

December 18, 2000

Mr. Steven D. Liedle
[]
Bechtel Nevada
P.O. Box 98521
Las Vegas, NV 89030-8521

Subject: Bechtel Nevada Price-Anderson Amendments Act Program Review

Dear Mr. Liedle:

On November 1, 2000, the Office of Price-Anderson Enforcement (EH-Enforcement) conducted a review of the Price-Anderson Amendments Act (PAAA) program activities at Bechtel Nevada. This review included an evaluation of the site processes (1) to identify and screen noncompliances for applicability under the PAAA, (2) to report noncompliances into the Noncompliance Tracking System (NTS) or the site's internal tracking system, (3) to correct the deficiencies in a timely manner, and (4) to track and validate closure of the corrective actions.

Review activities included onsite discussion with cognizant personnel and review of applicable procedures. The EH-Enforcement team selected reports from the NTS and internal tracking systems and issues from assessment findings to evaluate the Bechtel-Nevada PAAA noncompliance screening, reporting and corrective action closure process.

Our review noted positive attributes in your PAAA program. In particular, we found that (1) your PAAA Program was well established and was implemented by appropriately detailed formal procedure; (2) the PAAA organizational structure includes knowledgeable and experienced personnel; (3) information in a company-wide problem resolution process was being screened for PAAA; (4) your organization provides formal training on the Quality Assurance Rule for managers, and Procurement and Site Services personnel, as well as basic PAAA familiarization during General Employee Training; (5) root cause analyses are being performed for all PAAA issues; (6) PAAA issues were properly screened for reportability into the NTS including programmatic type issues; and (7) Performance Assurance personnel are used to verify completion of corrective actions for all PAAA issues.

However, our review did identify certain program areas that might represent program weaknesses. Namely, the process of requiring an extensive level of review and a high level of management to collectively conclude that a problem was a PAAA noncompliance, and the application of a relatively high threshold by the PAAA Senior

Review Board for such a determination, were incorrectly leading to relatively few problems being identified as PAAA noncompliances other than those that were clearly NTS-reportable. Failure to correct such program weaknesses could lead to a failure to receive mitigation in a potential future enforcement action. The specifics of our observations are documented in the enclosure.

No reply to this letter is required. Should you have any questions concerning our review please contact Sharon Hurley of my staff at (301) 903-0100.

Sincerely,



R. Keith Christopher
Director
Office of Price-Anderson Enforcement

Enclosure: PAAA Program Review

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ENCLOSURE

PRICE-ANDERSON AMENDMENTS ACT PROGRAM REVIEW FOR BECHTEL- NEVADA

I. Introduction

On November 1, 2000, the Department of Energy (DOE), Office of Price-Anderson Enforcement (EH-Enforcement) conducted a review of the Bechtel Nevada (BN) Price-Anderson Amendments Act (PAAA) Program. This review included an evaluation of site processes to screen noncompliances for applicability under the PAAA, for reporting and tracking in the DOE Noncompliance Tracking System (NTS) and internal tracking system.

II. Identification and Screening of Potential Noncompliances

A. Procedural Requirements/Identification

Company Directive CD-3200.005 Revision 0, *Deficiency Reporting*, approved August 16, 1999, requires employees to report to their supervisor all conditions or incidents that could affect safety, health, quality, operations or the environment. These conditions include all operational, maintenance, internal and external assessment, or otherwise identified problems. For any such conditions, supervisors are required to file a Deficiency Record in the CREATES (Computerized Requirement Evaluation Assessment, and Technical Evidence System) database. An individual employee or manager/supervisor is required to forward to the PAAA Coordinator any concern that could be a potential PAAA issue.

Since BN uses a single process to capture all deficiencies, the consideration of multiple sources for potential PAAA issues becomes easier. The CREATES database is the primary source of issues to be evaluated for potential PAAA noncompliance. Other sources of issues screened for PAAA applicability are the employee concerns program and the employee Hotline.

BN Company Directive CD-3200.007 Revision 0, *Price Anderson Amendments Act Review Process*, effective March 10, 2000, defines the process utilized by BN to review issues for potential PAAA noncompliances, to disposition those issues, and to track corrective actions. CD-3200.007 re-iterates that employees should identify and report concerns to their manager, and managers should forward any that are potential PAAA issues to the PAAA Coordinator.

BN officials stated all employees receive basic information on the PAAA Program as part of General Employee Training and managers and Procurement and Site Services personnel receive formal training on the Quality Assurance Rule.

B. Procedural Requirements/Screening

In accordance with BN Company Directive CD-3200.007 Revision 0, potential PAAA noncompliances are reviewed by the PAAA Coordinator, and assigned a unique number for tracking. The PAAA Coordinator then forwards a summary of the issue to the responsible Program Manager, as well as to the Performance Assurance Manager, the Assistant General Manager for ES&H, and the Corporate General Counsel. These individuals are required to complete their review within 15 days, and report back to the PAAA Coordinator their conclusions on whether this issue is a PAAA noncompliance and potentially reportable. If all of the reviews conclude that the issue is not a PAAA noncompliance, then the PAAA Coordinator may determine that a PAAA Senior Review Board does not need to be convened.

If the reviews indicate the issue is a potential PAAA noncompliance, the PAAA Coordinator will schedule a meeting of the Board, with concurrence of the Board chairperson. Voting members of the Board, with input from nonvoting members of the Board, decide whether a matter has PAAA applicability, make reporting decisions and provide direction for corrective action. Board membership consists of the Deputy General Manager for Programs, the Deputy General Manager for Services, the Assistant General Manager for Nevada Operations, the Assistant General Manager for Environment, Safety and Health¹, the Manager for Performance Assurance², General Counsel, and Manager for Internal Audit.

The review team identified a weakness. Specifically, to be declared a PAAA noncompliance an issue must be extensively documented, justified through several levels of review, and ultimately justified to senior management in the form of the PAAA Senior Review Board. Such an extensive process has led to very few issues being identified as PAAA noncompliances except those that are clearly reportable into the NTS. Lack of identifying non-NTS reportable noncompliances results in a lost opportunity to correct such problems, as well as to review these for possible programmatic problems.

C. Contractor PAAA Coordinator

The contractor PAAA Coordinator is the single point of contact for the BN PAAA program. The PAAA Coordinator is a function of the Internal Audit group. The

¹ MP-0400-99 Revision 0, *Management Plan for Environment, Safety and Health Division*, approved August 26, 1999, places responsibility for developing and implementing an effective Radiation Protection Program "compliant with 10 CFR 835" with the Health Physics Department of the Environment Safety and Health Division.

² Under BN Management Description MD-0001.01 Revision 1, *Management Description*, dated January 2000, Performance Assurance personnel develop and administer Quality Assurance requirements.

Internal Audit Manager serves as the PAAA Coordinator. (Reference MP-0600-99 Revision 0, *Management Plan for Internal Audit*, approved August 26, 1999.)

D. Identifying Potential PAAA Programmatic Issues

As noted previously, Company Directive CD-3200.005, *Deficiency Reporting*, establishes the process for reporting deficiencies in the CREATES database. CREATES is a BN company-wide tracking system used to track and ensure correction of hardware and non-hardware deficiencies. This directive also requires that multiple deficiencies, when taken as a group, that represent a significant impact on quality, safety, health, the environment or company efficiency should also be designated and dispositioned in CREATES. Such issues could represent potential PAAA programmatic issues.

Additionally, CD-3200.007 provides that trend analysis will be performed by Performance Assurance personnel using information in CREATES and in other sources. Specifically, on a quarterly basis Performance Assurance personnel are to (1) review PAAA information in the Computerized Requirement Evaluation Assessment and Technical Evidence System (CREATES), (2) identify aggregation of assessments/deficiencies that may constitute a potential program concern, and (3) identify assessments/deficiencies that may be a PAAA noncompliance.

E. Self-Assessment of PAAA Screening/Reporting Process

In December 1999, BN issued Assessment No. IA-MA-00-01, *Price Anderson Amendments Act Review Process*. The purposes of this assessment, performed by the Performance Assurance organization, was to review BN's PAAA review process for process improvement and to verify that "the process was being implemented properly in view of the expansion of scope of OPE [Office of Price-Anderson Enforcement] enforcement." The assessment findings indicated a general compliance with CD-3200.007. However, the assessment found that there was no interface between the contractor's system for tracking radiological discrepancies/deficiencies (Radiological Awareness Program, Procedure L-A10.008.P, Revision 0, approved May 7, 1998) and CREATES. The Performance Assurance organization recommended that deficiencies identified under that procedure be entered into CREATES.

Effective September 20, 2000, Procedure L-A10.008.P was superseded by OI-0441.300, Revision 0, *Radiological Awareness Reporting Program*. OI-0441.300 now requires reporting of radiological PAAA concerns into CREATES.

F. Findings/Conclusions

Our review identified a number of positive aspects of this part of the Bechtel-Nevada screening process:

1. The PAAA Program was well established and was implemented by appropriately detailed formal procedure
2. The PAAA organizational structure includes knowledgeable and experienced personnel
3. Use of a single company-wide problem resolution process to effectively and efficiently address all quality problems and to effectively screen for possible
4. Providing basic information about the PAAA program as part Employee Training is a positive aspect; Providing formal training on the Quality Assurance Rule for managers, and Procurement and Site Services personnel is a positive aspect
6. Comprehensive and routine screening of deficiencies and PAAA issues for potential programmatic problems is a positive aspect
7. Conducting root cause analyses for all PAAA issues, both internally reported and tracked as well as NTS-reported issues, and;

process are positive aspects.

Additionally, the self-identified weakness in not including radiological deficiency

the recent nature of the finding, the EH-Enforcement team was not able to evaluate whether this problem had been effectively corrected.

weaknesses in their

following:

9. Requiring a high level of management to collectively conclude in a formal very few items receiving that designation at Bechtel-Nevada,
10. Bechtel-Nevada's PAAA Senior Review Board appears to be applying a noncompliance, incorrectly leading to relatively few problems being identified as PAAA noncompliances.

, Price Anderson

Amendments Act Review Process

sources of PAAA issues, outside of the DR/Creates process, are reviewed. These sources include the employee concerns program and Hotline

The EH-Enforcement team also discussed the alleged "expanded scope" of the QA Rule reference in Assessment No. IA-MA-00-01, *Amendments Act Review Process* and learned that BN interpreted Enforcement *Enforcement of 10 CFR 830.120 (Quality Assurance Rule) for Facilities Below Hazard Category II* of the Quality Assurance Rule. The EH-Enforcement team explained that Enforcement Guidance Supplement 99-01 did not expand the scope of 10 CFR

Rule and its applicability was enumerated in GC-1995-01, and has been consistently applied by DOE, including EH-Enforcement.

III. Evaluation for Reportability

A. Procedural Requirements

CD-3200.007 provides criteria for contractor review of a potential PAAA issue and for reporting the issue, if determined to be a noncompliance with a nuclear safety requirement or a rule Implementation Plan. The BN directive criteria for NTS reporting comports with DOE's guidance in *Identifying, Reporting, and Tracking Nuclear Safety Noncompliances under Price-Anderson Amendments Act of 1988*, June 1998. Essentially, both the DOE guidance document and the BN directive are clear that "DOE expects [NTS] reports to be submitted without contractors making a detailed evaluation of safety significance" PAAA noncompliances that do not meet the NTS threshold for reportability are tracked in CREATES.

B. Findings/Conclusions

The EH-Enforcement team found that BN maintained detailed records of the screening process and reporting decisions. However, the EH-Enforcement review found two following weaknesses in the PAAA reporting process:

1. Discussions with BN representatives and language in documents provided by BN³ indicate that BN might be applying a judgement of significance in determining whether PAAA issues were reportable into the NTS. The EH-Enforcement team cautioned BN about adding criteria to the thresholds established in *Identifying, Reporting, and Tracking Nuclear Safety Noncompliances under Price-Anderson Amendments Act of 1988*. For example, several issues and events, when discussed with the EH-Enforcement team, were judged not to have the potential for radiological harm, and thus were considered not to be PAAA issues. The EH-Enforcement team explained that no such criteria are a precondition for application of Part 830 or Part 835. However, despite this finding, from the limited review conducted by the EH-Enforcement team, it appeared that BN was appropriately making determinations regarding NTS reporting.
2. The Enforcement Team reviewed a listing of deficiencies that were evaluated by BN during FY 2000 and determined to meet the PAAA applicability threshold (i.e., the issue represented a noncompliance with a nuclear safety requirement). The team observed that the vast majority of the PAAA noncompliance issues, approximately 83%, also met the NTS reportability threshold. Based upon industry experience, the EH-Enforcement team would expect to see the majority of PAAA issues meeting the criteria for reporting

³ For example, Interoffice Memorandum dated November 8, 1999, Number 0100-00-JHH-0032 and Interoffice Memorandum dated November 3, 1999, Number 0410-AO-00-0009.

into the local tracking system, and a much smaller fraction reaching the threshold for reporting into NTS. The contractor should be alert to this anomaly as it could indicate that deficiencies are not being reported into CREATES, or that deficiencies reported into CREATES are not appropriately being recognized as PAAA noncompliances.

IV. Cause Determination

A. Procedural Requirements

CD-3200.007 requires a root cause analysis for all matters having PAAA applicability, whether reported and tracked internally or reported into NTS.

B. Findings/Conclusions

The extent of cause determinations for all PAAA issues is considered a strength of the BN PAAA screening, reporting and correction process. The EH Team noted no weaknesses in this area.

V. Corrective Action and Closure

A. Procedural Requirements

In accordance with CD-3200.007, for deficiencies that are determined to be a potential PAAA noncompliance, the responsible manager:

1. Prepares a report in CREATES for the deficiency and identifies the immediate corrective actions, and prepares input to the NTS report for NTS-reportable noncompliances,
2. Conducts a root cause analysis for all NTS-reportable and non-NTS-reportable PAAA issues,
3. Develops a Corrective Action Plan and obtains approval of managers responsible for the individual actions, the PAAA Coordinator, and the PAAA Senior Review Board.

The responsible individual for completion of each corrective action is required to forwards objective evidence of completion of the corrective actions to the Performance Assurance organization. The Performance Assurance organization performs a verification of completion of corrective actions for all PAAA issues, notifies the PAAA Coordinator when corrective actions are completed, and also forwards objective evidence to support closure of actions.

B. Findings/Conclusions

The EH Team noted no weaknesses in this area. The use of the Performance Assurance organization to verify completion of corrective actions for all PAAA issues is a program strength.

VI. BIOASSAY PROGRAM

In July 1998 the new Manager, Radiological Controls determined that an evaluation of the Bechtel-Nevada Bioassay program was required, and he required BN Radiological Health Staff perform a series of self-assessments of the program. That assessment found a number of weaknesses, similar to those identified in DOE's bioassay Enforcement Guidance Supplement bioassay moratorium letter of November 24, 1998. The problems included a Technical Basis Document that was out-of-date, weak procedures, no established agreement with the dosimetry Lab (turn-around times, MDA's, protocols, etc.), no work restriction procedure, no guidelines on chelation, inadequate training, etc. Steps were taken to conform to the conditions set forth in the moratorium letter of November 24, 1998. A comprehensive corrective action plan was developed that included 17 actions. The noncompliance conditions and the corrective actions were entered into the NTS, in a report filed February 18, 1999. The timing of the NTS report was within the 120-day moratorium period stated in the November 24, 1998, letter. All of the NTS corrective actions were completed by June 21, 2000, with the exception of commitments to conduct semi-annual independent assessments of the program up to September 30, 2001.

As a follow-up to the review in 1998 and the actions completed to resolve the findings of that review, BN performed an assessment of its Bioassay Program. A report is being prepared. BN has agreed to forward a copy of that report to EH-Enforcement when it is also made available to the Nevada Operations Office.

VII. CONCLUSION

The EH review of the BN PAAA Program found the program to be well established and formalized by procedure; it generally meets DOE expectations and guidance. Some improvements would be appropriate, based on the weaknesses noted in this report.