

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Audit Report on "Quality Assurance of
Black Cells at the Waste Treatment Plant"

INTRODUCTION AND OBJECTIVE

Bechtel National, Inc. (Bechtel) is responsible for construction of the Department of Energy's (Department) \$12.2 billion Waste Treatment & Immobilization Plant (WTP). The WTP mission is to treat and encapsulate in glass the majority of the 53 million gallons of waste that amassed from decades of plutonium production at the Department's Hanford Site. To shield plant workers from intense radiation that is expected from normal plant operations, waste processing vessels will be located in sealed compartments called "black cells." Black cells are enclosed rooms where inspection, maintenance, repair, or replacement of equipment or components is impracticable because there is no engineered access. Additionally, there are other vessels in the WTP facilities that are considered "hard-to-reach" because of location and expected difficulty to perform repairs or maintenance. Waste processing vessels in black cells and hard-to-reach areas must last for WTP's 40 year expected design life without in-service inspection and maintenance.

To reduce the risk of vessel failure, additional requirements are imposed on the fabrication of black cells and hard-to-reach areas. The WTP is required to comply with *The American Society of Mechanical Engineer's Quality Assurance Program Requirements for Nuclear Facilities* (NQA-1), a consensus standard that requires, among other things, quality assurance records sufficient to demonstrate that work meets specifications; qualified individuals performing all work; use of materials appropriate for nuclear activities; and quality records that are traceable to the parts in a manner that assures that identification is established and maintained.

An allegation was made to the Office of Inspector General (OIG) that quality assurance records for the black cells and hard-to-reach waste processing vessels at the WTP were not traceable to work performed. In response to the allegation, we initiated an audit to determine whether the Department was meeting quality assurance requirements for the fabrication of black cell and hard-to-reach waste processing vessels for the WTP.

RESULTS OF AUDIT

Our review substantiated the allegation. We found that the Department had procured and installed vessels in the WTP that did not always meet quality assurance requirements. We identified multiple instances with each of the seven vessels we reviewed where

quality assurance records were either missing or were not traceable to the vessel. Specifically, we found that:

- Bechtel had not obtained or maintained isometric drawings¹, such as weld maps, identifying the specific location of each weld as well as information on welding procedures, the qualifications of the welder, materials used in the vessels, nondestructive examinations; and, positive material tests which ensure that the materials used to fabricate the vessels were compatible with expected operating conditions. Our review of available supporting evidence also revealed that not all required records were available to demonstrate that components or welds were tested, nor were material and services traceable on a number of vessels. This was despite the contract requirement for information availability to ensure that vessel fabrication met technical specifications; and,
- Bechtel had not obtained or maintained radiographs showing the integrity of welds as required by the contract. In fact, Bechtel allowed fabricators to use an alternative nondestructive examination (NDE)² procedure, ultrasonic inspection, which did not produce independently verifiable permanent records such as would be available with the use of radiographs. These records were especially important since Bechtel's quality assurance inspectors who observed the ultrasonic inspections performed by the fabricators were not qualified to interpret test results per the contract's technical specification. Although ultrasound inspection may be appropriate for certain conditions, we found no evidence that subcontractors requested or received Bechtel's approval for the use of alternative NDE methods, as required.

In addition, we noted that the Department may have overpaid incentive fee to Bechtel based on its level of performance. Specifically, Bechtel was paid \$30 million in incentive fee for the delivery and installation of vessels into the WTP facilities. When the Department learned that one of the vessels was nonconforming they instructed Bechtel to return \$15 million in performance fee. However, neither the Department's Office of River Protection nor Bechtel could provide evidence that the fee was returned to the Department.

Weaknesses in quality assurance records associated with black cell and hard-to-reach waste processing vessels occurred because the Department's oversight of contractor performance was not adequate to identify deficiencies in Bechtel's implementation of its quality assurance program. Specifically, Bechtel employed inspectors located at contractors' locations to witness work performed and execute a progressive and final review and approval of quality assurance record packages. However, the on-site inspectors lacked the qualifications to interpret NDE tests of welds as specified in

¹ An isometric drawing is a three dimensional pictorial representation of an object.

² Nondestructive Examination (NDE) methods used to examine welds such as radiography (x-rays) or ultrasonic detect voids, lack of fusion, or other imperfections that would cause the weld to fail during operations.

Bechtel's contract. Additionally, Bechtel's receipt inspection procedures were deficient in that reviews of quality assurance records that accompanied the vessels were limited to basic procedures, such as determining that the expected numbers of pages of documentation were received.

The matters discussed in this report come at a time when concerns about WTP safety have been raised and the Department is working to ensure a proactive safety culture at the WTP. To its credit, the Department took prompt action on some of the issues identified during our audit. For instance, after receiving the original June 2010 allegation, the Department conducted technical surveillances in August 2010 that confirmed some of the issues in the complaint and required Bechtel to take steps to correct the deficiencies and conduct a review to determine the extent of the condition. After our audit identified additional concerns that had not been identified by Bechtel and through the Department's surveillance, the Department performed another surveillance which confirmed some of the findings identified in this audit report. On September 15, 2011, the Department ordered Bechtel to correct these additional deficiencies. While these actions are encouraging, we are concerned that the prior reviews performed by Bechtel and the Department failed to fully identify the extent of the problems with the missing or incomplete quality assurance documents and that weaknesses in oversight still exist.

The importance of ensuring that black cell and hard-to-reach components cannot be overstated. Premature failure of these components could potentially contaminate large portions of a multi-billion dollar facility and interrupt waste processing for an unknown period of time. For these reasons, we have made several recommendations designed to strengthen safety controls at the WTP. We have recommended a more intense effort to recover contractor fee for the nonconforming vessel.

MANAGEMENT REACTION

To be added.

Attachment

cc: Deputy Secretary
Associate Deputy Secretary
Under Secretary for Nuclear Security
Acting Assistant Secretary for Environmental Management
Chief of Staff

REPORT ON QUALITY ASSURANCE OF BLACK CELLS AT THE WASTE TREATMENT PLANT

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QUALITY ASSURANCE OF BLACK CELLS AT THE WASTE TREATMENT PLANT

Quality Assurance Records

In June 2010, the Office of Inspector General (OIG) received an allegation that quality assurance records for the "black cell" and "hard-to-reach" waste processing vessels (containment vessels) were not traceable to work performed at the Waste Treatment Plant (WTP). Because this was a concern that may affect the safety of the WTP workforce, the OIG initially contacted the Department's Office of Health, Safety and Security. On August 3, 2010, that office asked the Department's Office of River Protection (ORP) to assess whether welds on containment vessels in the "black cells" at the WTP could be verified to be in compliance with specifications. Accordingly, ORP conducted a surveillance of five subcontractors hired to fabricate vessels for WTP to verify that all nondestructive examination (NDE) of welds and weld records met Bechtel contract requirements.

Based on ORP's review of the five vessels, some of the issues in the complaint were confirmed. The surveillance identified a missing NDE record that would have documented tests performed to ensure weld quality, as well as a missing diagram that would have established traceability of quality assurance records to the vessel. As a result, ORP ordered Bechtel to correct the deficiencies identified in the surveillance report, and perform an extent of condition assessment in order to ascertain whether the problems were limited to the specific vessel, or represented a broader problem. Bechtel's extent of condition review evaluated 3 of 17 vessels provided by one subcontractor and concluded that the missing NDE record was an isolated incident. However, Bechtel also concluded that weld diagrams were missing for all 17 vessels provided by that subcontractor.

In response to concerns raised in the allegation, we initiated this audit to provide a more comprehensive review of whether the Department was meeting quality assurance requirements for the fabrication of black cell and hard-to-reach waste processing vessels for the WTP. During fieldwork, we identified additional concerns that had not been identified by the Department's surveillance or Bechtel's extent of condition reviews. After we discussed these concerns with the ORP representatives, ORP performed another surveillance which confirmed the findings identified in this audit report. Our review included an examination of seven vessels which tested for compliance with quality assurance requirements contained in Bechtel's contract to determine whether the Department was ensuring that these requirements were met for the fabrication of black cell and hard-to-reach waste processing vessels for the WTP.

Our test results showed that Bechtel had not met its contract requirements for the fabrication of black cell and hard-to-reach processing vessels. Specifically, of the seven vessels:

- Nondestructive examination records providing evidence that welds met specifications were missing for two vessels;
- Quality assurance records providing traceability of material, welding procedures, welders and NDE examinations to the associated vessels were incomplete for six vessels; and,

- Positive Materials Identification records providing evidence that materials and components were tested were not met for the seven vessels.

Further, two of Bechtel's subcontractors deviated from contract requirements for weld examination without appropriate authorization;

In our judgment, the lack of quality assurance records over materials and components used in black cell and hard-to-reach vessels was a serious matter. We concluded that the absence of such records reduced the Department's ability to demonstrate that the WTP can operate safely and successfully. Additionally, we noted that the void of quality assurance records could adversely affect the Department's ability to effectively manage potential future emergency situations due to the lack of information regarding the quality of workmanship and components used in vital WTP systems such as the black cells.

Nondestructive Examination of Vessels

Two of the seven vessels we reviewed were missing certain Nondestructive Examination (NDE) records that provide evidence welds met specifications. To provide confidence that welds are less likely to fail during the WTP's expected forty year design life, the Department required that specific welds essential to containing the radioactive waste are examined. Nondestructive Examinations of welds is used to detect voids, lack of fusion, or other imperfections that may cause a weld to fail during operations.

Specifically, we found that NDE records were missing for vessels supplied by two different Bechtel suppliers, Harris Thermal, Inc. (Harris) and Joseph Oat Corporation. Specific to Joseph Oat Corporation, we could not identify NDE records of the welds for top and bottom heads of the vessel. Follow up action by ORP substantiated the missing quality assurance records and also identified another missing NDE record for a nozzle. Bechtel attempted to obtain the missing NDE records for this vessel from the fabricator, but was unable to because the heads of the vessel were fabricated by a subcontractor that had purged the NDE records.

Prior to our audit, ORP had conducted a review in response to the initial allegation which determined that one vessel, provided by Harris, was also missing NDE records for one of the vessel's nozzles. Subsequently, Bechtel conducted an extent of condition review that analyzed three of seventeen vessels provided by Harris. Bechtel did not identify any additional missing NDE records for the three vessels reviewed and concluded it was an isolated incident that warranted no further action. However, the combined results of our testing and ORP surveillance showed that Bechtel had not ensured it had adequate support that welds met specification for 3 of the 31 containment vessels that it had received from fabricators as of March 2011.

While we recognize that the number of welds missing NDE records represented a small percentage of total welds, the fact that Bechtel could not demonstrate that all welds had been tested is troubling since a weld failure will essentially make the vessel unusable due to the inability to fix or repair a vessel after the start of operations.

Traceability of the Fabrication of Vessels

In addition to missing NDE records, we found that for six of the seven vessels where quality assurance records did exist, the records were incomplete because all material, welding procedures, welders and NDE examinations were not traceable to the associated item. Nuclear quality standards (NQA-1) require that material and services used are appropriate for the nuclear activities and are traceable to the items in a manner that assures that identification is established and maintained from initial receipt and fabrication up to and including installation and use. Bechtel incorporated these requirements into its Quality Assurance Manual for WTP. Accordingly, all contractors were required to submit a weld map identifying the specific location of each weld used in the fabrication of the vessel, as well as information on the welding procedures, the welder, material used, and the location of the NDE.

However, we identified incomplete documentation regarding traceability of quality records for six of the seven vessels we reviewed, including missing or incomplete weld maps, and no traceability to weld procedures or the welder. In addition, four vessels had incomplete records pertaining to the welding filler material used. Welding filler material is used to affix the pieces of the stainless steel vessel together. Bechtel's subcontracts state, "All records pertaining to the nondestructive examination, base materials, filler materials, fabrication, and inspection shall be traceable to the area and part inspected and be accessible for Buyer's (Bechtel) examination." When we inquired as to why these records were not maintained, Bechtel officials informed us that these records were not considered permanent records and were discarded by the subcontractor.

ORP's earlier surveillance review also identified a missing weld map for the same vessel missing the NDE records for one of the vessel nozzles; consequently, weld filler material and weld records were not traceable for that vessel.

Positive Material Identification

We also found that the seven vessels we reviewed did not meet contract requirements for Positive Material Identification (PMI), which ensures that the material used to fabricate the vessel is compatible with the expected operating conditions. The PMI was to be performed on the assembled vessel and required the subcontractor to test each and every component and weld. The subcontractor was also required to provide a PMI map of the fabricated vessel that identified each component and weld, showing the locations of the PMI testing. However, rather than a map, most suppliers we reviewed provided a matrix of each test and the component or weld tested. As a limited review, we compared this matrix to the bills of materials and determined that not all components or welds were tested on some of the vessels. Furthermore, without a PMI map, there is no traceability to identify the test locations of the components or welds on the vessel. The ORP did not review PMI testing in its earlier surveillance.

Deviation from Contractor Requirements

Bechtel also allowed two of its subcontractors to deviate from NDE contract requirements without appropriate authorization. These two vendors utilized ultrasonic examination to determine deformities in the welds. The contract required contractors to use radiography as the preferred method to examine welds that make up the primary confinement for the vessel. If the

contractor considered it impractical to perform radiographic testing, the contractor could propose ultrasonic examination to Bechtel.

Neither subcontractor submitted a Supplier Deviation Disposition Request (SDDR) to Bechtel to request authorization for changing the approved examination method from radiography to ultrasonic. The SDDR process establishes the reason for deviating from the requirement and ensures that a technical engineering review is performed to make certain the deviation will not affect the safety of the facility. Rather than a SDDR, both contractors submitted fabrication drawings for approval that depicted the nozzles on the vessel and indicated in some instances the NDE method they would use was ultrasonic. When asked if this was appropriate, Bechtel stated that the approval of the deviation to use ultrasonic, rather than radiography, was indicated by virtue of Bechtel having approved the fabrication drawing. However, this practice circumvented the SDDR process that required an engineering review of the deviation to ensure it would not affect the safety of the facility. Ultrasonic testing may be advantageous in some instances where a weld may be too thick to be easily radiograph. However, the main advantage of radiography is that a permanent physical record (film) is created that can be used for further analysis.

Quality Assurance Implementation and Oversight

The Department had not provided what in our view was the necessary oversight to ensure that Bechtel adequately designed and implemented its Quality Assurance Program. Weaknesses in quality assurance records associated with the vessels occurred because Bechtel placed an over-reliance on Supplier Quality Representatives, located at the contractor locations where the vessels were built. We found, however, that the Representatives had not met required technical competencies nor had they ensured that all necessary steps were taken to develop and maintain essential quality assurance records. Bechtel's receipt verification procedures were also limited in scope and did not include a thorough review of quality assurance records.

Source Verification

We identified several weaknesses with Bechtel's quality assurance process based at the contractor locations where the vessels were built. Bechtel's acceptance program largely relied on inspectors, referred to as Supplier Quality Representatives (SQR), who were located at contractors' locations to witness work performed and execute a progressive and final review and approval of quality assurance record packages. Bechtel placed a SQR at the contractors' locations to monitor the quality of work being performed. This receipt method, also known as "Source Verification," was implemented in accordance with Bechtel's material acceptance plan that requires the SQR to perform inspections, examinations, or tests at predetermined points. However, we identified several concerns with the source verification process:

- Bechtel's SQR's were not qualified to oversee the welding examinations. Bechtel's source verification process relies on the skills and knowledge of the SQR to evaluate the quality of a weld, to include witnessing welding activities and the NDE inspection to ensure the processes were correctly performed to appropriate codes. However, we determined that none of 16 SQRs were qualified to interpret weld NDE results, since they

were not qualified to either a level II or III weld inspector, per technical specification requirements.

- Bechtel's SQR did not ensure that complete records packages were compiled for each vessels. The SQR is the only individual that reviews the quality records for completeness and compliance to the contract. Prior to the release of a vessel for delivery, the SQR is responsible for the progressive and final review and approval of the supplier-generated quality records packages that accompany the vessel. However, the SQRs approved incomplete records packages that were missing weld maps, nondestructive examinations of welds, positive material test, and other documentation.

Receipt Verification

Additionally, Bechtel's receipt inspection process for the vessels was not as robust as we would have expected. Specifically, Bechtel's receipt inspection process did not assure that the vessels procured conformed with quality assurance record requirements contained in Bechtel's contract. Rather, Bechtel's inspection process focused primarily on reviewing for damage and cleanliness. The requirements for verifying receipt of quality assurance records were very cursory and only included verifying that the expected number of pages existed for each document category.

Department Oversight

The Department provided inadequate oversight over Bechtel's quality assurance process and did not adequately assess Bechtel's internal controls for oversight of its subcontractors. Thus, it was ineffective in preventing the receipt of vessels that did not conform to contract requirements. Surveillances performed by the Department were not comprehensive enough to detect the inadequacies in Bechtel's source verification program and to identify the missing quality assurance documentation. Between 2002, when the first vessel fabrication contract was awarded, and July 2009, ORP visited only two subcontractors, Harris and Northwest Copper Works in 2004. These inspections were performed to ensure subcontractor compliance with requirements, but did not include a review of quality assurance controls. The ORP did not return to these locations until July 2009, under the direction of the Department's Office of Environmental Management. To the Department's credit, these subsequent reviews were more extensive and involved reviewing procedures and other quality assurance controls.

In addition, the Department did not require that Bechtel's quality assurance processes were sufficient, commensurate with the importance or complexity of the item or service being delivered. That is, highly complex equipment associated with a project as massive as the WTP may require more than one method of acceptance to assure conformance. Bechtel's receipt inspection program was unsuccessful in detecting that Supplier Quality Representatives (SQR) had not validated that the vessels met the specified contractual requirements before releasing them for delivery. Had Bechtel effectively verified conformance with contractual requirements, including the need to maintain complete quality assurance records, the error rate would likely have been substantially lower. We also noted that the Department did not ensure Bechtel's use of appropriate personnel for the performance of different functions in the receipt process; for example, welds should be verified only by qualified weld inspectors. Finally, the Department did not ensure that Bechtel had safeguards in place to identify deviations from contract

specification. The contract required that all vessels that have any deviation from inspection procedures be technically justified and approved by Bechtel. However, there was no methodology in the material acceptance plan to identify NDE deviations.

Other Matters

In addition to the issues identified above, we determined that Bechtel was incorrectly paid a \$15 million fee in 2003 for a vessel that did not conform to contract requirements because it lacked adequate quality assurance records. Furthermore, although in 2004 the Department demanded that the fee be returned, neither Bechtel nor ORP could provide evidence that the fee was returned to the Department.

The Department did not take aggressive action to retrieve the first \$15 million fee payment. A letter issued to Bechtel on February 11, 2004, identified that the welds on the vessel had not been fully examined to ensure that weld defects were discovered. This specific requirement was included in the contract with Bechtel and in the Safety Requirements Document for the facility. The Department further criticized Bechtel's construction and acceptance testing program for not disclosing that the vessel had not undergone full examination prior to the setting of the vessel in the High Level Waste facility. The Department letter noted that Bechtel had also failed to include this requirement for the vessel supplier. In its response, Bechtel asserted that it didn't completely agree with many of the assertions of the Department; but concluded that a point-by-point response would not bring closure to the issue. As an alternative, Bechtel expressed its desire to meet with the Department to find a mutually acceptable resolution. We requested the evidence of the resolution; however, there were no records of the meeting or indications that Bechtel repaid the fee and Department officials were not certain if the fee had been repaid.

In addition, we determined that a second \$15 million fee payment was paid in 2005 for four vessels, one of which we determined was nonconforming because it lacked adequate quality assurance records. Regarding the second performance fee, at the time we determined the vessel was nonconforming, a different fee criteria applied which denied the Department the ability to recover fee for a non-conforming vessel after it had been installed, as in this case

Programmatic Impact

Without improvements to the quality assurance process and acquiring the necessary quality assurance records, the Department may not be able to demonstrate that the WTP facilities are safe and will that they operate as intended. These records have significant value to the Department and are required by the regulators to demonstrate that the WTP can operate safely and successfully. The lack of quality assurance records could hinder the Department's corrective response in the event of an emergency, potentially exposing workers and the environment to dangerous radiation. The lack of such records could also result in delays and cost overruns to address flaws in materials that lack adequate documentation. Finally, the records could also be

used to establish a baseline to allow the Department to operate the facility beyond its 40 year design life.

RECOMMENDATIONS:

Although the Department had taken a number of actions to address the deficiencies that we identified, we believe that additional action is necessary to ensure the safety and effective operation of the black cells and hard-to-reach vessels. Accordingly, we have made several recommendations to strengthen the Department's quality assurance processes and to recoup performance fee paid by the Department for a non-conforming vessel. To address the problems in this report, we recommend that the Acting Assistant Secretary, Office of Environmental Management:

1. Conduct an independent evaluation of Bechtel's quality assurance processes for black cell and hard-to-reach area vessels to make certain they are comprehensive and adequate for ensuring compliance with all Federal requirements;
2. Review quality assurance documentation associated with black cell and hard-to-reach area vessels and take any necessary action to ensure the receipt of all necessary records required by the project;
3. Ensure that Bechtel makes certain that vessel fabricator suppliers and service providers possess the necessary qualifications to perform their task;
4. Intensify on a continuing basis, Departmental oversight of Bechtel's quality assurance processes, promptly identify and require remediation of any less than adequate quality assurance process; and require Bechtel to enhance its internal review mechanisms to correct quality assurance problems; and,
5. Finally, determine whether the \$15 million performance fee payment for a nonconforming vessel was returned to the Department and, if not, take necessary action to recoup the fee from Bechtel.

MANAGEMENT AND AUDITOR COMMENTS

To be added.

APPENDIX 1

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The objective of this audit was to determine whether the Department is meeting quality assurance requirements for the fabrication of black cell and hard-to-reach waste processing vessels for the Waste Treatment Plant.

SCOPE

We conducted this audit from March 24, 2011 to November XX, 2011, at the Hanford Site in Washington State. The scope of the audit was to review procurement packages related to vessels that exist in black cells or in areas that were hard-to-reach in the Waste Treatment Plant. Our reviewed focused on the issues contained in the allegations made to the Office of Inspector General.

METHODOLOGY

To accomplish the audit objective, we:

- Obtained and reviewed Bechtel National, Inc. (Bechtel) Quality Assurance Manual and policies and procedures to determine how Bechtel determines vessel fabrication contract requirements and how they ensure that these requirements are met;
- Obtained and reviewed procurement documentation for seven vessels that were selected based on a judgmental sample determined by risk associated with previous reviews;
- Researched Federal and Departmental regulations, policies and procedures; and,
- Interviewed key personnel in the Office of Environmental Management; Chief of Nuclear Safety; Office of Health Safety and Security; Office of River Protection, and Bechtel.

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. Accordingly, we assessed significant internal controls and compliance with laws and regulations necessary to satisfy the audit objective. We also assessed the Department's implementation of the *Government Performance and Results Act of 1993* and determined that it had established performance measures for project management. 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. We did not rely upon computer processed data to accomplish our audit objective.

An exit conference was held with Department officials on December XX, 2011.

Coordination Draft

APPENDIX 2

RELATED AUDIT REPORTS

- Audit Report on *The Procurement of Safety Class/Safety Significant Items at the Savannah River Site* (DOE/IG-0814, April 2009). The audit found that the Department had procured and installed safety-class and safety-significant structures, systems and components that did not meet NQA-1 quality standards. These failures occurred because Departmental controls were not adequate to prevent and/or detect quality assurance problems. Additionally, management did not effectively communicate quality assurance concerns between the several Departmental program elements operating at the Savannah River Site. The procurement and installation of these nonconforming components resulted in cost increases. In general, the internal control weaknesses we discovered could have permitted, without detection, the procurement and installation of safety critical components that did not meet quality assurance standards. In a worst case scenario, undetected, nonconforming components could fail and injure workers or the public.
- Audit Report on *Quality Assurance Standards for the Integrated Control Network at the Hanford Site's Waste Treatment Plant* (DOE/IG-0764, May 2007). The audit found that the Waste Treatment Plant control system acquired by the Department did not meet applicable quality assurance standards--specifically, those required for "an activity affecting the immobilization of radioactive high-level waste." As a result, the system does not meet the stringent procedures, plans, specifications, or work practices associated with nuclear quality standards. Under the circumstances, we concluded that the Department cannot be sure that the Plant's current system is suitable for processing nuclear waste.

APPENDIX 3

MANAGEMENT COMMENTS

To be added.

Coordination Draft