

**INSPECTION TECHNICAL PROCEDURE**

**I-151**

**RCP DOCUMENTS, RECORDS, AND REPORTS ASSESSMENT**

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Revision 1

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
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## Table of Contents

1.0	PURPOSE.....	1
2.0	OBJECTIVES .....	1
3.0	INSPECTION REQUIREMENTS .....	2
	3.1 Adequacy and Effectiveness of RCP Records Management Implementing Procedures.....	2
	3.2 Adequacy and Effectiveness of Individual Monitoring and Dose Records .....	2
	3.3 Adequacy and Effectiveness of Monitoring and Workplace Records .....	2
	3.4 Adequacy and Effectiveness of RCP Administrative Records .....	2
	3.5 Adequacy and Effectiveness of RCP Reports.....	2
	3.6 Adequacy and Effectiveness of Conformance with the Privacy Act.....	2
4.0	INSPECTION GUIDANCE .....	2
	4.1 Adequacy and Effectiveness of RCP Records Management Implementing Procedures.....	3
	4.2 Adequacy and Effectiveness of Individual Monitoring and Dose Records .....	4
	4.3 Adequacy and Effectiveness of Area Monitoring and Workplace Records .....	5
	4.4 Adequacy and Effectiveness of RCP Administrative Records .....	7
	4.5 Adequacy and Effectiveness of RCP Reports.....	7
	4.6 Adequacy and Effectiveness of Conformance with the Privacy Act.....	8
5.0	REFERENCES .....	9
6.0	LIST OF TERMS.....	10

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# INSPECTION TECHNICAL PROCEDURE I-151, REV. 1 RCP DOCUMENTS, RECORDS, AND REPORTS ASSESSMENT

## 1.0 PURPOSE

This procedure provides guidance for assessing elements of the Contractor's Radiological Control Program (RCP) addressing document, records, and report management. This guidance is based on the requirements in the Radiation Protection Program (RPP), the Safety Requirements Document (SRD), the Preliminary Safety Analysis Report (PSAR), the Quality Assurance Manual (QAM), and the Integrated Safety Management Plan (ISMP).

This inspection procedure addresses the adequacy and effectiveness of the following:

- RCP records management implementing procedures
- Individual monitoring and dose records
- Monitoring and workplace records
- RCP administrative records
- RCP reports
- Conformance with the Privacy Act.

This inspection procedure compliments Inspection Technical Procedure (ITP) I-131, *Document Control and Records Management Program Inspection*.

**NOTE: This procedure references RPP sections as the basis of many of the requirements. At the time of its writing, the RPP was approved for design and construction. When the revised RPP is approved for operations, this procedure will be reviewed to ensure the inspection attributes and references are appropriate.**

## 2.0 OBJECTIVES

This procedure is used by the Office of River Protection (ORP) to verify the Contractor has developed and implemented an effective RCP document, records, and report management program that will ensure: (1) information is available to protect individuals from unwarranted radiation exposure, (2) compliance with regulations and authorization basis commitments is demonstrated, (3) the effectiveness of the radiological control program can be evaluated, and (4) a historical data base is available for review.

This inspection procedure is a component of the RCP inspection program. This and other inspection procedures will be used on an on-going basis, as needed, to provide assurance document, record, and report management activities are being conducted as required by the RCP, authorization basis commitments, and Contractor procedures. This procedure will be used throughout the entire life cycle of the River Protection Project - Waste Treatment and Immobilization Plant (WTP). However, the entire inspection procedure may not be completed during any one inspection and/or every time the inspection procedure is used.

### **3.0 INSPECTION REQUIREMENTS**

#### **3.1 Adequacy and Effectiveness of RCP Records Management Implementing Procedures**

The inspector should verify the Contractor has prepared, reviewed, and approved procedures to ensure RCP information required in the authorization basis is documented and maintained. (RPP, Requirements 22 and 76 through 100; SRD, Safety Criterion (SC) 5.0-1; and QAM, Policy Q-17.1)

#### **3.2 Adequacy and Effectiveness of Individual Monitoring and Dose Records**

The inspector should verify the Contractor's individual radiation exposure monitoring and dose records have been maintained as required. (RPP, Requirements 78 through 85, and 129)

#### **3.3 Adequacy and Effectiveness of Monitoring and Workplace Records**

The inspector should verify the Contractor has maintained records of other monitoring and workplace activities as required. (RPP, Requirements 86 through 89; and SRD, Section 5.0)

#### **3.4 Adequacy and Effectiveness of RCP Administrative Records**

The inspector should verify the Contractor has maintained RCP administrative records as required. (RPP, Requirements 90 through 95)

#### **3.5 Adequacy and Effectiveness of RCP Reports**

The inspector should verify the Contractor prepared and distributed RCP reports as required. (RPP, Requirements 32, 96 through 100, 128, 130; and SRD, SC 5.0-2, 5.1-1, 5.2-1, 7.7-1, and 7.7-2)

#### **3.6 Adequacy and Effectiveness of Conformance with the Privacy Act**

The inspector should verify the Contractor has implemented its procedures to ensure it does not violate Title 5 U.S.C. 552a in the management of its RCP documents, records, and reports. (RPP, Requirement 99)

### **4.0 INSPECTION GUIDANCE**

Inspection guidance is provided to assist the inspector in addressing the inspection requirements in Section 3.0 of this procedure.

The inspector should review the applicable parts of the authorization basis. The inspector should also be familiar with the content of the documents listed in Section 5.0, "References."

The QAM contains a comprehensive statement of requirements applicable to the records (including reports) addressed during this inspection. QAM, Policy Q-17.1, states, in part, records shall be legible, accurate, dated (including revision date), identifiable to the product or service involved, complete, and maintained in an orderly manner.

Note while the Contractor is not committed to the DOE G 441.11, *Occupational Radiation Protection Record-Keeping and Reporting Guide*, or American National Standards Institute (ANSI) Standard ANSI/HPS N13.6-1999, *Practice for Occupational Radiation Exposure Records Systems*, both provide useful information to aid the inspector in evaluating a RCP records management program.

The guidance below includes suggested sample sizes of documents and records to review and personnel to interview. The inspector may wish to choose a different sample size based on the life cycle of the facility, on the initial observations in any area, or on previous inspection reports. The samples should be of sufficient size to provide confidence the inspector can conclude if: (1) the Contractor has established and implemented an adequate and effective RCP records management program meeting QAM requirements, (2) records are being maintained as required by the program procedures, and (3) radiological reports are timely, complete, and distributed as required.

#### **4.1 Adequacy and Effectiveness of RCP Records Management Implementing Procedures**

To assess the adequacy and effectiveness of the RCP records management implementing procedures the inspector should perform the following:

- 4.1.1 If those procedures have not been reviewed pursuant to ITP I-131, I-140, "RCP Programmatic Assessment," or this procedure, then the inspector should perform the following:
  - 4.1.1.1 Review the RCP or administrative procedure establishing how RCP documents and procedures are developed, reviewed, approved, revised, and disseminated to determine if it is consistent with QAM requirements.
  - 4.1.1.2 Select three RCP procedures and verify by record review they are developed, reviewed, approved, revised, and disseminated in accordance with the procedure mentioned in 4.1.1 above, and QAM, Policy Q-06.1.
  - 4.1.1.3 Review the RCP or administrative procedure establishing how the RCP records and reports will be prepared, validated, identified, collected, retained, changed, stored, and disposed, to determine if it is consistent with the QAM. Also, verify the procedure or procedures require the results of all radiological measurements to be expressed in special units of rad, roentgen, rem, or curies. (RPP, Requirement 10) Verify procedures address

the specific records and reports necessary to meet RPP, Requirements 76 through 100, 129, and 130, and SRD, SC 5.1-1, 5.2-1, 7.7-1, and 7.7-2 requirements.

- 4.1.1.4 Select several categories of RCP records, for example, radiological worker training, high radiation area access logs, and bioassay results, and identify at least three records from each category for review. Verify these records are prepared, validated, identified, collected, retained, changed, stored, and disposed in accordance with the procedure reviewed in 4.1.1.2 above. Based on this review, determine if the procedure meets the criteria expressed in QAM Policy Q-05.1.
- 4.1.2 If ITP I-131 or I-140 have been performed and inspection reports describe the RCP document, records, and report procedures as adequate, or if this procedure has been previously performed, then the inspector should:
  - 4.1.2.1 Review any changes to the RCP procedures establishing how documents, records, and procedures are developed and maintained and select three changes to determine if they are made consistent with QAM, Policy Q-06.1 and if the revised procedures continue to meet the requirements of QAM, Policy Q-05.1.
  - 4.1.2.2 Review the results of audits or assessments made since the last inspection to determine if changes to procedures were necessary to improve performance. If changes were necessary, select two and verify they were implemented.
  - 4.1.2.3 Determine, based on the following observations from 4.2 through 4.6, if the procedures are adequate to ensure all the information required to be captured in individual documents, records, and reports required pursuant to the authorization basis has been satisfied.

## **4.2 Adequacy and Effectiveness of Individual Monitoring and Dose Records**

To assess the adequacy and effectiveness of the individual monitoring and dose records, the inspector should perform the following:

- 4.2.1 If possible, the inspector should select the records for about 10 individuals having received dose in excess of the required monitoring threshold value stipulated in RPP, Requirement 45, and verify the following:
  - A record has been maintained to demonstrate dosimetry devices worn by the individuals are processed by an approved vendor;
  - A record has been maintained demonstrating the dosimetry vendor is informed of the type, energy, and location of radiation received by the individual;
  - The individuals' dose histories are recorded for the current year if occupational exposures are received from other than the Contractor's facility;

- Dose records include the exposure history if the individuals are involved in a planned special exposure;
  - Any emergency exposures received are recorded in the individuals' records;
  - The dose reported by the vendor is consistent with the exposure information provided by the Contractor i.e., deep vs. shallow, lens of the eye, specific extremity for special dosimeters, skin, or area of skin;
  - If the individuals' dosimeters are lost/damaged/or not worn, the results of the dose determinations are included in the record;
  - If internal exposures occur, sufficient information is provided to record the committed dose equivalent, committed effective dose equivalent, and total effective dose equivalent;
  - If one of the individuals is a “declared pregnant worker,” the dose to the embryo/fetus is recorded;
  - If the individuals' records of dose are available to him/her.
- 4.2.2 Determine, based on record review and discussion with Contractor representatives, whether all individual monitoring and dose records have been maintained by the Contractor or provided to DOE on cessation of activities, and whether other data necessary to allow future verification or reassessment of dose has been recorded and maintained. (RPP, Requirements 77, 84, and 87)
- 4.2.3 Select the records for 10 individuals who are provided individual monitoring, but are not required to be monitored, and confirm the records are maintained as in 4.2.1 above. (RPP, Requirement 79)
- 4.2.4 Based on the results of the records reviewed above, determine if any adverse observations are caused by failure to follow procedures or, possibly, as a result of inadequate procedures.

### **4.3 Adequacy and Effectiveness of Area Monitoring and Workplace Records**

To assess the adequacy and effectiveness of the area monitoring and workplace monitoring records, the inspector should perform the following:

- 4.3.1 If possible, the inspector should select at least five topics from the following list, which were not examined during a previous ITP inspection. Scan the records available related to those topics and select at least three records from each topic for detailed review. Determine if the records have been maintained in accordance with the RCP procedures and RPP, Requirements 86 through 89.

- Technical basis documents which define the types, intensity, and energy of radiation and radioactive material throughout the facility.
- Radiation and radioactive material monitoring instrumentation calibration, maintenance, use, and control.
- Counting equipment calibration and quality control.
- Installed area radiation and airborne monitoring equipment recorder data.
- Individual dosimetry/bioassay vendor contracts, procedures, quality control, audits, and correspondence.
- Pocket dosimeter qualification, calibration, maintenance, and use records.
- Routine area direct radiation, contamination, and airborne sampling results;
- Special monitoring or evaluations performed to establish Radiation Work Permit (RWP) controls.
- RWPs.
- Special monitoring performed to support engineering and work control decisions.
- Monitoring in response to incidents and emergencies, including personnel contamination.
- High and very high radiation area access control and radiation monitoring.
- Radiological area posting, monitoring, and access.
- Radioactive material labeling, storage, access, and inventory.
- Sealed source inventory, leak testing, and use.
- Release of potentially contaminated materials and equipment.
- Shipping and receiving of radioactive material.
- Radiological emergency response.

4.3.2 Based on the results of the records reviewed above, the inspector should determine if any adverse observations were caused by failure to follow procedures or possibly, as a result of inadequate procedures.

#### **4.4 Adequacy and Effectiveness of RCP Administrative Records**

To assess the adequacy and effectiveness of the RCP administrative records, the inspector should perform the following:

4.4.1 If possible, select at least three topics from the following list, which were not examined during a previous ITP inspection. Scan the records available related to those topics and select at least two records from each topic for detailed review. Determine if the records have been maintained in accordance with the RCP procedures and RPP, Requirements 90 through 95.

- Training records, including General Employee, Radiological Worker, Radiological Control Technician, Radioactive Waste Classification and Transport, Instrument Repair and Calibration, ALARA, Planned Special Exposure, and Non-Technician job specific and professional development.
- ALARA program design and implementation.
- Respiratory protection program.
- Audits, inspections, assessments, reviews and actions taken in response to observations.
- Radioactive material management program, including shipping and disposal.
- Declarations of pregnancy, estimated dates of conception, and revocations of declarations.
- Changes in equipment techniques and procedures used for monitoring.
- Sealed radioactive source control, inventory, and leak testing.
- Changes to RCP procedures and documents.
- Entry and access control.

4.4.2 Based on the results of the records reviewed above, the inspector should determine if any adverse observations are caused by failure to follow procedures or possibly, as a result of inadequate procedures.

#### **4.5 Adequacy and Effectiveness of RCP Reports**

To assess the adequacy and effectiveness of RCP radiological reports, the inspector should perform the following:

4.5.1 If possible, the inspector should select at least three topics from the following list, which were not examined during a previous ITP inspection. Scan the reports related to those topics and select at least two reports from each topic for detailed review. Determine if the reports contain the required information, are prepared, reviewed, and approved in accordance with the RCP procedure, and are distributed in accordance with timeliness requirements.

- Planned special exposures.
- Individually requested dose reports, annual dose reports, termination reports, and at any time reports are made to the DOE concerning individual exposure.
- Leaking sealed sources.
- Contamination incidents and unplanned releases of radioactive material.
- Individual dose in excess of regulatory limits.
- Annual radiological reports to DOE.

4.5.2 Based on the results of the reports reviewed above, the inspector should determine if any adverse observations are caused by failure to follow procedures or possibly, as a result of inadequate procedures. Before reaching a conclusion regarding the adequacy of procedures the matter should be discussed with the RPM as in Section 4.1.2.3 above.

#### **4.6 Adequacy and Effectiveness of Conformance with the Privacy Act**

Any system of records retrieving information concerning individuals by personal identifiers, such as name, any identifying numbers (e.g., Social Security Number or payroll number), symbol, or other identifying particulars assigned to the individual, is subject to the Privacy Act. Records of deceased individuals are not covered by the Privacy Act, but are subject to the Freedom of Information Act (FOIA).

The objective of this inspection element is to determine if the Contractor has established and implemented controls to ensure an individual's dose records are not revealed to anyone other than the individual, DOE, or Contractor personnel who have a need to know without prior written consent of the individual. (RPP, Requirement 99)

Using the Contractor's procedure implementing the Privacy Act, the inspector should perform the following:

- 4.6.1 Select 10 requests for prior occupational radiation dose history records and verify the procedure is followed.
- 4.6.2 Review the distribution list, including electronic distribution, for any reports of unplanned dose or dose in excess of regulatory limits, to determine if the individual's

identity is released to members of the public or DOE/Contractors not having a need to know.

- 4.6.3 During tours of the facility, observe if printouts or other media containing the identity and dose of individuals are made readily available. Any observation of this practice should be consistent with RCP procedures or discussed with the Contractor representative to determine if the “need to know” criteria has been satisfied.
- 4.6.4 Based on the results of the reports reviewed above and tours of the facility, determine if any adverse observations are caused by failure to follow procedures or possibly, as a result of inadequate procedures.

## 5.0 REFERENCES

10 CFR 835, “Occupational Radiation Protection,” *Code of Federal Regulations*, as amended.

10 CFR 1008, “Records Maintained on Individuals (Privacy Act),” *Code of Federal Regulations*.

ANSI/HPS N13.6-1999, *Practice for Occupational Radiation Exposure Records Systems*, American National Standards Institute (ANSI), 1999.

DOE G 441.1-11, *Occupational Radiation Protection Record-Keeping and Reporting Guide*, U.S. Department of Energy, 1999.

*Integrated Safety Management Plan*, 24590-WTP-ISMP-ESH-01-001, Rev. 3, Bechtel National, Inc., 2003.

*Preliminary Safety Analysis Report to Support Construction Authorization*, 24590-WTP-PSAR-ESH-01-002, Volumes I through IV, latest versions, Bechtel National, Inc.

*Quality Assurance Manual*, 24590-WTP-QAM-QA-01-001, Rev. 4, Bechtel National, Inc., 2003.

*Radiation Protection Program for Design and Construction*, 24590-WTP-RPP-ESH-01-001, Rev. 0, Bechtel National, Inc., 2001.

RL/REG-98-26, *Inspection Technical Procedures*, U.S. Department of Energy, Office of River Protection, 2003.

ITP I-131, “Document Control and Records Management Program”

ITP I-140, “RCP Programmatic Assessment”

*Safety Requirements Document*, 24590-WTP-SRD-ESH-01-001-02, Volume II, Rev. 2j, Bechtel National, Inc., 2003.

## 6.0 LIST OF TERMS

ALARA	as low as is reasonably achievable
ANSI	American National Standards Institute
DOE	U.S. Department of Energy
FOIA	Freedom of Information Act
ISMP	Integrated Safety Management Plan
ITP	Inspection Technical Procedure
ORP	Office of River Protection
PSAR	Preliminary Safety Analysis Report
QAM	Quality Assurance Manual
RCP	Radiological Control Program
RPP	Radiation Protection Program
RWP	Radiation Work Permit
SC	Safety Criterion
SRD	Safety Requirements Document
WTP	Waste Treatment and Immobilization Plant

Attachment: None