



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

00-RU-0413

Mr. Phillip O. Strawbridge
Transition Manager
BNFL Inc.
3000 George Washington Way
Richland, Washington 99352

Dear Mr. Strawbridge:

**ASSESSMENT OF THE INDEPENDENCE OF THE QUALITY ASSURANCE
ORGANIZATION INSPECTION REPORT, IR-00-005**

From April 20, 2000, through May 4, 2000, the Office of Safety Regulation (Regulatory Unit) performed an inspection of BNFL Inc. (BNFL) to assess the independence of the Quality Assurance (QA) organization.

Two Findings (documented in Notice of Finding, Enclosure 1) were identified and are summarized as follows: (1) the Project QA Manager did not have sufficient organizational freedom as indicated by the April 17, 2000, reassignment of the Project Quality Assurance Manager by the General Manager, even though the Project QA Manager reported directly to the Corporate QA Manager and not the General Manager; and (2) the Project QA Manager presented Stop Work Order, SWO-W375-00-QA00002, to the Deputy Project Manager; however, the Deputy Project Manager did not consider the Stop Work Order appropriate, did not stop work, and did not appeal the action to the BNFL Corporate QA Manager, as required by procedures. Details of the inspection, including the Findings, are documented in the inspection report (Enclosure 2).

The Findings described above are of significant concern to the Regulatory Unit (RU). These Findings represent a very serious problem with the implementation of the BNFL Quality Assurance Program. BNFL cannot be successful if the QA Organization does not have sufficient authority and freedom from the line organization to carry out its responsibilities, as required by law. Reassignment of the Project QA Manager by the General Manager compromised this independence, created the appearance of retribution, and resulted in a chilling effect to some BNFL employees. Slow and noncompliant response to stop work at the request of the Project QA Manager further suggested a lack of independence, a preference to schedule over quality, and management lack of knowledge of procedure requirements.

Mr. Phillip O. Strawbridge
00-RU-0413

-2-

You are requested to provide a written response to the Findings within 30 days, in accordance with the instructions provided in the enclosed Notice of Finding. In addition, the RU requests that BNFL provide in the response, the results of a determination if the conditions described in the Findings identify noncompliance with DOE nuclear safety requirements and if these conditions are reportable under 10 CFR Part 820, Appendix A, "General Statement of Enforcement Policy." The RU also requests that BNFL, in its response, describe what further actions will be taken to address potential "chilling effect" that has resulted from the reassignment of the Project QA Manager.

Nothing in this letter should be construed as changing the Contract (DE-AC27-96RL13308). If BNFL has any questions regarding the inspection or Findings, please contact me or Pat Carrier of my staff on (509) 376-3574.

Sincerely,

D. Clark Gibbs, Regulatory Official
Office of Safety Regulation
of the RPP-WTP Contractor

REG:RCB

Enclosures

cc w/encls:
D. A. Klein, BNFL

NOTICE OF FINDING

Standard 4, "Safety, Health, and Environmental Program," of Contract DE-AC27-96RL13308, dated August 24, 1998, between BNFL Inc. (the Contractor) and the U.S. Department of Energy, defines the Contractor's responsibilities under the Contract as they relate to conventional non-radiological worker safety and health; radiological, nuclear, and process safety; and environmental protection.

Standard 4, Section c.2)(b) requires the Contractor to comply with the specific nuclear regulations defined in the effective rules of the 10 CFR 800 series of nuclear requirements.

Title 10 of the Code of Federal Regulations Part 830, Nuclear Safety Management, Section 120, "Quality Assurance [QA] Requirements," requires the Contractor to conduct work in accordance with the requirements of Section 120 and to develop a Quality Assurance Program that reflects the requirements of Section 120.

The Contractor's QA Program is defined in BNFL-5193-QAP-01, Revision 5, "Quality Assurance Program and Implementation Plan [QAPIP]," dated April 2000.

During the performance of an inspection of the Independence of the Quality Assurance Organization conducted from April 20 through May 4, 2000, at the Contractor's offices, the Office of Safety Regulation (Regulatory Unit [RU]) identified the following:

1. Section 1.4 of the QAPIP Revision 5, required that "The Project QA Manager reports directly to the Corporate (BNFL Inc.) QA Manager, and has direct access to the Project Manager and to the General Manager. The QA Manager has sufficient authority and organizational freedom to verify that project activities are performed in accordance with applicable codes and standards."

Contrary to the above, the QA Manager did not have sufficient organizational freedom as indicated by the April 17, 2000, reassignment of the Project QA Manager by the General Manager, even though the Project QA Manager reported directly to the Corporate QA Manager and not the Project Manager.

This is considered an inspection Finding.

2. QAPIP Section 1.4, "Responsibilities", stated, "The TWRS-P Project Quality Assurance Manager has the authority and responsibility to stop project work when the work, if allowed to continue, would result in activities or documents being in noncompliance with stated requirements.

Section 5.3.2, "Instructions and Procedures," of the QAPIP requires processes that affect quality to be conducted using approved instructions and procedures.

BNFL procedure K13P051, "Authority to Stop Work", stated, "The responsible manager shall take immediate action to cease work activities as advised by the Project QA Manager... and if the responsible manager considers the action of a stop work order inappropriate, the stop work order may be appealed to the BNFL [Corporate] QA Manager, but work may not proceed until released and approved by the Project QA Manager."

Contrary to the above, on April 3, 2000, when Project QA Manager presented Stop Work Order, SWO-W375-00-QA00002, to the Deputy Project Manager, the Deputy Project Manager did not stop work and did not appeal the action to the BNFL [Corporate] QA Manager because he considered the stop work order inappropriate.

This is considered an inspection Finding.

The Contractor is requested to provide to the Regulatory Unit within 30 days of the date of the cover letter that transmitted this Notice, a reply to the Findings described above. The reply should include: (1) agreement or disagreement with the Findings; (2) the reason for the Finding, if the Contractor agrees with it, and if the Contractor disagrees, the reason why; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further Findings; and (5) the date when full compliance with the applicable commitments in your authorization base will be achieved. Where good cause is shown, consideration will be given to extending the requested response time.

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
Office of Safety Regulation of the
River Protection Project-Waste Treatment Plant Contractor

INSPECTION: ASSESSMENT OF THE INDEPENDENCE OF THE
QUALITY ASSURANCE ORGANIZATION

REPORT NO: IR-00-005

FACILITY: BNFL Inc.

LOCATION: 3000 George Washington Way
Richland, Washington 99352

DATES: April 20 - May 4, 2000

INSPECTORS: R. C. Barr (Lead), Project Management Official
L. F. Miller, Safety Review Official
P. C. Carrier, Verification and Conformance Official
C. K. Liu, Chemical Process Safety Technical Advisor
A. Hawkins, Senior Regulatory Technical Advisor

APPROVED BY: P. Carrier, Verification and Confirmation Official
Office of Safety Regulation of the TWRS-P Contractor

This page intentionally left blank.

EXECUTIVE SUMMARY

Assessment of the Independence of the Quality Assurance Organization Inspection Report Number IR-00-005

INTRODUCTION

This inspection examined aspects of the independence of the Contractor Quality Assurance (QA) Organization. Specifically, the inspection covered the reassignment of the Project QA Manager and the issuance of Stop Work Order, SWO-375-00-QA00002.

SIGNIFICANT OBSERVATIONS AND CONCLUSIONS

- The inspectors identified a Finding concerning the lack of independence of the QA Organization, as indicated by the reassignment of the Project QA Manager by the General Manager, who had no reassignment authority over the Project QA Manager. (IR-00-005-01-FIN) (Section 1.2.2)
- The inspectors observed that the reassignment of the Project QA Manager by the General Manager was made without the concurrence of the Contractor's Corporate QA Manager and without the knowledge of the Human Resources Manager. (Section 1.2.2)
- The inspectors observed that the reassignment of the Project QA Manager by the General Manager had a chilling effect on some Contractor employees. The inspectors found that approximately thirty percent of employees interviewed perceived that the reassignment of the Project QA Manager by the General Manager was in direct response to the Project QA Manager issuing Stop Work Order, SWO-375-00-QA00002. Furthermore, about fifteen percent of those interviewed indicated that they would be reluctant to bring issues to management due to concern of reprisal. (Section 1.2.3)
- The inspectors identified a Finding concerning the failure to follow the Authority to Stop Work procedure, K13P051_2. The Responsible Manager, the Deputy Project Manager, did not take immediate action to cease work activities as advised by the Project QA Manager and did not proceed in an orderly manner with the action requested. (IR-00-005-02-FIN) (Section 1.3.2)
- The inspectors observed that some Contractor managers did not have adequate knowledge of corrective action procedures. These managers considered it acceptable to require the QA Organization to obtain additional information if they did not agree with the action of the Stop Work Order. (Section 1.3.2)

ASSESSMENT OF THE INDEPENDENCE OF THE QA ORGANIZATION

Table of Contents

1.0	REPORT DETAILS	1
1.1	Introduction.....	1
1.2	Reassignment of the Project QA Manager.....	1
1.2.1	Inspection Scope	1
1.2.2	Chronology, Observations, and Assessments	2
1.2.3	Perception of Contractor Staff of the Reassignment of the Project QA Manager	4
1.2.4	Conclusions.....	5
1.3	Stop Work Order, SWO-W375-00-QA00002	5
1.3.1	Inspection Scope	5
1.3.2	Observations and Assessments	5
1.3.3	Conclusions.....	6
2.0	EXIT MEETING SUMMARY.....	6
3.0	REPORT BACKGROUND INFORMATION	7
3.1	Partial List of Persons Contacted.....	7
3.2	List of Items Opened, Closed, and Discussed.....	7
3.3	Key Documents Reviewed.....	7
3.4	List of Acronyms	7

ASSESSMENT OF THE INDEPENDENCE OF THE QA ORGANIZATION INSPECTION REPORT

1.0 REPORT DETAILS

1.1 Introduction

The River Protection Project-Waste Treatment Plant (RPP-WTP) was in the preliminary design stage at the time of this inspection. The Contractor (BNFL Inc.) was in the latter stages of preparing for the submittal of the Contract required April 24, 2000, deliverables.

The RPP-WTP Contract DE-AC27-96RL13308 (between the U.S. Department of Energy (DOE) and BNFL Inc., dated August 24, 1998) Standard 4, Section c.2)(b) requires the Contractor to comply with the specific nuclear regulations defined in the effective rules of the 10 CFR 800 series of nuclear requirements. One of these rules, 10 CFR 830.120, *Quality Assurance Requirements*, requires the group [in this case the Contractor's Project QA Organization] performing independent assessments shall have sufficient organizational freedom to carry out its responsibilities. The Contractor reflected this requirement in the Quality Assurance Program and Implementation Plan [QAPIP], BNFL-5193-QAP-01, Revision 5, dated April 2000, Section 1.4, that states, "The QA Manager reports directly to the Corporate QA Manager, and has direct access to the Project Manager and to the General Manager. The QA Manager has sufficient authority and organizational freedom to verify that project activities are performed in accordance with applicable codes and standards."

The Regulatory Unit (RU) conducted this special inspection to determine if recent actions taken by the Contractor compromised the independence of the QA Organization from the line organization (Project Organization) that is required by 10 CFR 830.120 and the Contractor's QAPIP. Specifically, this inspection examined the reassignment of the Project QA Manager. The inspection also included review of a recently issued stop work order.

1.2 Reassignment of the Project QA Manager

1.2.1 Inspection Scope

The inspectors assessed whether the Project QA Manager had been reassigned by the General Manager and the circumstances of this reassignment. The inspectors also assessed whether the Contractor's Project QA Organization had sufficient organizational freedom to carry out its responsibilities. The assessment included interviews of the General Manager, the reassigned Project QA Manager, the Contractor's Corporate Environment Safety and Health /QA Manager (ES&H/QA Manager), the Corporate QA Manager, the Project Human Resources Manager, the current Project QA Manager, and selected contractor staff.

1.2.2 Chronology, Observations, and Assessments

On April 18, 2000, in routine daily communication with the Contractor, the RU learned the Project QA Manager had been reassigned on April 17, 2000, to be the Deputy Project QA Manager. This personnel action was believed to have been taken by the Project General Manager. Because the QAPIP requires independence of the Project QA Organization from the Project Organization, the Regulatory Official initiated this special inspection to determine if the Contractor's actions compromised this independence.

Based on interviews, the inspectors determined the following list represents a chronology of the events surrounding the reassignment of the Project QA Manager.

- In mid-March 2000, the following Contractor managers of the RPP-WTP discussed staffing for Part B-2 of the project: the General Manager, the Corporate ES&H/QA Manager, the Corporate QA Manager, and the Operations and Safety Manager. These managers agreed that the Project QA Manager position required a more senior and experienced individual than the individual who currently filled the position.
- In mid-March 2000, in discussion regarding B-2 staffing between the Contractor and the Office of River Protection (ORP), the General Manager notified the Manager of ORP of his intentions to hire a more senior and experienced individual to fill the B-2 Project QA Manager position. The Manager of ORP recommended a potential candidate for the position.
- On March 23, 2000, to ascertain the candidate's availability, the Corporate ES&H/QA Manager conducted an interview with the candidate. During the interview, current regulatory issues, such as authorization basis maintenance, were discussed, but no potential positions were discussed.
- On March 31, 2000, the Operations and Safety Manager interviewed the same candidate. Interview discussions centered on the candidate's interest in becoming a Contractor employee and his availability. Available positions discussed were associated with engineering project management.
- On April 3, 2000, the Project QA Manager provided the Deputy Project Manager with Corrective Action Request (CAR), CAR-W375-00-QA00010 and associated Stop Work Order (SWO), SWO-W375-00-QA00002). The CAR described that BNFL Engineering Limited (BEL) had performed work continuously but had not submitted a QA Program or Implementation Plan as required by contract. The SWO noted that BEL had not completed contractual requirements of developing a Quality Program.
- On April 4, 2000, the candidate was interviewed by the prospective manager of the Special Purpose Company (SPC) that would be formed for Part B-2. The interview covered subjects similar to the previous interviews. No specific positions were discussed.
- On April 5, 2000, the candidate interviewed with the General Manager. During this interview, the General Manager discussed the Project QA Manager position with the

candidate and terms of employment.

- On April 11, 2000, the Deputy Project Manager signed the SWO after being provided additional information by the Project QA Manager. On the same day, the candidate was offered the Project QA Manager position.
- The SWO was implemented on April 12, 2000.
- On April 15, 2000, the Corporate ES&H/QA Manager notified the Corporate QA Manager via E-mail that the General Manager had selected a new Project QA Manager. No date of assignment was mentioned in the E-mail.
- On April 17, 2000, the General Manager notified the Project QA Manager that he had been reassigned as the Deputy Project QA Manager.
- On April 18, 2000, in routine daily communication with the Contractor, the RU learned the Project QA Manager had been reassigned on April 17, 2000.
- On April 19, 2000, the Regulatory Official spoke with the Corporate ES&H/QA Manager, who indicated that he was surprised the General Manager had reassigned the Project QA Manager at such an early date. The ES&H/QA Manager did indicate that he was aware that the candidate he had interviewed had been selected as the Project QA Manager for Part B-2.
- On April 20, 2000, the RU began inspection regarding the independence of the Project QA Organization from the Project by interviewing Contractor staff and collecting pertinent documents.

Section 1.4 of the QAPIP states, "The QA Manager reports directly to the Corporate QA Manager, and has direct access to the Project Manager and to the General Manager. The QA Manager has sufficient authority and organizational freedom to verify that project activities are performed in accordance with applicable codes and standards." This implements the requirement of 10 CFR 830.120 (c) [Quality Assurance Criteria] (3) [Assessment] (ii) [Independent Assessment] that states, "The group performing independent assessments shall have sufficient authority and freedom to carry out its responsibilities."

The inspectors observed that interviews and selection of the Part B-2 Project QA Manager had insufficient involvement by the Corporate QA organization, suggesting inadequate independence of the QA organization from the Project organization. Contractor senior managers, including the Corporate ES&H/QA Manager and the Corporate QA Manager, had decided that a more experienced and senior individual was needed as the Project QA Manager for Part B-2. However, these managers did not adequately discuss how and when the interviewing, hiring, and reassignment would occur. All but one of the interviews had been performed by project managers. The Corporate QA Manager, the direct supervisor of the Project QA Manager and the most knowledgeable individual regarding quality assurance and qualification requirements for the position, was not involved in interviewing or selecting the Part B-2 Project QA Manager. Furthermore, the Corporate QA Manager was unaware of when the reassignment was to occur

and was available at the project site the day of the reassignment.

The inspectors also noted the senior managers did not sufficiently involve the Human Resources organization to assist with the interviews, selection, hiring and reassignment. The Human Resources organization was not involved in the selection process as outlined in Contractor procedure K21P010A_0, "Personnel Selection," dated September 1999.

The inspectors found that on April 17, 2000, the General Manager reassigned the Project QA Manager, in spite of not having management authority over the Project QA Manager. Based on this reassignment, the inspectors concluded the Contractor had not implement the Section 1.4 of the QAPIP that requires the group performing independent assessments to have sufficient authority and freedom to carry out its responsibilities. This is a Finding (IR-00-005-01-FIN).

Collectively, insufficient involvement by the Corporate QA Organization and the Human Resources Organization in interviews, selection and reassignment of the Project QA Manager suggested to the inspectors that the reassignment action was done on the spur of the moment. The timing of the reassignment, two days after the SWO was issued, suggested to the inspectors that the reassignment may have been associated with the SWO. The General Manager stated that the timing of the reassignment had nothing to do with the SWO. He indicated experience gained during the staffing up in Part B-1 identified the need to hire staff well before the need date. The General Manager also noted that the improvements in the QA Program had not been at the expected rate, which emphasized the need for reassignment.

1.2.3 Perception of Contractor Staff of the Reassignment of the Project QA Manager

The inspectors interviewed a limited number (20) of the BNFL staff, who were responsible for conducting assessments, regarding their perception of the reassignment of the Project QA Manager and their willingness to bring potential safety issues to management. These interviews were conducted on April 26, 2000, after the Corporate ES&H/QA Manager had explained to employees the Company's rationale for the reassignment.

The inspectors found that approximately, thirty percent of the employees interviewed had the perception that the reassignment was associated with the issuance of SWO-W375-00-QA00002. Approximately, fifteen percent of those interviewed stated the reassignment of the Project QA Manager would affect their decisions to bring safety issues to management.

From the interviews conducted, the inspectors concluded that the reassignment of the Project QA Manager by the General Manager had the appearance of retribution for issuing the SWO and had a chilling effect on some employees with respect to identifying safety issues to management. The inspectors also noted that the action that management had taken to explain the reassignment was ineffective in changing the perception of those interviewed.

1.2.4 Conclusions

The Project QA Organization is not sufficiently independent from the Project Organization, as indicated by the reassignment of the Project QA Manager by the General Manager and the limited participation by the Corporate QA manager and excessive participation by the project managers in the hiring of his replacement. The action of this reassignment created a chilling effect for some Contractor employees that conduct independent and self-assessments. Actions taken to date to address the chilling effect were ineffective. One inspection Finding was identified.

1.3 Stop Work Order, SWO-W375-00-QA00002

1.3.1 Inspection Scope

The inspectors assessed Stop Work Order SWO-W375-00-QA00002, "BNFL Engineering Limited (BEL) performing work without a QA Program and Implementation Plan", and the Contractor's compliance with procedure K13P051_2, "Authority to Stop Work," dated July 1999. In the conduct of this portion of the inspection, the inspectors interviewed staff, reviewed procedure K13P051_2 and reviewed SWO-W375-00-QA00002.

1.3.2 Observations and Assessments

The inspectors observed that the subject of SWO-W375-00-QA00002 had been a longstanding evolving issue between the Project and QA organizations since early in Part B-1. Contract W375-LC98-4172 with BEL was effective in late 1998. That contract required BEL to develop a QA Program and an Implementation Plan. The Implementation Plan was required to describe how the quality program requirements would be implemented through a system of procedures, instructions, and other approved documents. The Project QA organization was concerned because BEL had not complied with the contract because it had not developed the required QA Program and Implementation Plan and may have been performing quality-related work. The project contended that no quality-related work performed by BEL went unreviewed by RPP-WTP project engineers and at that time the QA organization had identified no instances where that was not the case.

As previously noted in Section 1.2.2, on April 3, 2000, Corrective Action Request (CAR), CAR-W375-00-QA00010 and associated SWO-W375-00-QA00002 were presented to the Deputy Project Manager by the Project QA Manager. Through interviews, the inspectors learned that the Deputy Project Manager, who was concerned with project schedule, informed the Project QA Manager that he had provided him with insufficient information to stop work and requested that he provide additional supporting information. On April 11, 2000, additional information was provided and the Deputy Project Manager signed the SWO. The SWO was issued on April 12, 2000, after concurrence by the Functional Manager.

The inspectors identified that BNFL procedure K13P051_2 required that the responsible manager take immediate action to cease any work activities as advised by the Project QA

Manager. Procedure K13P051_2 also stated, if the responsible manager considers the action inappropriate the action may be appealed to the BNFL Corporate QA Manager, but work may not proceed until released/approved by the Project QA Manager. In discussions with the Deputy Project Manager, the inspectors determined his knowledge on the details of procedure K13P051_2 was limited.

The inspectors found that work subject to SWO-W375-00-QA00002 proceeded after April 3, 2000, when the Project QA Manager provided the SWO to the Deputy Project Manager, and the Deputy Project Manager considered the stop work action inappropriate and did not appeal the action to the Corporate QA Manager. Procedure K13P051_2, "Authority to Stop Work," required that the responsible manager immediately stop work when presented with a stop work order by the Project QA Manager, and if the responsible manager does not consider the stop work action appropriate, the action may be appealed to the Corporate QA Manager. Failure to follow procedure as required by QAPIP Section 5.3.2, "Procedures, Codes of Practice, and Instructions," regarding implementing stop work orders is considered a Finding (IR-00-005-02-FIN).

1.3.3 Conclusions

The issue of BEL not having a QA Program and Implementation Plan was longstanding and not effectively resolved early in Part B-1. Some managers had inadequate knowledge of the Stop Work Authority procedure. The Contractor did not comply with its procedure for stop work. One Finding was identified.

2.0 EXIT MEETING SUMMARY

The inspectors presented the inspection results to members of Contractor management at an exit meeting on May 4, 2000. The Contractor acknowledged the observations, conclusions, and Findings presented.

At the exit meeting, Contractor staff made a number of comments that were considered in reaching the conclusions in this inspection report. The following provides the comment and disposition:

- The newly assigned Project QA Manager stated that in his interview with the Corporate ES&H/QA Manager the position of Project QA Manager had been discussed. The inspectors noted this contradicted information provided in an earlier interview. The inspectors considered the information irrelevant to the Finding that the Project QA Manager had been reassigned by the General Manager.
- The Corporate ES&H/QA Manager stated that he had given the General Manager his authority to reassign the Project QA Manager. The inspectors noted that this responsibility can not be delegated to the Project Organization and at the same time maintain independence from the Project Organization.

- The Safety and Operations Manager stated he disagreed with the inspectors that the reassignment action taken by the General Manager indicated that the QA organization would not be independent and the feedback regarding "chilling effect" was important. The inspectors considered the information relevant to the Finding that the Project QA Manager did not have sufficient organizational freedom because it suggested a strong misconception of the concept of independence on the part of the Project, which appeared to be the root of the problem.

The inspectors asked the Contractor whether any materials examined during the inspection should be considered proprietary information and the Contractor stated there was none.

3.0 REPORT BACKGROUND INFORMATION

3.1 Partial List of Persons Contacted

M. Bullock, Vice President and General Manager
 C. Smith, Corporate ES&H/QA Manager
 R. Laske, Corporate QA Manager
 A. Dobson, Safety and Operations Manager
 C. Burrows, Deputy Project Manager
 M. Witherspoon, Project QA Manager
 G. Voyles, Deputy QA Manager
 D. Sansotta, Project Human Resources Manager

3.2 List of Items Opened, Closed, and Discussed

IR-00-005-01-FIN	Finding	Failure of the Contractor to assure the Project QA Manager had sufficient authority and organizational freedom to verify that project activities were performed in accordance with applicable codes and standards
IR-00-005-02-FIN	Finding	Failure of the Contractor to comply with procedure K13P051_2, "Authority to Stop Work."

3.3 Key Documents Reviewed

Contractor Procedure K13P051_2, "Authority to Stop Work," dated July 99
 Contractor Procedure K21P010A_0, "Personnel Selection," dated September 99

3.4 List of Acronyms

BEL	BNFL Engineering Limited
BNFL	BNFL Inc.

CFR	Code of Federal Regulations
CAR	Corrective Action Report
DOE	U.S. Department of Energy
ES&H	Environmental, Health, and Safety
ORP	The Office of River Protection
QA	Quality Assurance
QAPIP	Quality Assurance Program and Implementation Plan
RPP-WTP	River Protection Project – Waste Treatment Plant
RU	Regulatory Unit
SWO	Stop Work Order
SPC	Special Purpose Company