

Department of Energy

Washington, DC 20585

November 10, 2003

Mr. Steven Liedle
[]
Bechtel Jacobs Company, LLC
P.O. Box 4699
Oak Ridge, TN 37831-7294

EA-2003-09

Subject: Preliminary Notice of Violation and Proposed Imposition of Civil Penalty \$192,500

Dear Mr. Liedle:

This letter refers to the recent investigation by the Department of Energy (DOE) of the facts and circumstances associated with the following nuclear safety issues at the Oak Ridge and Paducah sites:

- 1. Hazard categorization of waste storage facilities
- 2. Isotope Circle Facilities ventilation issues
- 3. Orphan waste containers
- 4. June 2002 [] release event from building []
- Paducah Gaseous Diffusion Plant (PGDP) [] cylinder wall issues

An Investigation Summary Report describing the results of that review was issued to you on August 21, 2003. An Enforcement Conference was held on September 25, 2003, in Germantown, Maryland, with you and members of your staff to discuss these findings. A Conference Summary Report is enclosed.

Based on our evaluation of these issues and information that was provided during the Enforcement Conference, DOE has concluded that violations of the Price-Anderson Amendments Act (PAAA) Quality Assurance Rule (10 CFR 830.122) occurred. The violations are described in the enclosed Preliminary Notice of Violation (PNOV).

Section 1 of the enclosed PNOV describes numerous work process, management/independent assessment, and quality improvement deficiencies associated with the hazard categorization of waste storage facilities, Isotope Circle Facilities ventilation issues, orphan waste containers, and PGDP [] cylinder wall issues. These involve (1) radioactive material inventory control

Section II addresses violations associated with the June 2002 [1 release from], and identifies several instances of failure to adequately develop and building [implement controls for replacement of high efficiency particulate air (HEPA) filters in]. As a result, radioactive material present in the building [ventilation system was dispersed out of the ventilation stack. Spots of radioactive contamination up to 100,000 disintegrations per minute (dpm) were identified on adjacent roadways and parking lots within the Oak Ridge site and an Operational Emergency was declared. Thirty-two site personnel were monitored for [1 intakes. Fortunately, the bioassay results indicated that uptakes were unlikely. Section II also discusses specific deficiencies associated with the procurement and oversight of subcontractor services for the HEPA filter replacement that disclosed significant weaknesses in the degree of BJC oversight of subcontractor activities. Section II further identifies deficiencies with the extent of condition review for possibly defective work processes governing ongoing or recent work activities.

In accordance with the General Statement of Enforcement Policy, 10 CFR 820, Appendix A, the violations described in the sections of the PNOV have been classified according to severity level. The violations in section I of the PNOV have been classified as three Severity Level II violations based on the numerous failures to follow nuclear safety requirements and the recurring nature of the problems. The violations in section II have been classified as two Severity Level II violations and one Severity Level III violation. In determining the severity level of these violations, DOE considered the actual or potential safety significance associated with the events or issues under consideration and the programmatic and recurring nature of the problems.

To emphasize the importance of maintaining a comprehensive quality program for DOE nuclear activities, I am issuing the enclosed PNOV and Proposed Civil Penalty in the amount of \$192,500. The specific detail supporting the associated civil penalties is provided for each violation. For the violations in section I, DOE has determined that no mitigation is warranted for timely self-identification and reporting since many of the issues were identified by the DOE Oak Ridge Operations Office. DOE has concluded that 25 percent mitigation is appropriate for corrective actions associated with the work control and management/independent assessment deficiencies. However, no mitigation

for corrective actions was applied to the quality improvement violations given the recurring nature of the violations.

You are required to respond to this letter and to 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 reports filed in the Noncompliance Tracking System (NTS). You should enter into the NTS (1) any additional actions you plan to take to prevent recurrence and (2) the anticipated completion dates of such actions.

After reviewing your response to the PNOV, including your proposed corrective actions entered into NTS, DOE will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements. DOE will continue to monitor completion of corrective actions until these matters are resolved.

Sincerely,

Stephen M. Sohinki

Director

Office of Price-Anderson Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Enclosures:
Preliminary Notice of Violation
Enforcement Conference Summary
List of Attendees

Cc: G. Boyd, ORO

- B. Hawks, PAAA Coordinator, ORO
- P. Baxter, PAAA Coordinator, BJC
- L. Vaughan, PAAA Coordinator, EM
- R. Schwartz, PAAA Coordinator, SC
- R. Orbach, SC-1
- J. Roberson, EM-1
- B. Cook, EH-1
- S. Johnson, EM-05
- R. Azzaro, DNFSB
- A. Acton, IG-33
- R. Day, OE
- S. Adamovitz, OE
- S. Zobel, OE
- Docket Clerk, OE

Preliminary Notice of Violation and Proposed Imposition of Civil Penalty

Bechtel Jacobs Company, LLC Oak Ridge and Paducah Sites

EA 2003-09

As a result of a Department of Energy (DOE) evaluation of the following issues at the Oak Ridge and Paducah sites: hazard categorization of waste storage facilities, Isotope Circle Facilities ventilation issues, orphan waste containers, [] release event from [], and evaluation of the [] cylinder wall issues at the Paducah Gaseous Diffusion Plant (PGDP), violations of nuclear safety requirements were identified. In accordance with 10 CFR 820, Appendix A, "General Statement of Enforcement Policy," the violations are listed below.

I. Violations Pertaining to Hazard Categorization of Waste Storage Facilities, Isotope Circle Facilities Ventilation Issues, the Orphan Waste Containers and the PGDP []Cylinder Wall Issues

A. Work Control Deficiencies

10 CFR 830.122 (e), *Criterion 5 – Performance/Work Processes* requires that the contractor "(1) Perform work consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means."

Contrary to the above, between April 1998 and September 2002 at the Oak Ridge site, work was not performed consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means. Examples include the following:

The "BJC Quality Assurance Program Plan for Environmental Management And Enrichment Facilities at Oak Ridge, Tennessee, Portsmouth, Ohio, and Paducah Kentucky," dated September 30, 2001, requires that documents be "prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design." However, documents were not prepared to prescribe processes by which the Facility Categorization Management Program (FCMP) software would be maintained. Specifically, (1) upgrades to FCMP had not undergone a verification process; (2) there was no version control associated with the program; (3) detailed operating procedures for FCMP were not developed;

- (4) access control to FCMP source code was not restricted; and (5) the basis for changes made to FCMP were not documented.
- 2. WESKEM procedure WD-WM-B-1501, "Waste Acceptance and Dispositioning," dated December 27, 2001, and WD-WM-B-1502, "Work Control Requirements for WESKEM Operations," dated June 6, 2001, define the processes used for waste acceptance into facilities. However, neither procedure adequately described processes used to assure the accuracy of waste inventory data. Specifically, (1) the use of FCMP in waste inventory control is not mentioned; (2) administrative controls to assure that facility hazard categorization is not exceeded are not defined; and (3) quality control checks of inventory data are not defined.
- 3. BJC procedure BJC-PQ-1440, "Control of Nonconforming Items and Services," Revision 1, dated October 10, 2001, "What to Do" section 6 requires that the responsible manager or designee report nonconforming items or services by obtaining Nonconformance Report (NCR) Form, BJCF-329 and ensuring that the "Description of Nonconforming Condition" section provided adequate information regarding the technical and/or administrative requirements violated, i.e., requirements not met. However, at no time did BJC complete the required NCR form during the several years in which differential pressure (DP) readings were out of range as specified in the building [______] check sheets.
- 4. BJC Procedure WM-SM-502.5, "General Operating Procedure for Building []," Revision 0, dated April 19, 2001, section 7.2(2) states that "The cells must be maintained at a negative pressure water gauge (w.g.) relative to the operating areas. An administrative limit on negative pressure of -0.3 inches (in.) has been set." However, negative pressure in the building [] cells was allowed to go below this administrative limit for an extended period of time. In addition, the procedure requires the Operation/Facility Supervisor to "Read and verify that facility checks are within normal operational parameters. Initiate corrective actions, as necessary and appropriate for the abnormal conditions." However, out of range DP readings in [] were allowed to go uncorrected for an extended period of time.
- 5. BJC Procedure WM-SM-502.1, "General Operating Procedure for Building []" Revision 0, section 7.2(1), dated April 19, 2001, states that, "The cells must be maintained at a negative pressure relative to the operating area. An administrative limit of –0.2 in. pressure w.g. has been established." However, negative pressure in the building [cells was allowed to go below this administrative limit for an extended period of time. In addition, the procedure requires that the Operations/Facility Supervisor "immediately notify the Facility Manager

and/or STR of any unusual condition or event in the facility. Take immediate action to ensure the health and safety of personnel and the environment are protected." However, the Facility Manager and/or STR was not notified as required by this procedure. Thus, out of range DP readings in building [] were allowed to go uncorrected for an extended period of time.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$41,250

B. <u>Management/Independent Assessment Deficiencies</u>

10 CFR 830.122(i) *Criterion 9 – Assessment/Management Assessment* requires that the contractor "Ensure managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives."

10 CFR 803.122(j) Criterion 10 – Assessment/Independent Assessment requires that the contractor "(1) Plan and conduct independent assessments to measure item and service quality, to measure the adequacy of work performance, and to promote improvement."

Contrary to the above, between April 1998 and September 2002 at the Oak Ridge site, BJC programs focused on the conduct of management and independent assessments were absent or ineffective in identifying and correcting quality problems associated with items or services provided to DOE as indicated by the following:

1. The BJC Quality Assurance Program (QAP) Plan states that "BJC uses the management assessment process to evaluate the adequacy and effectiveness of implementation of BJC procedures and subcontract terms and conditions." In addition, the QAP Plan states that independent assessments are designed to "evaluate implementation of requirements in the execution of field activities both self-performed and subcontracted." However, problems were known to exist in the veracity of the waste inventory data for some time. A review of management and independent assessments performed by BJC indicates that BJC was not proactive in evaluating waste inventory tracking activities through their assessment programs despite having prior knowledge of weaknesses in this area of their operations. Only after the issuance of the "DOE Environmental Management Assessment Program – Technical Assessment: Hazard Categorization of Bechtel Jacobs Waste Disposition Project Waste Storage Facilities" in March 2002, did BJC take a more aggressive approach to identifying the root cause of the problems and develop and implement appropriate corrective actions.

2. The BJC QAP Plan states that "BJC uses the management assessment process to evaluate the adequacy and effectiveness of implementation of BJC procedures and subcontract terms and conditions." In addition, it is stated that independent assessments are designed to "evaluate implementation of requirements in the execution of field activities both self-performed and subcontracted." However, the storage of orphan radioactive waste containers and the unanalyzed impact that this storage activity might have on safety basis documentation have been prevalent at facilities managed by BJC for the past several years.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty – \$41,250

C. <u>Management / Quality Improvement Deficiencies</u>

10 CFR 830.122 (c) Criterion 3 – Management/Quality Improvement requires that the contractor "(1) Establish and implement processes to detect and prevent quality problems. (2) Identify, control, and correct items, services, and processes that do not meet established requirements. (3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem."

Contrary to the above, between April 1998 and October 2002, the identification, control, and correction of items, services, and processes that do not meet established requirements, as well as the identification of causes of problems and work to prevent recurrence as a part of correcting the problem did not occur, in that BJC failed to adequately implement or sustain corrective actions directed at preventing recurrence of known operational deficiencies at the Oak Ridge site and the PGDP as indicated by the following:

1. Prior to the issuance of IT-6505, "BJC Software Quality Assurance Program," in October 2001, BJC had not formally established an effective process which subjected software developed, maintained, and enhanced by its subcontractors to quality assurance requirements directed at detecting and preventing quality problems with software used in waste inventory tracking. In a joint DOE and BJC Safety Management Program Review conducted in February 2003, it was noted that (1) BJC had not confirmed that all environment, safety, and health software that should be under a software quality assurance program had such a program in place and (2) BJC had not established requirements for software error reporting.

- 2. BJC was aware of problems related to uncertainties in waste inventory tracking data for several years. Specifically, in a report issued by the Office of Inspector General (OIG) entitled, "Audit Report on Waste Characterization at Oak Ridge," dated June 19, 2000, the OIG concluded "Bechtel Jacobs and its predecessor contractor at Oak Ridge did not accurately characterize the Department's waste. Specifically, the contractors misstated the weight, volume, and physical descriptions of the waste inventory. These conditions occurred because the Department and its contractors did not develop procedures for determining accurate weights, volumes, and physical descriptions of the containerized waste. As a result, the Department could not rely on waste characterization data to make informed decisions regarding the amount of mixed and low-level waste to be treated or disposed." In a report from the DOE Oak Ridge Operations Environmental Management Assessment Program, entitled "Technical Assessment: Hazard Categorization of Bechtel Jacobs Waste Disposition Project Waste Storage Facilities," dated March 2002, DOE concluded "BJC has not developed adequate formality and operational controls for ensuring that radiological inventories in waste disposition facilities are adequately defined, documented, and compared to DOE hazard categorization limits. Also, there are numerous sources of data error present in the current and legacy radiological material inventory resulting in an undefined level of reliability in the present estimates of inventory." The corrective actions BJC identified and implemented to address the OIG concerns were not timely or effective in addressing the continuing problems related to the characterization of waste inventory as evidenced by the recurrent nature of the problem observed in the DOE Oak Ridge Operations Office Technical Assessment.
- 3. Although problems with maintaining DP at buildings [] have been known to exist for several years, BJC had not established processes in their operations of these facilities such that this known recurrent quality related problem had not been addressed in an effective or timely manner through a quality improvement program. It was only through active DOE Facility Representative involvement in the DP issues at these facilities that BJC more aggressively addressed the corrective actions needed to prevent recurrence.
- 4. The storage of orphan radioactive waste containers outside of facility specific safety basis documentation has existed at facilities managed by BJC since it assumed its responsibilities as a Management and Integration contractor in April 1998. BJC management processes used to detect this quality-related problem have proven to be ineffective. It was only through active DOE

Headquarters and DOE Facility Representative involvement in the orphan waste issues that BJC more aggressively addressed the corrective actions needed to remedy existing problems and prevent future recurrence.

- - Numerous fields in the "[] Cylinder Wall Thickness Report" check sheets required by PA-2421 were blank with regard to test date, instrument calibration, and signature by a certified ultrasonic testing (UT) technician.
 - Despite the requirement to record the cylinder wall surface condition for each measurement location, only one test sheet contained that information on the check sheet.
 - The BJC work performance submittal to PAD included the original report sheets and duplicate, but transcribed, check sheets prepared by Tetra Tech. None of the original check sheets and only two of the transcribed check sheets were signed. However, PA-2421 required all check sheets to be signed. Furthermore, several transcribed check sheets were signed by someone other than the certified UT technician who performed the testing, in contrast to PA-2421 requirements.
 - Several check sheets had no examination date, while other check sheets only provided the instrument calibration date.
 - Three original check sheets had no record of calibration, and one check sheet indicated the instrument calibration was performed the day after the measurements were taken, not prior to the measurements as required.
 - PA-2421 requires the UT instrument be calibrated after the last cylinder is measured, no later than three hours after the previous calibration, or when measurement data appear suspect. However, none of the submitted check sheets confirmed that the subcontractor complied with this requirement.

- 6. BJC took no action to correct the check sheet deficiencies until after its discovery by PAD staff. BJC, in accordance with procedure BJC-PQ-1450, "Subcontractor Oversight," revision 1, dated August 16, 2002, is required to have in place and implement a contractor oversight plan. This procedure states that the oversight plan is to consider "Procedure and Work Control Adherence" as an oversight component. Documentation to confirm compliance with this requirement was omitted from Tetra Tech's August 2002 submittal of cylinder wall thickness measurement check sheets.
- 7. BJC performed a cursory root cause analysis (RCA) of the event and determined that PA-2421 was inadequate in that the procedure "...did not provide adequate guidance and contained ambiguous instructions for reporting results." However, PA-2421 was not found inadequate or ambiguous in providing instructions to the UT technicians regarding check sheets in that section 8.4.30 requires the UT technician to "[s]ign each UT check sheet after all data and comments have been recorded" and section 8.4.31 requires that UT technician to "[e]nsure each UT Checksheet has all of the following information:
 - Date of expiration
 - Cylinder number
 - Signatures or initials of personnel performing inspections
 - Identity of equipment used
 - Calibration results
 - Location information of points measures
 - Surface preparation for manual UT measurements."
- 8. The RCA checklist indicated that BJC management failed to provide adequate administrative control (presumably in accepting the check sheets without any further action).

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$55, 000

II. Violations Pertaining to the Investigation of [] Release Event from Building []

A. Work Control Deficiencies

10 CFR 830.122 (e), *Criterion 5 – Performance/Work Processes* requires that the contractor "(1) Perform work consistent with technical standards, administrative controls, and other hazard controls adopted to meet

regulatory or contract requirements, using approved instructions, procedures, or other appropriate means."

Contrary to the above, BJC failed to adequately develop and implement administrative controls including written procedures and requirements for work performed by its subcontractor, Duratek Federal Services (DFS) in that:

- 1. REL-0235, "Replacement of HEPA Filters at 3517 & 3038 Facilities, Revision 4," dated July 18, 2002, was a BJC work release issued to DFS for the filter replacement and required that a job hazard analysis (JHA) be prepared. However, a JHA was not prepared by DFS as required by the work release. REL-0235 further required that specific hazard controls be identified for each step of the task. Rather than comply with this requirement, a Pre-task Hazard Review (PTHR) was used which is simply a checklist of hazards, and did not include development of specific hazard controls for each step.
- 2. DFS-SM-3038-0124, Revision 1, dated June 25, 2002, the work package developed by DFS for the June 2002 HEPA filter replacement, was inadequate in that it did not fully analyze steps that were being included in the process. In particular, it did not evaluate the consequences of placing a slight, negative pressure on the filter bank to pull loose material back into the system, although the BJC work release (REL-0235) had indicated that from process knowledge a high level of contamination existed within the filter housings.
- 3. A manufacturer's plaque on the FH-210 filter housing states that dampers must be closed during HEPA filter change out. The work procedure for the June 2002 filter change-out was inadequate in that it failed to meet this manufacturer's requirement or provide justification for not doing so, and it improperly called for the dampers to be cracked-open.
- 4. WM-ADM-302.2.2, "Hazards Review," Revision 0, issued September 25, 2000, requires that a hazard review be conducted prior to the beginning of work to identify potential hazards and to establish mitigating controls. However, the work package developed by DFS for the June 2002 HEPA filter replacement was inadequate in that the hazard review by DFS did not evaluate the potential for air emissions hazards and did not include mitigating controls for such hazards.
- 5. DFS procedure WM-ADM-302.2.2 further specifies a Pre-Task Hazard Review form for work that does not include significant

potential hazards and a Job Hazard Analysis for work that involves multiple steps and for work that could involve significant potential for injury or illness. With the hazards involved in the filter changeout work, a JHA should have been performed per the DFS's procedures.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$ 27,500

B. <u>Procurement Deficiencies</u>

10 CFR 830.122 (g), *Criterion 7 – Performance/Procurement* requires that the contractor "(1) Procure items and services that meet established requirements and perform as specified. ... (3) Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services."

Contrary to the above, procured services did not meet established requirements, and steps were not taken to ensure that a supplier continued to provide acceptable services, in that:

- BJC's subcontractor DFS did not perform the filter replacement in accordance with BJC safety requirements for this type of activity. DFS failed to prepare a Job Hazards Analysis as required by BJC, did not fully analyze the consequence of placing a negative pressure on the filter bank, and did not consider the potential for air emission hazards.
- 2. BJC's management, safety and health, and quality assurance personnel did not take sufficient steps to provide adequate oversight of DFS activities to detect the following: the deficiencies in the subcontractor's hazards analysis, its failure to conform with the BJC work release, and the potential for a direct radiological release outside the facility due to this work activity.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$27,500

C. <u>Management/Quality Improvement Deficiency</u>

10 CFR 830.122 (c) *Criterion 3 – Management/Quality Improvement* requires that the contractor "(1) Establish and implement processes to detect and prevent quality problems. (2) Identify, control, and correct items, services, and processes that do not meet established requirements. (3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem."

This is a Severity Level III violation. No civil penalty.

Pursuant to the provisions of 10 CFR 820.24, Bechtel Jacobs Company, LLC 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-6, 270 Building, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, D.C. 20585-0270 if sent by US Postal Service. If sent by overnight carrier, the response should be addressed to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, EH-6, 270 Building, U.S, Department of Energy, 19901 Germantown Road, Germantown, MD 20874-12190. Copies should also be sent to the Director, Oak Ridge Operations Office as well as my office. 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 violations; (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 should be delineated with proposed completion dates identified in DOE's Noncompliance Tracking System. In the event the violations set forth in this PNOV are admitted, this Notice will constitute a Final Order in compliance with the requirements of 10 CFR 820.24.

Any request for remission or further mitigation of civil penalty must be accompanied by a substantive justification demonstrating extenuating circumstances or other reasons why the assessed penalty should not be paid in full. Within 30 days after the issuance of the PNOV and civil penalty, unless the violations are denied, or remission or additional mitigation is requested, BJC shall pay the civil penalty of \$192, 500 imposed under section 234a of the Atomic Energy Act by check, draft, or money order payable to the Treasurer of the United States (Account 891099) mailed to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, at one of the above addresses. If BJC should fail to answer within the time specified, the contractor will be issued an order imposing the civil penalty.

Should additional mitigation of the proposed civil penalty be requested, BJC should address the adjustment factors described in section IX of 10 CFR 820, Appendix A.

Stephen M. Sohinki

Director

Office of Price-Anderson Enforcement

Dated at Washington, DC, this 10th day of November 2003

ENFORCEMENT CONFERENCE SUMMARY

(NTS-ORO—BJC-BJCPM-2002-0001) (NTS-ORO—BJC-X10ENVRES-2002-0001) (NTS-ORO—BJC-X10ENVRES-2002-0002) (NTS-ORO—BJC-PGDPENVRES-2003-0001)

On September 25, 2003, the Office of Price-Anderson Enforcement (OE) held an Enforcement Conference with Bechtel Jacobs Company (BJC), in Germantown, Maryland. The meeting was called to discuss the facts, circumstances, and corrective actions pertaining to nuclear safety issues at the Oak Ridge and Paducah sites associated with (1) hazard categorization of waste storage facilities, (2) Isotope Circle Facilities ventilation issues, (3) orphan waste containers, (4) [1 release event, and (5) Paducah Gaseous Diffusion Plant (PGDP) [1 cylinder wall issues over the period April 1998 through November 2002. Stephen Sohinki, Director of the Office of Price-Anderson Enforcement, called the meeting to order. Mr. Sohinki stated that OE convened the meeting to (1) address the issues noted in the August 21, 2003, Investigation Summary Report, (2) discuss corrective actions taken to prevent recurrence, and (3) discuss mitigation factors for OE consideration. Information and key areas discussed at the conference are summarized below, and material provided by BJC during the conference was incorporated into the docket.

Steve Liedle, [] began the BJC presentation by stating that BJC takes nuclear safety issues associated with nuclear facility operation very seriously. Recent self-assessment activities were discussed along with findings and associated programmatic improvements. Mr. Liedle concluded his introductory remarks by agreeing that the OE Investigation Summary Report reflected past performance issues by BJC and stated that corrective actions are best understood in the context of broad programmatic improvements made by BJC.

Ms. Karen Balo discussed the hazard categorization of waste storage facilities by first addressing areas of concern related to BJC work control and quality improvement. Ms. Balo then discussed extent of condition reviews, corrective actions taken, and programmatic improvements related to waste storage facility inventory control. Rick Dearholt discussed issues related to orphan waste containers. Mr. Dearholt began his

presentation by providing a brief timeline of events. Areas of concern related to work control and quality improvement were also discussed. Mr. Dearholt further discussed the isotope circle facilities ventilation issues and initially provided a summary of events. Work control and quality improvement were identified by him as areas of concern. Mr. Dearholt concluded his presentation by discussing extent of condition reviews, corrective actions, and programmatic improvements undertaken by BJC to address the identified issues.

Peter Caswell discussed the [] contamination event by initially providing a summary of the event. Work control was identified as an area of concern. Mr. Caswell also discussed the PGDP [] cylinder wall issues by providing a summary of those issues. Work control and quality improvement were identified as areas of concern. Mr. Caswell concluded his presentation by discussing extent of condition reviews, corrective actions, and programmatic improvements undertaken by BJC to address the [] event and the cylinder wall issues.

Jimmy Massey, Closure Project Evaluation Board/ISMS Improvements Manager, provided a presentation on broad programmatic improvements undertaken by BJC. Programmatic improvements discussed as part of Mr. Massey's presentation included (1) integrated safety management systems (ISMS) improvements, (2) work control and quality assurance improvements, (3) safety basis improvements, (4) standards management improvements, (5) training and qualification improvements, (6) facility operations improvements, (7) facility management improvements, (8) conduct of operations improvements, (9) conduct of maintenance improvements, (10) subcontract management and oversight improvements, (11) procurement process improvements, (12) systems engineering improvements, (13) software quality assurance improvements, (14) issues management process improvements, and (15) assessment program improvements. Mr. Massey then concluded his presentation by providing a status report on programmatic improvements and summarizing the overall programmatic improvement efforts undertaken by BJC.

Mr. Liedle concluded the BJC presentation by acknowledging the validity of the performance issues in the OE Investigation Summary Report, outlining BJC programmatic improvements, emphasizing organizational changes, noting positive feed back from recent external assessments, and committing to ongoing continuous improvement.

Mr. Sohinki stated that OE would consider the information presented by BJC together with the entire record when OE undertakes its enforcement deliberations. Mr. Sohinki then adjourned the conference.

September 25, 2003

Bechtel Jacobs Company

Enforcement Conference List of Attendees

Office of Price-Anderson Enforcement

Stephen M. Sohinki, Director Susan Adamovitz, Senior Enforcement Officer Howard Wilchins, Senior Litigator Richard Day, Enforcement Officer Steve Zobel, Enforcement Officer Hank George, Technical Advisor

Oak Ridge Operations Office

Randall Smyth, Director, Technical Support and Oversight Steve McCracken, Area Manager Brenda Hawks, PAAA Coordinator

DOE Office of Science

Ray Schwartz, PAAA Coordinator

Environmental Management

Larry Vaughan, Quality Assurance Specialist Dae Chung, Senior Technical Advisor

Bechtel Jacobs

Steve Liedle, []
Jimmy Massey, Closure Project Evaluation Board/ISMS Improvements Manager
Peter Caswell, Manager Subcontract Technical Representative
Jean Dunkirk, Managing Counsel
Rick Dearholt, Project Manager
Karen Balo, Project Manager
Phil Baxter, PAAA Coordinator