

Department of Energy
Washington, DC 20585

August 9, 2002

Mr. M. C. Hughes
[]
Bechtel Hanford, Inc.
3350 George Washington Way
Richland, WA 99352

EA 2002-04

Subject: Preliminary Notice of Violation

Dear Mr. Hughes:

This letter refers to the Department of Energy's (DOE) investigation of the facts and circumstances concerning quality assurance deficiencies associated with the acquisition of nondestructive assay (NDA) technical services by Bechtel Hanford, Inc. (BHI). BHI acquired these services beginning in 1998 from another DOE prime contractor at the Hanford Site to support BHI in decommissioning the [radioactive material] Concentration Facility.

The DOE Office of Price-Anderson Enforcement (OE) initiated a review of this matter in July 2001. DOE made formal requests for relevant documentation and conducted a full review of the documentation received from BHI. In addition, during the week of February 11, 2002, OE held discussions with DOE personnel and interviewed DOE contractor personnel in Richland, Washington, and at the Hanford Site. Our findings were provided to you in the Investigation Summary Report issued May 21, 2002. An Enforcement Conference was held with you and members of your staff on June 26, 2002, in Richland to discuss these findings. A Conference Summary Report is enclosed.

Based on DOE's investigation and information that BHI provided before and during the Enforcement Conference, DOE concluded that violations of 10 CFR 830.120 (Quality Assurance Rule) occurred. These violations are described in the enclosed Preliminary Notice of Violation (PNOV).

The enclosed PNOV describes breakdowns with BHI's acquisition of onsite NDA technical services. The breakdowns involved the following: (1) a failure of BHI to ensure that the onsite provider had developed a formal approved procedure to document its processes for equipment calibration for the work after BHI's Letter of Instruction required such a procedure be developed before start of work; (2) a failure of BHI to verify that the onsite provider had a formal approved procedure to document its processes for analysis and reporting of measurements control data after BHI's Letter of Instruction required such a procedure be developed before start of work; and (3) a

failure of BHI to document its review and concurrence of procedures and other documentation from the onsite provider as required by BHI's Quality Program.

Although this matter did not result in an actual consequence to site personnel or the public, DOE is sufficiently concerned about the deficiencies to issue the enclosed PNOV. Such deficiencies, if left uncorrected could clearly lead to a more serious concern. Specifically, the deficiencies identified by DOE's investigation, if not corrected by BHI, could result in the improper burial of transuranic waste at the Environmental Restoration Disposal Facility, which is not licensed for this type of waste.

In this case, BHI entered into a contract with DOE to be the prime contractor at the Hanford Site responsible for decommissioning activities at the [radioactive material] Concentration Facility. As the prime contractor for this activity, BHI is responsible for quality performance of all work relative to specific work tasks under the contract even if BHI acquires the services of another DOE prime contractor to perform elements of the work. Specifically, BHI has an obligation to DOE to provide sufficient specifications, requirements, hazard information, and quality requirements for services that are acquired from another contractor whether the contractor is a prime or otherwise. BHI had developed sufficient specifications and requirements for procedures for the work to be performed by an onsite provider, but BHI failed in its obligation to ensure that appropriate procedures were actually developed by the onsite provider. Had BHI performed an adequate review of provider procedures, BHI would have identified the lack of appropriate procedural controls related to instrument calibration and measurements control. Additionally, BHI established a requirement that it review and concur with particular procedures developed by the onsite provider, but BHI failed to document a review of the procedures as required by its Quality Program.

In accordance with the General Statement of Enforcement Policy, 10 CFR 820, Appendix A, the deficiencies described in the enclosed PNOV have been classified as a Severity Level III problem. In determining the Severity Level of these violations, DOE considered the actual and potential safety significance associated with the event under consideration, the programmatic and recurring nature of the problems, and other factors. In reaching its decision, DOE acknowledges BHI's limited review of the work performed by the onsite contractor prior to the identification of the problem with the NDA data. For example, BHI conducted destructive sampling tests and re-initiated a requirement for progress reports from the onsite contractor. DOE also concluded that the contractor's corrective actions were comprehensive once it became aware of errors in NDA data provided by the onsite contractor. DOE also recognized that there was some initial confusion regarding the legal relationship between Hanford Site prime contractors and the responsibility of prime contractors to perform oversight of services it acquires from onsite providers. In addition, BHI took steps, via formal communications with DOE, to clarify its contractual obligations and DOE's expectations in such cases.

You are required to respond to this letter and follow the instructions specified in the enclosed PNOV when preparing your response. Your response should document any additional specific actions taken to date. Corrective actions will be tracked in the

Noncompliance Tracking System (NTS). You should enter into the NTS (1) any actions that have been or will be taken to prevent recurrence and (2) the target and completion dates of such actions. After reviewing your response to the PNOV, including your proposed corrective actions entered into the NTS in addition to the results of future assessments or inspections, DOE will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements.

Sincerely,



Stephen M. Sohinki

Director

Office of Price-Anderson Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Enclosures:

Preliminary Notice of Violation
Enforcement Conference Summary Report
List of Attendees

cc: K. Klein, DOE-RL
G. Sanders, DOE-RL
S. Seth, DOE-RL
S. Olinger, DOE-RL
L. Piper, DOE-RL
R. Carosino, DOE-RL
M. Schlender, DOE-RL
C. Gibbs, DOE-RL
B. Hollowell, DOE-RL
B. Fiscus, DOE-RL PAAA Coordinator
R. Hughes, BHI PAAA Coordinator
B. Cook, EH-1
M. Zacchero, EH-1
J. Roberson, EM-1
S. Johnson, EM-5
H. Himpler, EM-5, DOE PAAA Coordinator
R. Day, OE
P. Rodrik, OE
S. Hurley, OE
Docket Clerk, OE

Preliminary Notice of Violation

Bechtel Hanford, Inc.

EA-2002-04

During a Department of Energy (DOE) investigation conducted in February 2002, violations of DOE nuclear safety requirements were identified. In accordance with 10 CFR 820, Appendix A, "General Statement of Enforcement Policy," DOE issues this Preliminary Notice of Violation, without civil penalty, pursuant to Section 234A of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282a, and 10 CFR 820. The particular violations are set forth below.

I. Violation Pertaining to Work Control

10 CFR 830.120(c)(2)(i) requires that work shall be performed to established technical standards and administrative controls using approved instructions, procedures, or other appropriate means.

Contrary to the above, the following examples were identified in which BHI work was not adequately performed to established standards and controls using approved instructions or procedures:

- A. BHI issued a Letter of Instruction to Fluor Hanford Inc (FHI) dated June 8, 1998, to acquire non-destructive assay (NDA) services from an FHI subcontractor to support BHI with work activities relating to the [radioactive material] Concentration Facility. The Letter of Instruction required that the FHI subcontractor submit written procedures for conducting the NDA work for BHI's review and concurrence prior to commencing work. Among the required procedures specifically identified are procedures for "...calibration of the NDA equipment" and "...analysis and reporting of measurements control data."

BHI's review of submitted documentation was inadequate since it failed to identify significant deficiencies in the FHI subcontractor submission. Specifically, the subcontractor failed to submit required formal procedures for calibration of NDA equipment and for analysis and reporting of measurements control data. The BHI review failed to identify these omissions. The subsequent lack of formal procedures for NDA instrument calibration and measurements control program implementation contributed to NDA calibration and measurement deficiencies associated with the [] decommissioning work.

- B. Procedure BHI-QA-01, ERC Quality Program Part 1, ERC Quality System Requirements, Rev. 1 and 2, section 4.2.3, requires that "...sufficient records shall be specified, prepared, reviewed, authenticated, and maintained to reflect the achievement of the required quality. Records shall include documents such as results of reviews."

BHI failed to document its review and concurrence of documents and procedures submitted by the FHI subcontractor in response to the June 8, 1998, Letter of Instruction.

Collectively, these violations constitute a Severity Level III problem.
No civil penalty.

Pursuant to the provisions of 10 CFR 820.24, Bechtel Hanford, Inc. is hereby required within 30 days of the date of this Preliminary Notice of Violation (PNOV) to submit a written statement or explanation to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, EH-10, 270 Corporate Square Building, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585-0270 if sent by the U.S. Postal Service. If sent by overnight carrier, the response should be addressed to Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, EH-10, 270 Corporate Square Building, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290. Copies should also be sent to the Manager, Richland Operations Office, and to the Cognizant Secretarial Office for the facility that is the subject of this PNOV. This reply should be clearly marked as a "Reply to a Preliminary Notice of Violation" and should include the following for each violation: (1) admission or denial of the alleged violation; (2) any facts set forth which are not correct; and (3) the reasons for the violations if admitted, or if denied, the basis for the denial. Corrective actions that have been or will be taken to avoid further violations will be delineated with target and completion dates in DOE's Noncompliance Tracking System. In the event the violations set forth in this PNOV are admitted, this Notice will constitute a Final Notice of Violation in compliance with the requirements of 10 CFR 820.25.



Stephen M. Sohinki
Director
Office of Price-Anderson Enforcement

Dated at Germantown, MD
this 9th day of August 2002

Enforcement Conference Summary (NTS-RL- -BHI-DND-2001-0002)

The Department of Energy's (DOE) Office of Price-Anderson Enforcement (OE) held an Enforcement Conference with Bechtel Hanford, Incorporated (BHI) personnel on June 26, 2002, in Richland, Washington. The OE held the meeting to discuss the facts, circumstances, and corrective actions pertaining to Nondestructive Assay (NDA) data quality issues over the time period May 1999 to May 2001 during which time Fluor Hanford Incorporated (FHI) provided portable NDA services to BHI in support of their decontamination and dismantlement efforts at Building []. Mr. Anthony Weadock, acting on behalf of the Acting Director of Price-Anderson Enforcement, chaired the conference. A list of attendees is attached. Information and key areas discussed at the conference are summarized below, and material provided by BHI during the conference was incorporated into the docket file.

Mr. M. C. Hughes, [], BHI, opened the BHI presentation by agreeing that there were some weaknesses in the methods by which BHI obtained onsite services for NDA support. Mr. Hughes explained that BHI has been working on improving the processes used by Hanford prime contractors when one prime contractor provides an item or service to another prime contractor. BHI staff personnel then addressed each of the findings contained in the Investigation Summary Report previously provided to BHI. In some cases BHI disagreed or provided clarification on the findings, the specifics of which are detailed in material provided by BHI at the conference and through a separate correspondence. These documents will be included in the docket file. During the discussion of the investigation report findings, OE requested and BHI provided a listing of documents reviewed by BHI related to portable NDA system calibration. BHI personnel then discussed the scope and status of corrective actions taken to address identified weaknesses and provided their assessment of the safety significance of the weaknesses. BHI personnel then addressed the application of the Quality Assurance Rule to oversight of the furnished services. BHI did not contend that it was exempt from oversight requirements. BHI personnel explained that impediments to oversight existed at Hanford and that actions were taken and are continuing to be taken to remedy this problem. Mr. Hughes then closed the BHI presentation by stating that some expectations and requirements associated with the Letter of Instruction were not met and that activities are ongoing to clarify the prime-to-prime relationship that will ultimately enable all to do a better job and save money.

Mr. Weadock indicated that DOE would consider the information presented by BHI when DOE undertakes its enforcement deliberations. Mr. Weadock then adjourned the conference.

June 26, 2002

**Bechtel Hanford Incorporated NDA Data Quality Issues
Enforcement Conference List of Attendees**

DOE Office of Price-Anderson Enforcement

Anthony Weadock
Richard Day

DOE Richland Operations Office

Lloyd Piper
Brian Fiscus
Robert Carosino
Richard Putoff
Shiv Seth

DOE Office of Environmental Management

Sandra Johnson

BHI

M. C. Hughes
Allan Chaloupka
Richard Hughes
Rami Hanash