

memorandum

DATE: August 7, 2008

Audit Report No. OAS-L-08-15

REPLY TO:

ATTN OF: IG-34 (A08ID013)

SUBJECT: Report on "Resolution of Personal Safety Issues at the Department of Energy"

TO: Chief Health, Safety and Security Officer

INTRODUCTION AND OBJECTIVE

The Department of Energy's (Department) Corrective Action Management Program (CAMP) is a systematic process for developing, tracking, reporting, and implementing corrective actions to resolve safety findings. It is also used to determine the effectiveness of completed corrective actions in preventing the recurrence of safety issues. The Department's Office of Health, Safety and Security (HSS) oversees CAMP and performs safety program assessments at each major Department site every one to three years to identify safety findings that require corrective action. That office also identifies, on an organizational level, significant programmatic weaknesses, areas needing improvement, and areas with effective performance.

After the site assessment is completed by HSS, the site must develop a corrective action plan to address identified safety findings. Department Order 414.1C, *Quality Assurance*, prescribes requirements for corrective action management and identifies the required elements of site corrective action plans. Department line managers are responsible for addressing, tracking, reporting, completing and verifying closure of corrective actions to effectively resolve all findings. The creation and modification of corrective actions must be approved by the site's designated Programmatic Secretarial Office or designee and are tracked to resolution in the Department's Corrective Action Tracking System (CATS). Also tracked in CATS are corrective actions resulting from Type A accident investigations, findings identified by the Office of Aviation Management, and other sources directed by the Secretary or Deputy Secretary.

We conducted this audit to determine whether Department field sites are taking corrective actions to resolve safety issues arising under the CAMP.

CONCLUSIONS AND OBSERVATIONS

Based on testing at four of the Department's field sites, nothing came to our attention to indicate that safety issues identified by HSS were not being resolved. Through CAMP, each of the sites we visited was working to correct and close out identified findings and to address areas needing improvement. However, we noted several minor issues related

to the completeness of corrective action plans, timeliness and accuracy of CATS data, and the ability to perform trending analysis on a complex-wide basis.

Completeness of Corrective Action Plans

Two of the field sites reviewed were not including all required elements in their corrective action plans. Department Order 414.1C requires that each corrective action have a deliverable, as well as planned initiation and completion dates. However, Argonne National Laboratory (Argonne) did not identify the deliverable for many of the corrective actions and Sandia National Laboratories (Sandia) did not establish the required initiation dates necessary to permit management to evaluate progress in implementing corrective actions. Even though HSS and cognizant programs reviewed each corrective action plan, neither identified the omissions nor did they provide the sites with recommendations to identify all required elements.

Timeliness and Accuracy of Data in CATS

Data related to corrective actions maintained in CATS was also not always entered within established timeframes. Once a corrective action plan is approved by the program office, sites are required to input the corrective actions into CATS within 10 business days. Additionally, as the corrective action plans are implemented, sites are required to enter the completion and verification status of the actions. Overall, in 78 of the 143 actions sampled, or 54 percent, the corrective actions were not input into CATS when due. Specifically,

- All 36 of the actions sampled at Argonne were input approximately 2 months after the approval of the corrective action plan.
- Twenty-three of the 26 actions sampled at the Savannah River Site were entered approximately 5 months after the approval of the corrective action plan.
- The 13 actions sampled from a 2005 corrective action plan at the Idaho National Laboratory (Idaho) were input into CATS approximately 2 months after the due date; however, all of the actions from the most recent 2007 corrective action plan were entered on time.
- Six of the 32 actions sampled at Sandia were entered approximately 2 months after the specified date.

In addition to delays in recording corrective actions, we noted that many of the completion dates entered into CATS were inaccurate. In addition to a planned completion date, sites are required to enter an actual completion date into CATS. In 74 of the 143 actions sampled, or 52 percent, the actual completion date entered into CATS did not match the documented completion date in the site's files. For example, 41 of the 143 actions differed by more than 10 days from the date recorded in CATS. In 16 of the 143 actions sampled, the evidence in the file indicated that the actions were actually completed after the due date, although they were entered into CATS as being completed on time. The CATS database is maintained by the Office of Corporate Safety Programs, within HSS. However, this office does not monitor the field sites' data entry to ensure it is timely and accurate. Because senior Department officials use this database to track the

progress of corrective actions regarding safety program-related findings, it is important that the information be complete and accurate.

Complex-wide Trending Analysis

Finally, the CATS database was not useful for identifying trends in recurring safety concerns on a complex-wide basis. In fact, it was only used to track the timeliness of corrective actions. The Department's Guide 414.1-5, *Corrective Action Program Guide*, states that a successful corrective action management program should perform a reliable trending analysis of findings and related causes to identify trends in occurrences, generic problems, and cross-functional weaknesses. While field level tracking systems permit site-by-site analyses, the CATS database does not have the capability to perform a complex-wide trend analysis. The CATS database allows users to group findings into specific categories to determine the number of findings in each functional area; however, it does not provide the capability to sort by cross-functional areas or causes to determine whether systemic problems exist throughout the Department. The lack of trending prevents sites from taking advantage of causal analyses or corrective action development lessons learned at other sites.

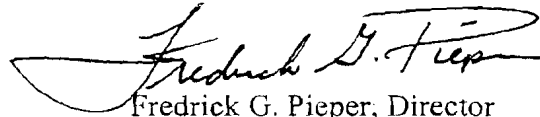
Management pointed out that it does have trending capabilities outside the confines of the CATS database. For example, the Office of Analysis Operating Experience (OPEX) program draws from many sources including CATS and is used to create safety and health lessons learned notices which are then disseminated throughout the Department complex. However, in further discussions with HSS officials, we learned that the OPEX Program primarily relies on the field sites to submit lessons learned reports and the field sites generally do not submit lessons learned reports for corrective actions resulting from HSS assessments. Therefore, we believe that improvements to the system are needed in order to perform useful trending analysis.

SUGGESTED ACTIONS

To address the issues described in this report, we suggest that the Chief Health, Safety and Security Officer, in coordination with applicable field site managers, as appropriate:

1. Provide oversight to ensure corrective action plans are completed as required and that field sites increase their efforts to comply with Department Order 414.1C;
2. Ensure that time limit requirements for data entry are met and completion dates are accurately reflected in CATS; and,
3. Review the CATS specifications to determine whether the system is capable of providing more value to management by trending or risk-ranking corrective actions.

Because no formal recommendations are being made in this report, a response is not required. We appreciate the cooperation of your staff and the various Departmental elements that provided information and assistance.



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Attachment

cc: Deputy Secretary
Chief of Staff
Team Leader, Audit Liaison Team, CF-1.2
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SCOPE AND METHODOLOGY

The audit was performed from January 2008 to July 2008 and included sampling at the following field sites: Argonne National Laboratory, Idaho National Laboratory, Sandia National Laboratories, and the Savannah River Site. The audit covered the most recent Office of Health, Safety and Security assessments and related corrective action plans at these sites.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Specifically, we assessed internal controls over the Department's Corrective Action Management Program as it relates to the completeness of corrective action plans; consistency between sites; accuracy of the data in CATS; and the ability to perform trending analysis complex-wide. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. Also, we examined the establishment of performance measures in accordance with the *Government Performance and Results Act of 1993* as it relates to the audit objective. Finally we relied upon automated data processing information to accomplish our audit objective, and conducted an assessment of the reliability of computer processed data.

An exit conference was held with officials from the Office of Health Safety and Security, Argonne National Laboratory, Idaho National Laboratory, Sandia National Laboratory and Savannah River Site on August 5, 2008.