITLE
Compliance Assurance Oversight at the Missile Defense Agency

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Missile Defense Agency, Infrastructure and Environment Directorate, 5700 18th Street, Bldg 245, Fort Belvoir, VA 22060-5573

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR’S ACRONYM(S)

11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES
Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 4-7 May 2009 in Denver, CO.

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:

a. REPORT
unclassified

b. ABSTRACT
unclassified
c. THIS PAGE
unclassified

17. LIMITATION OF ABSTRACT
Same as Report (SAR)

18. NUMBER OF PAGES
17

19a. NAME OF RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98)  Prescribed by ANSI Std Z39-18
Overview

- Environmental compliance at MDA is a function that cuts across all agency activities and all of the facilities and host installations where we do business.
- MDA recognized that we need a more formal, systematic approach to oversight of compliance activities – an approach that focuses on activities that pose the greatest cost and schedule risks to MDA’s program.
- This presentation describes a practical, risk-minimizing approach currently being considered by MDA to help assure environmental compliance across all agency activities.

CAO allows extra attention to be focused where it’s needed most.
MDA Mission

- **Broad scope and global reach**
  - Mission is to protect the U.S. homeland, deployed forces, Allies and friends against ballistic missiles of all ranges and in all phases of flight
  - Missile defense consists of a layered system of multiple types of interceptor systems, all linked together
  - Characterized by rapidly developing technologies and response to evolving threats
  - Activities occur at Army, Navy, Air Force, and host country installations worldwide

- **Initial capability for limited defensive operations was deployed in 2004**
Main product of MDA’s Environmental Management Program is compliance

Activities that support all MDA programs and special studies:

- Prepare and review NEPA documents (EAs, EISs, CATEXs), including E.O. 12114 analysis
- Ensure compliance with individual service regulations (e.g., Army, Navy, Air Force), host nation requirements, and individual range needs
- Prepare air, water, and stormwater discharge permits; surface water monitoring; noise monitoring and modeling; and environmental baseline surveys
- Support consultations with Federal and state agencies (e.g., Fish & Wildlife Service, National Marine Fisheries Service, Historic Preservation)
- Provide support to facility siting studies

These activities reduce risk, as well as future compliance burdens

All compliance activities are conducted within the framework of MDA’s Environmental Management System (EMS)
Noncompliance Risks

- Numerous causes of noncompliance
  - Easy for issues to “slip through the cracks” with numerous MDA and host installation requirements
  - Changes in schedule
    - Program priorities may change
    - Range may have conflicts with other users
  - Protracted agency reviews

- Implications of noncompliance
  - Test delays result in significant costs to a program
  - Increased risk of litigation
    - Always present: a 2001 lawsuit required substantial time commitment from MDA legal and environmental staff
    - Can minimize, but not eliminate
Emergence of CAO

- Purpose of Compliance Assurance Oversight (CAO)
  - To ensure that environmental compliance processes at locations with MDA activities are suitable and adequate
  - Ensure that plans for environmental compliance are being followed

- Intended CAO focus is on locations where perceived risk of noncompliance is greatest. Considerations include:
  - Magnitude, scope, and frequency of activities
  - Relative environmental risk and potential for environmental liabilities
  - Potential for public visibility or controversy

- CAO goes beyond NEPA compliance and allows MDA to apply resources to areas where perceived risk is greatest
CAO Has Broad Applicability

- MDA’s compliance assurance program includes:
  - **Environmental Baseline Surveys (EBSs):** conducted prior to occupying a site AND after leaving site
  - **MDA contracts and agreements:** reviewed for inclusion of risk reduction language
  - **Training:** project-level staff made aware of environmental requirements and risks
  - **Mitigation monitoring:** verify implementation and effectiveness of mitigation techniques
  - **NEPA:** implement consistent and thorough NEPA process
  - **Auditing:** review environmental compliance practices

- CAO is entirely consistent with MDA’s “Plan, Do, Check, Act” approach to continual improvement
Common Threads in CAO Reviews

- Many opportunities to conduct CAO reviews

- Although program is still being developed at MDA, common threads include projects with greatest potential to get senior management attention:
  - Potential environmental liabilities
  - Potential schedule delays

- We’ve encountered few surprises
  - High level of understanding and professionalism at DoD installations
  - Risks are generally well understood and are being addressed

CAO provides an excellent opportunity for informal communications and early resolution of problems
CAO Procedures

- Prepare schedule for assessments and resource needs
  - Affected by results of prior assessments or changes in activities or locations
  - May occur at any location where MDA conducts business
- Scope and criteria for assessments for each location are established in advance
- Assessments may be done “in office” or in the field
  - Desktop assessments begin with a data call; follow-up may or may not be needed
  - On-site assessments may be done to field-check and ground-truth the results of earlier desktop assessments
  - Deficiencies identified are noted and addressed as needed
- Assessment type and frequency are established on a priority basis based on previous assessment results, perception of ongoing risks, and available resources
CAO Teams

- To ensure objectivity, CAO assessment team members will have no functional responsibility within the location to be assessed.

- To ensure quality, at least one member of each team should be experienced in the CAO assessment process.

- All team members will be aware of a location’s compliance requirements for the activity.

- Staff uses computer-based tools and established procedures to make CAO more thorough and effective:
  - Currently reviewing needs
  - Goal is to continuously improve the CAO process

CAO requires knowledgeable & experienced assessment teams.
Representative Examples

- The following three examples illustrate some of MDA’s initial CAO efforts

- Each example shows a different aspect of CAO:
  - An EBS and Environmental Compliance Assessment and Management Program (ECAMP) at Wake Island
  - HazMat concerns for an Air Force program at Edwards Air Force Base (EAFB), CA
  - Review of potential environmental liabilities at Vandenberg Air Force Base (VAFB), CA
Ex. 1: Wake Island Transfer

- Air Force conducted EBS and ECAMP at Wake Island in 2002 prior to the transfer of operational control from Army to Air Force
- Purpose was to identify compliance issues prior to regaining operational control of Wake Island from the Army
- Air Force review included 365 sites and resulted in 210 findings
  - Listed responsible party and order-of-magnitude costs for findings
  - Prompted discussions between Army and Air Force
- MDA participated on-site for the entire ECAMP
  - Results helped provide proper perspective on findings and magnitude of potential liabilities
  - Helped to shift focus on Federal Facility Compliance Agreement between Army and EPA
Ex. 2: ABL HazMat at EAFB

- Many technical, cost, and schedule challenges from this high technology, cutting edge program
- Minimization and mitigation of potential chemical leaks were identified as an ongoing challenge for the testing program
- MDA environmental team requested information about status of inventory of HazMat, risks, waste streams, and management processes/procedures
- Found that ABL has on-going, in-depth oversight from:
  - Air Force reviews and audits
  - Boeing safety and structural reviews
  - Independent assessment team reviews
  - ABL Program review
Ex. 3: Env. Review at VAFB

- Tested MDA’s procedure for identifying and evaluating environmental liabilities associated with property, plant, and equipment
  - Visited each of the buildings with MDA assets
  - Used a field observation worksheet to identify potential environmental liabilities
- Discovered no environmental liabilities, but:
  - Recognized need to provide training to MDA personnel
  - Met with personnel for a major program that already has an extensive oversight and quality control function, including its own EMS
- Both MDA and VAFB recognized value of a systematic and consistent review
CAO Pros & Cons

- Pros:
  - Provides framework for independent review and focuses attention on areas of greatest perceived risk
  - Allows experienced staff flexibility in office and field reviews
  - Uses standardized processes and worksheets to document the assessments

- Cons:
  - A developing program with potential to reduce risks
  - Need to fight perception as “auditors” to ensure access to key personnel and information (we are not inspectors that can impose fines)
  - Must fully coordinate a CAO review with the host installation or organization to identify purpose and scope and identify any assistance needed
Lessons Learned To Date

- Many CAO opportunities exist throughout MDA’s environmental management program
  - A flexible program
  - Can take action on short notice
- CAO allows a “fresh set of eyes” on a program and the associated benefits of an independent review
  - Even if there are no problems identified, CAO may allow a new or better method to be used at a facility to accomplish a goal
  - Useful lessons learned can be shared with others
- Affords an excellent opportunity to identify and resolve issues informally
Questions?