

October 13, 2000

Dr. John Sackett
[]
Argonne National Laboratory- West
P.O. Box 2528
Idaho Falls, ID 83403-6000

Subject: Argonne National Laboratory-West PAAA Program Review

Dear Dr. Sackett:

During the period September 20-21, 2000, the Office of Enforcement and Investigation (EH-Enforcement) conducted a review of ANL-W Price-Anderson Amendments Act (PAAA) program activities. This review was intended as a follow-up to our initial program review conducted in September 1999. The September 1999 review itself was conducted to address weaknesses in your quality assurance and radiation safety programs identified in an Enforcement Letter dated February 9, 1999. Our recent review represents a further follow-up focused on the adequacy of actions you have taken in response to the deficiencies described in those letters. Our findings may be found in the attached enclosure.

Our review found a number of positive developments since our review in September 1999. The site, for example, has recently undergone a reorganization that appears to provide greater independence to individuals with responsibilities in the areas of environment, safety and health. We also noted the effort being made to proceduralize certain PAAA screening activities, the completion of an initial round of PAAA training for both workers and supervisors and an in process effort to develop a database that would capture PAAA and other safety related occurrences at the site. Finally, we recognize that positive attitudes toward the PAAA nuclear safety program have developed. However, our review also identified several significant deficient areas.

In general, PAAA noncompliance screening and reporting continues to be deficient. We recognize that efforts continue to be underway to prepare a software tool to implement a database for such screening, reporting and tracking efforts. However, it is also true that DOE's nuclear safety regulations were fully in place and enforceable by 1996 and that substantial weaknesses were specifically brought to the attention of ANL-W in September 1999. It is simply unacceptable for the site to lack the capacity to screen for PAAA safety problems in a timely manner at this late date. This is undoubtedly one of the key reasons hindering the site's ability to identify repetitive precursor issues that can lead to safety related occurrences. While the decision whether to identify and report regulatory matters is not a legal requirement, the failure to properly identify and report

these potential violations will result in a loss of mitigation credit consideration in any potential future enforcement action.

Further, our review indicates that several quality improvement deficiencies still exist. These deficiencies include (1) the failure to timely incorporate identified problems into effective quality problem resolution processes; (2) the failure to conduct effective root cause analysis with respect to reportable events and findings; (3) the failure to implement comprehensive corrective actions in response to such findings; and (4) the failure to timely identify common problems and trends across multiple facilities and activities.

DOE is continuing to review these quality improvement problems, as well as noncompliances associated with several recent incidents. Consequently, we provided a request for additional information to the site on October 4, 2000, and will be pursuing these issues as a separate investigation.

No reply to this letter is required. However, if you have any questions, please contact Howard Wilchins of my staff at (301) 903-0100.

Sincerely,



R. Keith Christopher
Director
Office of Enforcement and Investigation

Enclosure

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ENCLOSURE

EH-10 Follow-up Review of the ANL-W Price-Anderson Amendments Act Program

I. Introduction

During September 1999, the Office of Enforcement and Investigation (EH-Enforcement) conducted a review of the Argonne National Laboratory-West (ANL-W) PAAA program. A report summarizing the findings of that review was issued on November 15, 1999. Deficiencies were identified associated with the breadth of information screened for potential noncompliances, the consequent limited program focus on facility events rather than assessments, and the scope of the controlling procedure. Potential areas of noncompliance associated with the *Quality Improvement* and *Work Process* requirements of 10 CFR 830 were also identified, including (1) the lack of formal processes for the resolution of all identified quality problems, (2) lack of formal cause determinations, and (3) the lack of effective corrective actions.

In light of the extent of deficiencies identified during the September 1999 review, EH-Enforcement conducted a follow-up PAAA program review at ANL-W on September 21-22, 2000. The current review focused primarily on site progress in those areas previously identified as deficient. Our findings are summarized below.

II. Progress on Previously Identified PAAA Program Deficiencies

A. General Activities

Discussion with contractor personnel, in conjunction with a review of site documents, identified a number of improvements in the Argonne-West (ARG-W) PAAA program since the September 1999 DOE program assessment. The significant changes include:

1. Establishment of a new office of Environment, Safety and Health/Quality Assurance/Safeguards and Security Oversight. The new office centralizes site health and safety responsibility under one Director and includes responsibility for PAAA coordination and reporting.
2. Revision to the PAAA Program Procedure (see discussion below).
3. Provision of an initial round of PAAA program training to site employees in April 2000.
4. General improved attitude towards the PAAA nuclear safety program.

B. PAAA Program Procedure

During the prior review, several deficiencies were noted associated with the procedure describing the site PAAA program (AWP 3.4, *Price-Anderson Amendments Act*). Specifically, the procedure did not ensure assessment results were transmitted to the PAAA Coordinator and lacked detail on the following topics: PAAA training, the noncompliance screening process, closure of corrective actions, and functions of the Program Coordination Committee.

EH-Enforcement review of the current version of the procedure (AWP 3.4, *Price-Anderson Amendments Act Noncompliance Reporting*, Rev.1) indicates that the site has addressed these concerns in its revision of the procedure.

C. Noncompliance Identification

During the prior review, it was identified that limited sources of information were being made available to the PAAA Coordinator to review/screen for potential noncompliances. Specifically, information sources were generally limited to Occurrence Reports and ESH Division assessments.

Review of the revised AWP 3.4 indicated the procedure specifies a wide variety of information sources, including multiple internal and external assessments, to be forwarded to the PAAA Coordinator for screening. Discussions with the coordinator indicated that such material is being forwarded to him, which represents an improvement. Actual screening of the data for potential noncompliances, however, is dependent on a new ANL-W database, described below, which is not fully functional. Consequently, improvements to date in this area are of minimal effectiveness.

D. Noncompliance Screening and Reporting

The contractor has developed a series of screening forms, one to be used by facility managers to screen issues for potential PAAA applicability, and then evaluated by the PAAA Coordinator to identify noncompliance conditions. A software tool, called the "DIOT" (Database for Improvement Opportunity Tracking) system, described further in the Tracking and Trending section below, has been developed to walk a reviewer through the screening and evaluation processes, and to record their conclusions. The process appears to be in the proper sequence and series of questions to perform the PAAA screening function. However, weaknesses in timeliness were observed.

An example may be found in the handling of ANL-W occurrence report CH-AA-ANLW-FCF-2000-0002, which described the failure to use the Mass Tracking System when transferring materials in the Fuel Conditioning Facility (FCF). The issue was initially reported to DOE in ORPS on February 24, 2000. An

investigation was performed and a report documenting the findings was issued in March 2000. The DIOT screening form indicates the initial screen to determine if a PAAA noncompliance existed was not performed until September 14, 2000, more than five months after the investigation was completed. Although the initial screen determined a PAAA noncompliance potentially existed, no further PAAA evaluation for NTS reportability was available when it was requested by EH-Enforcement during our site visit.

E. Noncompliance Tracking and Trending

During the prior review, it was identified that ANL-W was utilizing several processes and databases to track quality problems, only two of which (Nonconformance Resolution and ORPS) were formally controlled by procedure. Other mechanisms used to track problems (various organization action item databases) were less formal and were being inconsistently utilized. This was noted to be a potential noncompliance with the requirements of 10 CFR 830.120 (c)(1)(iii), *Quality Improvement*.

The contractor has since developed the ANL-W DIOT system to formally report and track ANL-W safety and quality improvement opportunities and associated corrective actions. Requirements and responsibilities for use of the DIOT are contained in AWP 5.3, *Recording and Tracking Improvement Opportunities*. The contractor's intent is that quality problems and other improvement opportunities from a variety of sources will be formally entered into the DIOT database. Screening of the items for potential PAAA applicability and Noncompliance Tracking System reportability will occur as they reside on the database.

Although the intended use of DIOT as an integrated quality problem tracking system is viewed as commendable, discussions with ARG-W personnel indicated that the system is only partially implemented. Specific omissions include the following:

1. A significant number of assessment results have not been entered into the DIOT database in a timely manner. The contractor verbally indicated its desire to have all backlog assessments added to the system by October 31, 2000.
2. A significant number of items that are placed on the DIOT database have not yet been screened for PAAA applicability by a qualified evaluator. The contractor indicated additional training needed to be performed to qualify Facility Managers as evaluators.
3. The current capability for sorting/trending PAAA noncompliances is limited, based on the incomplete status of data entry/screening and the current categorization scheme for items on the DIOT database.

During the prior EH-Enforcement review, additional concerns were noted with the lack of "linkage" of various action item databases (thereby preventing the cross-

cutting review of trends) and the lack of timely completion of corrective actions. Due to the embryonic status of the DIOT system, it could not be used to determine progress in either of these areas during the September 2000 visit.

F. Cause Determination

The *Quality Improvement* provisions of 10 CFR 830.120 (c)(1)(iii) also require that correction of quality problems include identifying the root cause of the problem and working to prevent recurrence. During the prior review, it was noted that formal cause determinations were not routinely performed for all significant ANL-W deficiencies. For example, no formal cause determination had been performed in conjunction with a September 1999 ANL-W NTS report identifying repetitive work process noncompliances.

No improvement was noted in this area during the current review. Procedural criteria have not been established defining when a formal cause determination is required for noncompliances. The contractor verbally indicated its intent to formally establish such criteria by the end of October 2000. In May 2000, the contractor filed an NTS report identifying repetitive issues in the site-wide training program (NTS-CH-AA-ANLW-ANLW-2000-0001). Discussion with contractor personnel indicated that no formal cause determination had been performed to identify causes of the noncompliance or aid in the development of corrective actions.

III. Conclusion

Although areas of progress were evident in our review, significant deficiencies still exist in the implementation of the site's PAAA program. In order to receive consideration for mitigation in potential future enforcement actions, the deficiencies described above need to be corrected. In addition, fundamental requirements of the *Quality Assurance* program, such as root cause analysis and corrective action development and implementation are still not effectively in place, despite the fact that the DOE *Quality Assurance Rule*, 10 CFR 830.120, became effective in 1994. Failure to correct these deficiencies could result in enforcement action. Significant attention by contractor management continues to be warranted to ensure effective program implementation.