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## INSPECTION PROCEDURE 84750

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### RADIOACTIVE WASTE TREATMENT, AND EFFLUENT AND ENVIRONMENTAL MONITORING

PROGRAM APPLICABILITY: IMC 2561, Appendix A; and IMC 2800

NOTE: IMC 2515, Appendix A and G, refer to this procedure as a supplemental procedure for use during transition from an operating power reactor to a decommissioning reactor facility.

#### 84750-01 INSPECTION OBJECTIVES

- 01.01 To ensure that the radioactive waste treatment systems are maintained and so that radiological discharges are properly controlled, mitigated, monitored, and evaluated with regard to public exposure.
- 01.02 To ensure that abnormal radioactive gaseous or liquid discharges and conditions, when effluent radiation monitors are out-of-service, are effectively controlled, monitored, and quantified in accordance with applicable regulatory requirements and licensee procedures.
- 01.03 To ensure that the licensee's quality control program ensures that the radioactive effluent sampling and analysis requirements are satisfied so that discharges of radioactive materials are adequately quantified and evaluated from all established release points and any unmonitored and uncontrolled discharge path.
- 01.04 To ensure that Radiological Environmental Monitoring Programs (REMP): are effectively implemented, consistent with technical specifications (TS), and offsite dose calculation manual (ODCM); quantifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid release program; and meets the design objectives in Appendix I to 10 CFR Part 50.
- 01.05 To verify the adequacy of public dose calculations and projections resulting from radioactive effluent discharges.
- 01.06 To verify that the licensee is continuing to implement the voluntary NEI/Industry Ground Water Protection Initiative (GPI).
- 01.07 To conduct a routine review of problem identification and resolution activities associated with radioactive waste treatment and effluent and environmental monitoring per Inspection Procedure (IP) 40801, "Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors."

## 84750-02 INSPECTION REQUIREMENTS

### 02.01 Audits and Appraisals

Review the results of audits and appraisals performed since the last inspection. Review deficiency reports (also referred to as incident reports, off-normal 2 occurrence reports) issued for the effluent and environmental monitoring equipment, the radioactive waste treatment systems, and the groundwater monitoring program (GPI). Evaluate the adequacy of the licensee's corrective actions.

### 02.02 Changes in the Offsite Dose Calculations Manual (ODCM), Process Control Program (PCP), and Radwaste System Design and Operation

Review any significant changes made by the licensee to the ODCM, PCP, as well as to the liquid, gaseous, and solid radwaste system design and operation since the last inspection.

### 02.03 Process and Effluent Radiation Monitors

- a. As applicable, walk down 1-3 effluent radiation monitoring systems, include at least one liquid and one airborne system, and verify that effluent/process monitor configurations align with ODCM descriptions. For portions of the systems that are inaccessible, review the licensee's material condition and surveillance records.
- b. For the systems selected above, verify that the systems are operational with their alarm/trip setpoints properly set, properly calibrated and that they are maintained as specified in the ODCM or in the radiological effluent technical specifications (RETS), as appropriate.
- c. When possible for gaseous waste processing, observe selected portions of the routine processing and discharge of radioactive gaseous effluent (including sample collection and analysis). Verify that appropriate treatment equipment is used and the processing activities align with discharge permits.
- d. Evaluate any significant changes to the licensee's effluent release points, since the last inspection to verify they were adequately evaluated.
- e. When possible for liquid waste processing, observe the routine processing and discharge of effluents (including sample collection and analysis) to verify that appropriate effluent treatment equipment is being used and that radioactive liquid waste is being processed and discharged in accordance with procedure requirements and aligns with discharge permits.

### 02.04 Dose Commitments

- a. Review 1-3 radioactive liquid and 1-3 gaseous waste discharge permits, as applicable. Verify that the projected doses to members of the public are accurate and based on representative samples of the discharge path.
- b. For the radioactive liquid and gaseous waste discharges reviewed in (a) above, verify that the calculated doses, using the calculations specified in the ODCM, (monthly,

quarterly, and annual dose) are within the 10 CFR Part 50, Appendix I and Technical Specification dose criteria.

- c. Select, as available, 1-3 records of any abnormal gaseous or liquid tank discharges and verify the abnormal discharge was monitored by the discharge point effluent monitor. If discharges were made with inoperable effluent radiation monitors, or if unmonitored leakage occurred, verify that an evaluation was made of the discharge to satisfy the survey requirements of 10 CFR 20.1501.
- d. For changes to effluent monitor set points, evaluate the basis for changes to ensure that an adequate justification exists.
- e. Check the licensee's Radioactive Effluent Release Report(s) to determine that the reports were submitted as required, anomalous results and trends were evaluated, and the report format satisfied the recommendations of Regulatory Guide 1.21.

#### 02.05 Radwaste Storage

Determine if gaseous, liquid, and solid radwaste are adequately stored in the engineered storage tanks or areas, as appropriate.

- a. Select 1-3 areas where containers of radioactive waste are stored, and verify that the containers are labeled and controlled.
- b. Verify that the radioactive materials storage areas are controlled, posted and secured against unauthorized removal.
- c. Verify that the licensee has established a process for monitoring the impact of low-level radioactive waste storage sufficient to identify potential unmonitored, unplanned releases or nonconformance with waste disposal facility requirements.
- d. Verify that the licensee is performing periodic container inventories and inspections sufficient to meet 10 CFR 20.1406(c) and 10 CFR 20.1501(a)(2) requirements. Select 5-10 containers of stored radioactive materials, and verify that there are no signs of swelling, leakage, and deformation.

#### 02.06 Radiological Environmental Monitoring Program

- a. Walk down 1-3 air sampling stations and 2-3 of the thermoluminescent dosimeter (TLD) monitoring stations to determine whether they are located as described in the ODCM and to determine the equipment material condition.
- b. For the air samplers selected above, review the calibration and maintenance records to verify that they demonstrate adequate operability of these components.
- c. Observe the collection and preparation of 1-2 environmental samples from different environmental media and verify that environmental sampling is representative of the release pathways as specified in the ODCM and that sampling techniques are in accordance with procedures.

- d. As available, evaluate the licensee's actions in response to 3-5 events that involved a missed sample, inoperable sampler, lost TLD, or anomalous measurement.
- e. Select 1-3 structures, systems, or components (SSCs) that involve or could reasonably involve licensed material for which there is a credible mechanism for licensed material to reach ground water, and verify that the licensee has implemented a sampling and monitoring program sufficient to detect leakage of these SSCs to ground water.
- f. Review the licensee's monitoring results to implement the voluntary NEI/Industry Ground Water Protection Initiative (GPI) to determine if the licensee has implemented its program as intended, and to identify any anomalous results. For anomalous results or missed samples, determine if the licensee has identified and addressed deficiencies through its corrective action program.
- g. Review identified leakage or spill events and entries made into 10 CFR 50.75 (g) records. Review evaluations of leaks or spills, and review any remediation actions taken for effectiveness. Review onsite contamination events involving contamination of ground water (Lessons Learned Task Force (LLTF recommendation #17). Assess whether the source of the leak or spill was identified and mitigated.

Note: Limited, defined documentation of the review of abnormal or unplanned radioactive discharges (e.g., leaks and spills) should be provided in the inspection reports (see also IMC 0612) (LLTF recommendation #19)

- h. For unmonitored spills, leaks, or unexpected liquid or gaseous discharges, ensure that an evaluation was performed to determine the type and amount of radioactive material that was discharged.
  - 1. Assess whether sufficient radiological surveys were performed to evaluate the extent of the contamination and the radiological source term. Verify that a survey/evaluation has been performed to include consideration of hard-to-detect radionuclides.
- i. Determine whether the licensee completed offsite notifications; as provided in its GPI implementing procedures.
- j. Review the evaluation of discharges from onsite surface water bodies that contain or potentially contain radioactivity, and the potential for ground water leakage from these onsite surface water bodies. Determine if the licensee is properly accounting for discharges from these surface water bodies as part of its effluent release reports.
- k. Verify that on-site ground water sample results and a description of any significant onsite leaks/spills into ground water for each calendar year are documented in the Annual Radiological Environmental Operating Report (AREOR) for REMP or the Annual Radiological Effluent Release Report (ARERR).
- l. For significant, new effluent discharge points (such as significant or continuing leakage to ground water that continues to impact the environment if not remediated), determine if the ODCM was updated to include the new release point and includes the bases for all new assumptions and parameters used in dose calculations.

#### 02.07 Meteorological Monitoring Program

If applicable, verify that the meteorological instruments are operable, calibrated, and maintained in accordance with guidance contained in the FSAR, and licensee procedures. Verify that the meteorological data readout and recording instruments in the control room and, if applicable, at the tower are operable.

#### 02.08 Environmental Monitoring Quality Assurance (QA) Program

- a. If the licensee uses a vendor laboratory to analyze REMP samples, verify that the vendor's quality control program, including inter-laboratory comparison programs, is adequate.
- b. Review the results of the licensees' inter-laboratory comparison program to verify the adequacy of environmental sample analyses performed by the licensee. If applicable, review the licensee's determination of any bias to the data and the overall effect on the REMP.

#### 02.09 Problem Identification and Resolution

For each sample, conduct a periodic review of problem identification and resolution activities using IP 40801.

Utilize IP 40801 to evaluate the effectiveness of licensee controls in identifying, resolving, and preventing issues that degrade site safety or impact the quality of decommissioning activities, and to determine whether the corrective action program, audits, and assessments are conducted in accordance with the requirements of the NRC-approved quality assurance (QA) program and 10 CFR 50 Appendix B.

### 84750-03 INSPECTION GUIDANCE

#### 03.01 Audits and Appraisals

Look particularly for those audits that probe for programmatic weaknesses and assess the quality of the program. Focus upon licensee followup actions for identified issues. Review licensee deficiency (incident or off-normal) reports regarding effluent and environmental monitoring program issues. Are negative performance trends identified and are subsequent corrective actions timely and technically acceptable?

#### 03.02 Changes in the ODCM, PCP, and Radwaste System Design and Operation

The existence of certain plant structures, systems, and components (and the associated radiological source terms) may change as plants transition from an operating power reactor to a decommissioning reactor facility. As such, inspections should focus on areas of this procedure applicable to the current status of the plant. The licensee may be able to utilize the change criteria from 10 CFR 50.59 (Changes, tests and experiments) to update some facility monitoring requirements. Additionally, changes to the ODCM must be evaluated separately in accordance with Technical Specification or Quality Assurance Program requirements.

Check descriptions provided in the licensee's most recent Radioactive Effluent Release Reports of major design changes to the solid radwaste processing system and changes to the Process Control Program.

### 03.03 Process and Effluent Radiation Monitors

- a. Focus on any flow measurement devices and all accessible point-of-discharge liquid and gaseous effluent monitors of the selected systems. Look for monitor degradation and out-of-service tags. For effluent sampling systems (e.g., SPINGs), look for indications of non-representative sampling such as severe bends in sample line tubing, non-isokinetic sampling, or lack of heat tracing in areas where temperature extremes could have an impact (causing condensation and plate-out). Additionally, be alert to degraded ventilation system connections (e.g., flexible duct connectors) that could contribute to releases. Guidance on sampling systems is contained in ANSI N13.1-1969/1999, "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities," and ANSI N13.10-1974/ANSI N42.18-2004, "Specification and Performance of Onsite Instrumentation for Continuously Monitoring Radioactivity in Effluents."
- b. Focus on point of discharge effluent monitors and others, if time permits. Guidance on calibration program requirements is in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste"; Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination)—Effluent Streams and the Environment"; ANSI Standard N13.1-1969/1999, "Sampling Airborne Radioactive Materials in Nuclear Facilities"; and Health Physics Positions (HPPOS) 040 and 229 in NUREG/CR-5569, Revision 1, "Health Physics Positions Data Base," dated May 1, 1992. If an instrument is not calibrated correctly, determine generic applicability and actual and potential exposure impact, and assess the impact with respect to control or emergency preparedness. Deficiencies should be entered into the licensee's corrective action program. Notify regional EP inspector if any issues are found with effluent monitors found in the licensee's approved emergency action level scheme.
- c. No inspection guidance.
- d. In general, discharge points that are secondary dispersion/dilution points (i.e., those originating from authorized effluent discharges such as rain-out into storm drains or drainage from equipment condensation, including freezers) do not need further evaluation (see RIS 2008-03). However, the discharge of radioactive material from unusual discharge points (e.g., pumping of water from cable trays) needs an evaluation prior to discharge. This evaluation can be a bounding evaluation for less significant release points (see RG 1.21, Rev. 2). Some changes may require a 10 CFR 50.59 review, or prior NRC approval (e.g., burning contaminated oil in an auxiliary boiler). Consider if changes are subject to 10 CFR 50.59 reviews or NRC approval (e.g., alternate discharge points).
- e. No inspection guidance.

#### 03.04 Dose Commitments

- a. No inspection guidance.
- b. No inspection guidance.
- c. Consider discharges resulting from misaligned valves and valve leak-by, etc.
- d. Determine if the set points are based on an appropriate effluent radionuclide (noble gas) mix so as not to exceed the effluent dose limits in 10 CFR Part 20 and the design constraints in 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents." The radionuclide mix used in the calculation should be the same as or more conservative (lower average energy) than the licensee's actual source term mix.
- e. Check the licensee's Radioactive Effluent Release Report(s) to determine that the reports were submitted as required, anomalous results and trends were evaluated, and the report format satisfied the recommendations of Regulatory Guide 1.21. Note that an area where an unplanned release occurred into the on-site environs (e.g., a leak or spill) should be identified as an "impacted area" for decommissioning purposes in accordance with NUREG-1757, "Consolidated Decommissioning Guidance," issued September 2006. Also consider reviewing how the licensee documents this event in accordance with 10 CFR 50.75(g).

#### 03.05 Radwaste Storage

Are gaseous, liquid, and solid radwaste adequately stored, monitored, and inventories maintained, as described in the safety analysis reports?

- a. Labelling should be in accordance with 10 CFR 20.1904, "Labeling Containers," or material should be controlled in accordance with 10 CFR 20.1905, "Exemptions to Labeling Requirements," as appropriate. Do not duplicate inspection effort performed under Inspection Procedure 71124.01.
- b. For materials stored or used in the controlled or unrestricted areas, verify that they are secured against unauthorized removal and controlled in accordance with 10 CFR 20.1801, "Security of Stored Material," and 10 CFR 20.1802, "Control of Material Not in Storage," as appropriate.
- c. Inspectors should consider buildup of any gases produced by waste decomposition, chemical reactions, container deformation, loss of container integrity, or re-release of free-flowing water. Additional guidance of LLW storage is provided in Regulatory Issue Summary 08-32, "Interim Low Level Radioactive Waste Storage at Reactor Sites," Additionally, see Information Notice 90-50, "Minimization of Methane Gas in Plant Systems and Radwaste Shipping Containers," August 8, 1990.
- d. See Regulatory Guide 4.22, "Decommissioning Planning during Operations." for guidance on container inventories and inspections.

Note: The inspector should exercise caution in that some of these containers may exhibit elevated dose rates and some containers may not be accessible. Container conditions can be verified by review of licensee programs or by direct observation, consistent with as low as reasonably achievable (ALARA) principles.

### 03.06 Radiological Environmental Monitoring Program

- a. Consistent with smart sampling, the air sampling stations should be selected based on the locations in the downwind sectors with the highest concentration per unit release rate (X/Q), and highest deposition per unit release rate (D/Q), and thermoluminescence dosimeters (TLDs) should be selected based on the most risk-significant locations (e.g., those that have the highest potential for public dose impact). Shifts in wind sectors with the highest X/Q and D/Q may be detected by comparing several years of the licensee's meteorological data.
- b. No inspection guidance.
- c. No inspection guidance.
- d. Review missed and or anomalous environmental samples to identify if they should be reported in the annual environmental monitoring report. Review the licensee's assessment of any positive sample results (i.e., licensed radioactive material detected above the lower limits of detection (LLDs)). Review the associated radioactive effluent release data that was the source of the released material. Ensure that the licensee has addressed any positive indications in the environmental monitoring samples and has adjusted the effluent monitoring program and dose modeling, as appropriate to ensure the accuracy of the models. (See Section 6.8 in NUREG-1301, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors," and in NUREG-1302, "Offsite Dose Calculation Guidance: Standard Radiological Effluent Controls for Boiling Water Reactors," issued April 1991.)
- e. Some examples of SSCs are outdoor refueling water storage tanks, spent fuel pools, spent fuel pool leak detection systems, outdoor tanks, outdoor storage of contaminated equipment, buried piping, retention ponds, basins, or reservoirs, and steam lines. Some examples of leak detection methods for the SSCs are ground water monitoring, operator rounds, engineering walk downs or inspections, leak detection systems, or periodic integrity testing.
- f. Monitoring results are provided in the licensee's Annual Radiological Effluent Release Report or the Annual Radiological Environmental Operating Report.

For Part 50 licensees, adequate implementation of the NEI-GPI provides one acceptable method of implementing the Decommissioning Planning Rule requirements in 10 CFR 20.1406 and 10 CFR 20.1501 in accordance with RG 4.22, "Decommissioning Planning during Operations." If the licensee chooses other methods of implementing these requirements, review those methods of implementation.

For 10 CFR Part 52 licensees, in addition to complying with 10 CFR 20.1406, licensees are committed to implementing the GPI as part of their licensing basis, including use of the NEI 08-08A, "Generic FSAR Template Guidance for Life-Cycle Minimization of Contamination" as implemented in design features and operational programs.



- g. Assess whether sufficient radiological surveys were performed to evaluate the extent of the contamination and the radiological source term. Verify that a survey/evaluation has been performed to include consideration of hard-to-detect radionuclides. Note that the use of scaling factors can be used in bounding calculations. 10 CFR 50.75(g) files (or corrective action program files referencing 50.75(g) files) should contain a description of the leak or spill (isotopes and quantities), location and size of the impacted area, cross reference to survey results, and results of any remediation performed if undetected leakage has occurred or is suspected and insufficient monitoring/remediation actions have been taken by the licensee, discuss this issue with your supervisor. If assistance in assessing the adequacy of the licensee's onsite/offsite monitoring activities is needed and/or site hydrologic characteristics are not clearly defined, the program office should be consulted.
- h. No inspection guidance.
- i. No inspection guidance.
- j. Surface water bodies include: ponds, retention basins and lakes.
- k. No inspection guidance.
- l. Guidance on new release points is provided in Regulatory Guide 1.21 and Lessons Learned Task Force (LLTF) recommendation #17.

Note: In accordance with Regulatory Guide 1.109, a significant new exposure pathway exists if a conservative evaluation yields an additional dose increment equal to or more than 10 percent of the total from all exposure pathways considered in Regulatory Guide 1.109.

#### 03.07 Meteorological Monitoring Program

Compare readout data (i.e., wind speed, wind direction, and delta temperature) in the control room and at the meteorological tower to identify any differences that would indicate that inaccurate data are being used for dose determination. NOTE: This program may become defunct after fuel is in an ISFSI.

Note that most 10 CFR Part 50 licensees will not be committed to Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants," but may be committed to Safety Guide 23, "Onsite Meteorological Programs," (1972).

#### 03.08 Environmental Monitoring Quality Assurance (QA) Program

Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent Streams and the Environment," provides guidance for the content and extent of an acceptable program.

- a. No inspection guidance.
- b. RG 1.33, 1.21 and 4.15 provide guidance for licensees participating in an intra-laboratory and inter-laboratory comparison program to verify the quality of analyses.

### 03.09 Problem Identification and Resolution

In accordance with IP 40801, the inspector's evaluation of licensee or contractor's self-assessment, auditing, and corrective actions should reflect a balanced safety perspective. Appropriate recognition during the inspection should be provided regarding the conduct of activities performed above and beyond that required by regulations. Similarly, credit for licensee identified deficiencies, programmatic weaknesses, and violations, when coupled with effective and timely corrective actions, should be reviewed and addressed accordingly.

### 84750-04 RESOURCE ESTIMATE

For planning purposes, the initial completion of this procedure is estimated to require 40 onsite inspection hours, with subsequent annual inspections requiring 18 to 40 hours, depending on the stage of decommissioning and level of activity at the site.

Note that for all decommissioning inspection activities, the frequency of performance, level of effort needed, and specific inspection requirements to be evaluated and verified vary based on the stage of decommissioning at the facility, the scope of licensee activities, and the overall decommissioning strategy chosen for the plant (i.e., SAFSTOR or DECON). IMC 2561 contains a discussion of the expected inspection frequency and resource estimates during each phase of decommissioning and should be used when planning resources to conduct this inspection.

### 84750-05 COMPLETION STATUS

Inspection findings, open items, follow-up items, and conclusions shall be documented in accordance with Inspection Manual Chapter 0610 and other relevant regional or headquarter instructions. Inspections resulting from allegations will be documented and dispositioned in accordance with Management Directive 8.8.

### 84750-06 REFERENCES

- 10 CFR Part 20.1406, "Minimization of contamination,"
- 10 CFR Part 20.1501, "Subpart F—Surveys and Monitoring, General,"
- 10 CFR Part 20.1801, "Security of stored material,"
- 10 CFR Part 20.1802, "Control of material not in storage,"
- 10 CFR Part 20.1904, "Labeling Containers,"
- 10 CFR Part 20.1905, "Exemptions to labeling requirements,"
- 10 CFR Part 50.59, "Changes, tests and experiments,"

10 CFR Part 50.75, "Reporting and recordkeeping for decommissioning planning,"

10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,"

10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents,"

10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants,"

ANSI N13.1-1969/1999, "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities,"

ANSI N13.10-1974/ANSI N42.18-2004, "Specification and Performance of Onsite Instrumentation for Continuously Monitoring Radioactivity in Effluents,"

Inspection Manual Chapter (IMC) 0610, "Nuclear Material Safety and Safeguards Inspection Reports,"

IMC 0612, "Issue Screening,"

IMC 2515, Appendix A, "Risk-Informed Baseline Inspection Program,"

IMC 2515, Appendix G, "Baseline Inspection Guidance for Power Reactors Preparing for Transition to the Decommissioning Phase,"

Information Notice 90-50, "Minimization of Methane Gas in Plant Systems and Radwaste Shipping Containers,"

Inspection Procedure (IP) 40801, "Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors,"

IP 71124.01, "Radiological Hazard Assessment and Exposure Controls,"

"Lessons Learned Task Force (LLTF) Report,"

Management Directive 8.8, "Management of Allegations,"

NEI 08-08A, "Generic FSAR Template Guidance for Life-Cycle Minimization of Contamination,"

NUREG-1301, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors,"

NUREG-1302, "Offsite Dose Calculation Guidance: Standard Radiological Effluent Controls for Boiling Water Reactors,"

NUREG-1757, "Consolidated Decommissioning Guidance,"

NUREG/CR-5569, Revision 1, "Health Physics Positions Data Base,"

Regulatory Guide 1.21, “Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste,”

Regulatory Guide 1.23, “Meteorological Monitoring Programs for Nuclear Power Plants,”

Regulatory Guide 1.33, “Quality Assurance Program Requirements (Operation),”

Regulatory Guide 1.109, “Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I,”

Regulatory Guide 4.15, “Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination)—Effluent Streams and the Environment,”

Regulatory Guide 4.22, “Decommissioning Planning during Operations.”

Regulatory Issue Summary 08-32, “Interim Low Level Radioactive Waste Storage at Reactor Sites,”

Regulatory Issue Summary 08-03, “Return/Re-use of Previously Discharged Radioactive Effluents,”

Safety Guide 23, “Onsite Meteorological Programs.”

END

ATTACHMENT 1

Revision History for IP 84750

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Numbers (Pre-Decisional, Non-Public Information)
N/A	9/30/1988 CN 88-014	Initial issuance for use in the Systematic Assessment of Licensee Performance (SALP) inspection program.	None Required	None
N/A	12/4/1990 CN 90-014	Revised to remove requirements and guidance relating to solid radioactive waste, which is now contained in the new IP 86750.	None Required	None
N/A	3/15/1994 CN 94-006	Revised to reflect the requirements of the new 10 CFR Part 20 and to add a new section addressing the effectiveness of licensee controls.	None Required	None
N/A	ML19270D639 11/14/19 CN 19-036	The procedure was completely re-written and updated to address recent revisions to IMC 2561, overall content and format changes, and to reflect additional lessons learned from ongoing decommissioning activities.	None Required	ML19270D638