



~~FSMENMSS~~ Procedure Approval

Office of Nuclear Materials Safety and Safeguards
Procedure Approval

Implementation of Management Directive 5.10,
“Formal Qualifications for IMPEP Team Members and Team Leaders”

SA-111

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Issue Date:

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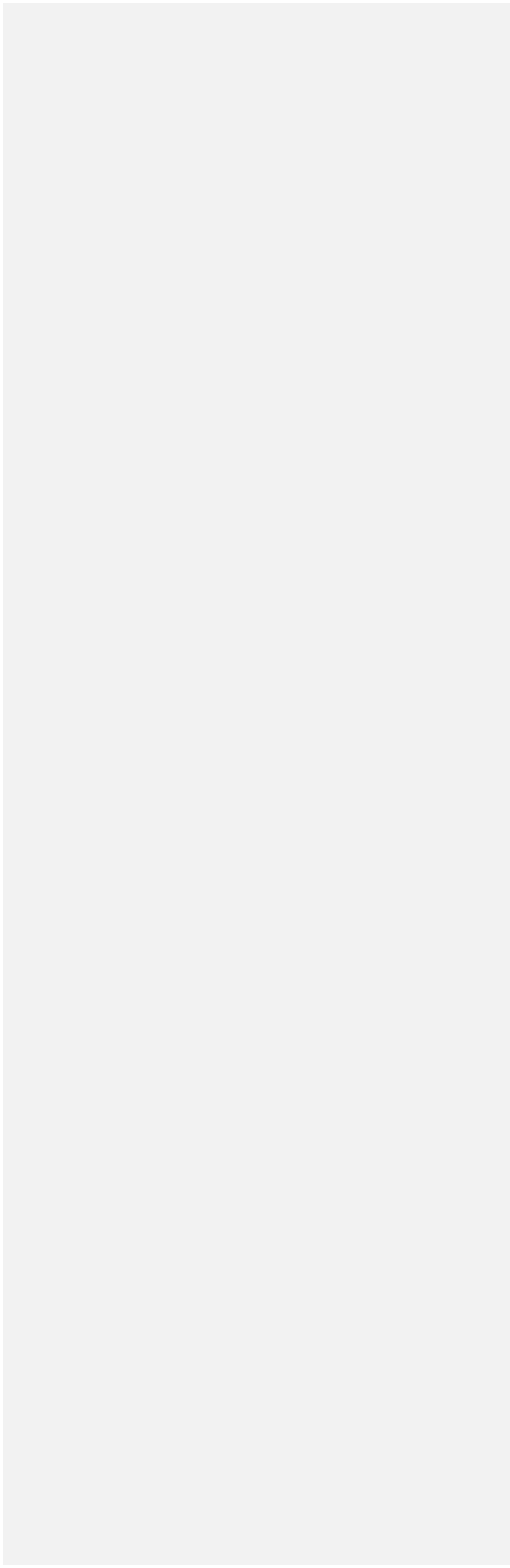
NOTE

~~These procedures were formerly issued by the Office of State and Tribal Programs (STP). Any changes to the procedure will be the responsibility of the FSMENMSS Procedure Contact as of October 1, 2006. Copies of FSMENMSS procedures will be available through the NRC website.~~

Any changes to the procedure will be the responsibility of the NMSS Procedure Contact.

Copies of NMSS procedures are available through the NRC Web site at <https://scp.nrc.gov>

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Procedure Title:
Formal Qualifications for IMPEP Team Members
and Team Leaders
Procedure Number: SA-111

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Issue Date:
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I. INTRODUCTION

This document describes the procedure for implementing NRC Management Directive (MD) 5.10, "Formal Qualifications for Integrated Materials Performance Evaluation Program (IMPEP) Team Members and Team Leaders." This procedure replaces Handbook 5.10.

II. OBJECTIVE

The training and qualification process is intended to provide IMPEP team members and team leaders with sufficient knowledge to conduct Agreement State and regional materials program reviews that are technically sound and in accordance with NRC policies and procedures. NRC and Agreement State employees designated as IMPEP team members and team leaders must successfully complete the requirements for individually assigned areas, as listed in Section V. of this procedure. In addition to the requirements of this procedure, other training may be necessary to supplement or enhance team member development. Exemption from specific training requirements may be granted in accordance with Section I.C of this procedure.

To facilitate implementation of this procedure within the Office of Nuclear Material Safety and Safeguards (NMSS), an IMPEP Qualification Cover Sheet; and IMPEP Basic Training Requirements, Indicator-Specific Qualifications, and Team Leader Qualification forms have been prepared (see Appendices A through C, respectively).

To implement the qualifications and training established in MD 5.10 within the Office of Nuclear Material Safety and Safeguards (STP) through the use of a written qualification guide for STPFSME IMPEP team members and team leaders.

III. BACKGROUND

NRC conducts periodic assessments of NRC Regional and Agreement State radiation control-radioactive materials programs and NRC Regional offices pursuant to Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program." IMPEP teams are comprised of staff from STPFSMENMSS, Office of Nuclear Material Safety and Safeguards (NMSS), NRC Regional offices, and Agreement States.

The training and qualification process detailed in MD 5.10 is intended to provide IMPEP team members and team leaders with sufficient knowledge to conduct NRC Regional and State radioactive materials program reviews that are technically correct and in accordance with NRC policies and procedures. To facilitate implementation of this directive within FSME, an IMPEP Qualification Form and an IMPEP Qualification Guides have been prepared (see Appendix A and Appendix B, respectively).

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IV. ROLES AND RESPONSIBILITIES

A. Director, STP-FSMENMSS:

1. ~~Ensure that personnel acting as IMPEP team members or team leaders meet the formal qualifications or alternate criteria as described in MD 5-10.~~
2. ~~Signs, or designates responsibility for signing, the IMPEP Qualification Form for each FSMENMSS IMPEP participant.~~

B. Agreement State Radiation Control Program Managers

Ensures that Agreement State personnel acting as IMPEP team members and team leaders, achieve and maintain qualifications in accordance with the guidelines in this procedure.

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CB. Senior IMPEP Project Manager, for IMPEP Coordination.

~~1. Maintains current copies of the IMPEP Qualification Form for all IMPEP team members and supporting IMPEP Qualification Guides for all IMPEP team members in STP.~~

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~~2. Ensures that individuals assigned as IMPEP team members, including team leaders, meet the formal qualifications or alternate criteria, as described in MD 5-10; and.~~

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1. ~~3. Tracks each IMPEP qualified individual's status and need for refresher training, per the policy for refresher training. Develops the IMPEP Team Member and Team Leader Training course modules in consultation with the Technical Training Center.~~

1. ~~a. The objective of the IMPEP team member training (course ID 58143) is to provide students with a general understanding of the structure of the IMPEP, including review preparation, the on-site review, and post-review activities. The essential elements of the course provides for an understanding of:~~

- i. the concept of performance-based reviews;

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- ii. the criteria from Management Directive 5.6 to make a rating determination for assigned indicators and provide input to the review team's overall findings for the program; and
 - iii. policies and procedures for applicable performance indicators.
- b. The objective of the IMPEP team leader training is to provide potential team leaders with an understanding of how to plan for an effective team. The essential elements of the course provides for understanding of how to:
 - i. plan for IMPEP reviews, including pre-review activities, on-site review, post-review activities, and inspection accompaniments;
 - ii. prepare the written report; and
 - iii. facilitate communication with the team and the program.

2. Solicits students from Agreement States programs.

3. Arranges training venue and provides training materials.

4. Consults with NRC regions and offices in determining NRC student roster.

a. 5. Maintains current copies of the IMPEP Qualification cover sheet (Appendix A), IMPEP Basic Training Requirements (Appendix B), Indicator-Specific Qualification and Team Leader Qualification forms (Appendix C) for all IMPEP team members and team leaders.

6. Ensures that individuals assigned as IMPEP team members, including team leaders, meet the formal qualifications or alternate criteria, as described in this procedure.

7. Tracks each IMPEP-qualified individual's status and need for refresher training, per the policy specified in Section V of this procedure.

D Immediate Supervisors of IMPEP Team Members

1. Ensure that employees confirmed for training attend the training; adjust work schedules, as necessary; and only withdraw an employee from a course in the event of a personal or agency emergency.
2. Will coordinate supplemental training for their employees with the IMPEP Project Manager.

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EC. IMPEP Team Members and Team Leaders:

1. Attend courses for which attendance has been confirmed and devote the effort required to achieve the maximum benefit from the training program.
2. Maintain core qualifications (refresher training) by attending IMPEP Team Member Training and/or participating in an IMPEP review within a 2 year period.
3. In addition to the above, team leaders receive additional training and experience specific to the duties/responsibilities that are required for that position.
4. Using the IMPEP Qualification cover sheet and forms (Appendices A-C), documents relevant course work and experience, as well as alternative criteria provisions, such as equivalency examinations, waivers, grandfathering, or interim qualification described in Section VII of this procedure, as appropriate, signs the IMPEP Qualification cover sheet, forwards copies of all IMPEP Qualification cover sheet and forms to the IMPEP Project Manager.
5. Updates the IMPEP Qualification cover sheet, Indicator-Specific Qualification forms and Team Leader Qualification form each time a new indicator qualification or team leader qualification is achieved, signs the IMPEP Qualification cover sheet and forwards to the IMPEP Project Manager.

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V. GUIDANCE

A. Documenting Qualifications:

1. Each IMPEP team member should complete an IMPEP Qualification Guide for each indicator ~~that the team member is qualified to act as principal reviewer for or team leader, as appropriate.~~
2. Each IMPEP team member should complete the "General IMPEP Qualifications" guide ~~in the IMPEP Qualification Guide.~~
3. The ~~Each~~ IMPEP team member should fully document any grandfathering, interim qualification, or other alternative means of qualification used (including journal qualification under NRC Inspection Manual Chapter 1246, Formal

~~Qualification Programs in the Nuclear Material Safety and Safeguards Program Area, etc.) in the "Alternative Criteria/Comments" sections provided in the IMPEP Qualification Guide. Attach additional sheets, if necessary.~~

- ~~4. The IMPEP Qualification Form should be signed by the IMPEP team member and the Director, STPFSME, or designee. All principal reviewer and team leader qualifications should be documented by the Director, STP.~~
- ~~5. A copy of each completed IMPEP Qualification Form and guide should be given to the Senior IMPEP Project Manager for IMPEP coordination to keep on file.~~

~~B. Updating Qualifications.~~

- ~~1. Each time a new course is completed or new qualification is achieved, the team member's personal IMPEP Qualification Guide should be updated, as appropriate.~~
- ~~2. A new IMPEP Qualification Form should be completed each time an IMPEP participant becomes qualified to act as principal reviewer for an additional indicator, or as team leader.~~
- ~~3. Refresher training should be documented as a line item on the appropriate indicator forms as necessary, on a refresher training page and attached to the team member's appropriate qualification guide.~~

~~C. Refresher Training~~

~~IMPEP team members are only required to attend refresher training if: 1) they did not participate in an IMPEP review the previous fiscal year; 2) they did not receive new member training in the previous fiscal year; and 3) they are scheduled for a review in the upcoming fiscal year.~~

V. TRAINING REQUIREMENTS

A. Guidelines

1. Written examinations will be used for designated courses to evaluate the candidate's understanding of the material. The passing grade for most examinations is 70 percent. However, not all courses have formal examinations. In these cases, satisfactory course completion is determined by attendance and completion of class activities.
2. Individuals who fail examinations may be given the opportunity to review the material through self-study and then be re-examined. If deemed necessary, individuals who fail a course may repeat the course in accordance with established policy of the Human Resources Training and Development, Office of the Chief Human Capital Officer.
3. In all cases, completion of formal training courses sponsored by the NRC will be documented using the ilearn Learning Management System of the NRC.

B. IMPEP Basic Training Requirements

The training described below is required for all IMPEP team members and team leaders.

1. Self-Study
 2. The team member should be familiar with the following:
 - a. NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)"
 - b. 10 CFR Parts 19 and 20
 - c. 10 CFR Parts 30-37 and 39
 - d. 10 CFR Parts 40, 61, 70 and 71
 - e. 10 CFR Part 150
2. Core Training

The IMPEP Team Member Training course as described in Section IV.C.1.a. is the minimum core formal classroom training required for all IMPEP team members and team leaders. Refer to Section VII of this procedure for exceptions to these requirements.

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3. Refresher Training

Refresher training will include IMPEP Team Member Training a minimum of once every 2 years, and other courses as determined by NRC management. Refresher training is not required for IMPEP Team members who have participated in an IMPEP as a Team Member within two years.

4. Professional Education/Experience

IMPEP team members must have a Bachelor's degree or equivalent training or experience in the physical/life sciences, engineering, or other appropriate field. The minimum amount of work experience required for all IMPEP team members is 2 years of experience with a radioactive materials program (including Agreement State program, fuel cycle, radioactive waste, or sealed source and device evaluation) before and within 5 years of participating in an IMPEP review.

C. Technical Staffing and Training Indicator

1. Qualifications

- a. Along with the IMPEP Basic Training Requirements in Sections V.B. of this procedure, the training described below is required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Staffing and Training.
- b. An IMPEP team member that is journal qualified as an inspector or license reviewer under NRC Inspection Manual Chapter 1248, "Formal Qualification Programs for Federal and State Material and Environmental Management Programs," or Agreement State equivalent, is by definition technically qualified to act as principal reviewer for this indicator.

2. Self-Study

The team member should be familiar with the following:

- a. NRC Inspection Manual Chapter 1248, "Formal Qualification Programs for Federal and State Material and Environmental Management Programs."

3. Supplemental Training

The following course provides additional training beyond that identified as required self-study. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

a. Root Cause/Incident Investigation Workshop (G-205)

4. Professional Experience

The minimum amount of work experience required for all IMPEP team members acting as principal reviewer for the common performance indicator, technical staffing and training, is 2 years of experience with a radioactive materials program (including Agreement State program, fuel cycle, radioactive waste, or sealed source and device evaluation) before and within 5 years of participating in IMPEP.

D. Status of Materials Inspection Program Indicator

Along with the IMPEP Basic Training Requirements outlined in Section V.B of this procedure, the training described below, or equivalent, is required for all IMPEP team members acting as principal reviewer for the common performance indicator, Status of Materials Inspection Program.

1. Self-Study

The team member should be familiar with the following:

a. NRC Inspection Manual Chapter 2800, "Materials Inspection Program."

b. NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20."

c. NRC Inspection Manual Chapter 0610, "Nuclear Material Safety and Safeguards Inspection Reports."

2. Indicator-Specific Training

The following courses provide additional training beyond that identified as self-study. This training, or equivalent, will be determined by the

individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

a. Inspection Procedures (G-108)

b. Root Cause/Incident Investigation Workshop (G-205)

c. Inspecting for Performance- Materials Version (G-304)

3. Professional Experience

The minimum amount of work experience required for all IMPEP team members acting as principal reviewer for the common performance indicator, Status of Materials Inspection Program, is 2 years of experience with a radioactive materials program (including Agreement State program, fuel cycle, radioactive waste, or sealed source and device evaluation) before and within 5 years of participating in an IMPEP review.

E. Technical Quality of Inspections Indicator

1. Qualifications

a. Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below, or equivalent, is required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Inspections, and for conducting inspector accompaniments.

b. An IMPEP team member that is journal qualified as an inspector under NRC Inspection Manual Chapter 1248, "Formal Qualification Programs for Federal and State Material and Environmental Management Programs" or Agreement State equivalent, is by definition technically qualified to act as principal reviewer for this indicator and to conduct inspector accompaniments.

2. Self-Study

The team member should be familiar with the following:

a. NRC Inspection Manual Chapter 2800, "Materials Inspection Program."

- b. [NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20"](#)
- c. [NRC Inspection Manual Chapter 0610, "Nuclear Material Safety and Safeguards Inspection Reports."](#)
- d. [NRC Inspection Procedure 87100 Series, "Licensed Materials Programs"](#)
- e. [All applicable temporary instructions related to materials programs](#)

3. [Indicator-Specific Training](#)

[The following courses establish minimum formal classroom training requirements for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Inspections.](#)

- a. [Inspection Procedures \(G-108\)](#)
- b. [Root Cause/Incident Investigation Workshop \(G-205\)](#)
- c. [Inspecting for Performance- Materials Version \(G-304\)](#)
- d. [Advanced Health Physics \(H-201\)](#)
- e. [Diagnostic and Therapeutic Nuclear Medicine \(H-304\)](#)
- f. [Safety Aspects of Industrial Radiography \(H-305\)](#)
- g. [Transportation of Radioactive Materials \(H-308\)](#)
- h. [Brachytherapy, Gamma Knife and Other Medical Uses \(H-313\)](#)
- i. [Materials Control, Security Systems & Principles \(S-201\)](#)
- j. [Gathering Information for Inspections through Interviews \(PDC\)](#)
- k. [Effective Communication for NRC Inspectors \(PDC\)](#)

4. [Supplemental Training](#)

[The following courses provide additional training beyond that identified as self-study and indicator-specific training. This additional training, or equivalent, will be determined by the individual's supervisor in](#)

consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

a. Environmental Monitoring for Radioactivity (H-111)

b. Air Sampling for Radioactive Materials (H-119)

c. Characterization and Planning for Decommissioning (H-115)

d. Respiratory Protection (H-311)

e. Internal Dosimetry and Whole Body Counting (H-312)

f. Safety Aspects of Well Logging (H-314)

g. Irradiator Technology (H-315)

5. Professional Experience

The minimum amount of work experience required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Inspections, is 2 years of experience as an independent inspector before and within 5 years of participating in IMPEP.

F. Technical Quality of Licensing Actions

1. Qualifications

a. Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Licensing Actions.

b. An IMPEP team member that is journal qualified as a license reviewer under NRC Inspection Manual Chapter 1248, "Formal Qualification Programs for Federal and State Material and Environmental Management Programs," or Agreement State equivalent, is by definition qualified to act as principal reviewer for this indicator.

2. Self-Study

The team member should be familiar with the following:

- a. NRC Inspection Manual Chapter 2800, "Materials Inspection Program."
- b. NUREG-1556 Series, "Consolidated Guidance About Materials Licenses."
- c. NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20."
- d. NRC Inspection Procedure 87100 Series, "Licensed Materials Programs."

3. Indicator-Specific Training

The following courses establish minimum formal classroom training requirements for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Licensing Actions.

- a. Licensing Practices and Procedures (G-109)
- b. Advanced Health Physics (H-201)
- c. Diagnostic and Therapeutic Nuclear Medicine (H-304)
- d. Safety Aspects of Industrial Radiography (H-305)
- e. Transportation of Radioactive Materials (H-308)
- f. Brachytherapy, Gamma Knife, and Other Medical Uses (H-313)
- g. Materials Control, Security Systems & Principles (S-201)

4. Supplemental Training

The following courses provide additional training beyond that identified as self-study and indicator-specific training. This training, or equivalent, will be determined by the individual's supervisor in consultation with the

IMPEP Project Manager and will depend on the individual's previous work experience.

- a. Inspection Procedures (G-108)
- b. Root Cause/Incident Investigation Workshop (G-205)
- c. Environmental Monitoring for Radioactivity (H-111)
- d. Air Sampling for Radioactive Material (H-119)
- e. Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Course (H-121)
- f. Internal Dosimetry and Whole Body Counting (H-312)
- g. Safety Aspects of Well Logging (H-314)
- h. Irradiator Technology (H-315)

5. Professional Experience

The minimum amount of work experience required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of Licensing Actions, is 2 years of experience as an independent license reviewer before and within 5 years of participating in IMPEP.

G. Technical Quality of Incident and Allegation Activities

1. Qualifications

- a. Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members acting as principal reviewer for the common performance indicator, Technical Quality of incident and Allegation Activities (Note: Only NRC personnel will review allegations during NRC regional reviews).
- b. An IMPEP team member that is journal qualified as an inspector under NRC Inspection Manual Chapter 1248, "Formal Qualification for Federal and State Material and Environmental Management Programs," or Agreement State equivalent, is by definition technically qualified to act as principal reviewer for this indicator.

2. Self-Study

The team member should be familiar with the following:

- a. NRC Management Directive 8.2, "NRC Incident Response Program."
- b. NRC Management Directive 8.3, "NRC Incident Investigation Program."
- c. NRC Inspection Manual Chapter 2800, "Materials Inspection Program," including guidance on allegations, references on incident response, and interactions with other agencies.
- d. NUREG-1303, "Incident Investigation Manual."
- e. Handbook on Nuclear Materials Event Reporting in the Agreement States (State reviews).
- f. Nuclear Materials Event Database
- g. NRC Management Directive 8.8, "Management of Allegations."

3. Indicator-Specific Training

These courses establish minimum formal classroom training requirements for all IMPEP team members acting as principal reviewer of the common performance indicator, Technical Quality of Incident and Allegation Activities.

- a. Inspection Procedures (G-108)
- b. Root Cause/Incident Investigation Workshop (G-205)
- c. Advanced Health Physics (H-201)
- d. Diagnostic and Therapeutic Nuclear Medicine (H-304)
- e. Safety Aspects of Industrial Radiography (H-305)
- f. Transportation of Radioactive Materials (H-308)
- g. Brachytherapy, Gamma Knife, and Other Medical Uses (H-313)

4. Supplemental Training

The following courses provide additional training beyond that identified as self-study and indicator-specific training. This training, or equivalent, will

be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

- a. Environmental Monitoring for Radioactivity (H-111)
- b. Air Sampling for Radioactive Material (H-119)
- c. Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (H-121)
- d. Internal Dosimetry and Whole Body Counting (H-312)
- e. Safety Aspects of Well Logging (H-314)
- f. Irradiator Technology (H-315)

5. Professional Experience

The minimum amount of work experience required for all IMPEP team members completing a review as part of the common performance indicator, Technical Quality of Incident and Allegation Activities, is to have had some involvement with incident and allegation response (e.g., experience in NRC's incident response group in headquarters or a regional office, experience with inspection or assessment of incident and allegation response programs, participation in allegation review boards, or serving as office allegation coordinator) before and within 5 years of participating in IMPEP.

H. Compatibility Requirements Indicator

Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members acting as principal reviewer for the non-common performance indicator, Compatibility Requirements.

1. Self-Study

The team member should be familiar with the following:

- a. NRC Management Directive 5.8, "Proposed 274b Agreements with States."
- b. NRC Management Directive 5.9, "Adequacy and Compatibility of Agreement State Programs."

c. [NMSS SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."](#)

d. [NMSS SA-201, "Review of State Regulatory Requirements."](#)

2. [Supplemental Training](#)

[The following course provides additional training beyond that identified as self-study. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous work experience and planned IMPEP activities in specific areas.](#)

a. [Root Cause/Incident Investigation Workshop \(G-205\)](#)

3. [Professional Experience](#)

[The minimum amount of work experience required for all IMPEP team members acting as principal reviewer for the non-common performance indicator, Compatibility Requirements, is direct involvement in some aspect of the promulgation of NRC or Agreement State regulations before and within 3 years of participating in IMPEP or the review of two Agreement State regulations for compatibility before and within 2 years of participating in IMPEP.](#)

I. [Sealed Source and Device Evaluation Program Indicator](#)

[Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members acting as principal reviewer for the non-common performance indicator, Sealed Source and Device \(SS&D\) Evaluation Program.](#)

1. [Self-Study](#)

[The team member should be familiar with the following:](#)

a. [NUREG-1556, Vol. 3, "Consolidated Guidance About Materials Licenses."](#)

b. [ANSI N538-1979, "Classification of Industrial Ionizing Radiation Gauging Devices."](#)

c. [ANSI N542-1977, "Sealed Radioactive Source Classification."](#)

d. Regulatory Guide 6.9, "Establishing Quality Assurance Programs for the Manufacture and Distribution of Sealed Sources and Devices Containing Byproduct Material."

2. Indicator-Specific Training

The following courses establish minimum formal classroom training requirements for all IMPEP team members completing a full technical review as principal reviewer for the non-common performance indicator, SS&D evaluation program.

a. Sealed Source and Device Workshop (G-116)

b. Advanced Health Physics (H-201)

3. Supplemental Training

The following courses provide additional training beyond that identified as self-study and indicator-specific training. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

a. Safety Aspects of Industrial Radiography (H-305)

b. Root Cause/Incident Investigation Workshop (G-205)

c. Brachytherapy, Gamma Knife, and Other Medical Uses (H-313)

d. Safety Aspects of Well Logging (H-314)

4. Professional Experience

The minimum amount of work experience required for all IMPEP team members completing a full technical review as principal reviewer for the non-common performance indicator, SS&D evaluation program, is 2 years as an independent SS&D reviewer before and within 5 years of participating in IMPEP.

J. Low-Level Radioactive Waste Disposal Program Indicator

Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members completing a technical review as principal reviewer for the non-common performance indicator, Low-Level Radioactive Waste (LLRW) Disposal Program.

1. Self-Study

The team member should be familiar with the following:

- a. NUREG-1199, "Standard Format & Content of a License Applications for a Low-Level Radioactive Waste Disposal Facility."
- b. NUREG-1200, "Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility."
- c. NUREG-1274, "Review Process for Low-Level Radioactive Waste Disposal License Applications Under Low-Level Radioactive Waste Policy Amendments Act."
- d. NRC Inspection Manual Chapter 2401, "Near Surface Low-Level Radioactive Waste Disposal Facility Evaluation Program."
- e. NUREG 1573, "A Performance Assessment Methodology for Low-Level Radioactive Waste Facilities."
- f. 10 CFR Part 61

2. Supplemental Training

The following course provides additional training beyond that identified as self-study. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

- a. Root Cause/Incident Investigation Workshop (G-205)

3. Professional Experience

The minimum amount of work experience required for all IMPEP team members completing a technical review as principal reviewer for the non-common performance indicator, LLRW disposal program, is 2 years of experience working as an inspector, license reviewer, or as a developer of regulatory programs for ensuring safety of LLRW disposal before and within 5 years of participating in IMPEP.

K. Uranium Recovery Program Indicator

Along with the IMPEP Basic Training Requirements in Section V.B. of this procedure, the training described below is required for all IMPEP team members

completing a technical review as principal reviewer for the non-common performance indicator, Uranium Recovery Program.

1. Self-Study

The team member should be familiar with the following:

- a. 10 CFR Part 40, Appendix A
- b. NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications."
- c. NUREG-1620, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act."
- d. NRC Inspection Manual Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program."
- e. NRC Inspection Manual Chapter 2641, "In-Situ Leach Facility Inspection Program."

2. Supplemental Training

The following course provides additional training beyond that identified as required self-study. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous education and work experience.

- a. Root Cause/Incident Investigation Workshop (G-205)

3. Professional Experience

The minimum amount of work experience required for all IMPEP team members completing a full technical review as principal reviewer for the non-common performance indicator, Uranium Recovery Program, is 2 years of experience working as an inspector, license reviewer, or as a developer of regulatory programs for ensuring safety of uranium recovery operations before and within 5 years of participating in IMPEP.

L. IMPEP Team Leader Training Requirements

Along with the IMPEP Team Leader training described in Section IV.C.1.b. and IMPEP Basic Training described in Section V.B. of this procedure, the training described below is required for all IMPEP team leaders.

1. Self-Study

The team leader should be familiar with the following:

- a. NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20".
- b. NRC Inspection Manual Chapter 1248, "Formal Qualification Programs for Federal and State Material and Environmental Management Programs."
- c. NRC Inspection Manual Chapter 2800, "Materials Inspection Program."
- d. NRC Management Directive 8.8, "Management of Allegations."

2. Team Leader-Specific Training

The following courses establish minimum formal classroom training requirements for all IMPEP team leaders.

- a. Inspection Procedures (G-108)
- b. Licensing Practices and Procedures (G-109)
- c. Advanced Health Physics (H-201)

3. Supplemental Training

The following courses provide additional training beyond that identified as self-study and team leader-specific training. This training, or equivalent, will be determined by the individual's supervisor in consultation with the IMPEP Project Manager and will depend on the individual's previous work experience and education.

- a. Root Cause/Incident Investigation Workshop (G-205)

- b. Diagnostic and Therapeutic Nuclear Medicine (H-304)
- c. Inspecting for Performance- Materials Version (G-304)
- d. Safety Aspects of Industrial Radiography (H-305)
- e. Transportation of Radioactive Materials (H-308)
- f. Brachytherapy, Gamma Knife and Other Medical Uses (H-313)
- g. Safety Aspects of Well Logging (H-314)
- h. Irradiator Technology (H-315)
- i. Effective Communications for NRC Inspectors [Professional Development Center (PDC)]
- j. Leading NRC Work Teams (PDC)
- k. NRC Materials Control, Security Systems & Principles (S-201)

4. Refresher Training

Refresher training will include the IMPEP Team Leader Training, as described in Section C.1.b., a minimum of once every 2 years and other courses as determined by NRC management. Refresher Team Leader Training is not required for IMPEP Team leaders who have participated in an IMPEP as a Team Leader within two years.

5. Professional Experience

- a. Five years of experience with a radiation materials program before and within 5 years of participating in IMPEP.
- b. Qualified to act as principal reviewer for at least two performance indicators.
- c. Participation in three IMPEP reviews as a principal reviewer for any indicator.
- d. Participation in two IMPEP reviews as team leader-in-training.
- e. A first-time team leader shall have an experienced qualified team leader as a member of the IMPEP team.

I. DOCUMENTATION OF IMPEP QUALIFICATIONS

A. Initial Qualifications

1. Each IMPEP team member should complete an IMPEP Qualification Cover Sheet (Appendix A) and specify each indicator that the team member is qualified to act as principal reviewer for or team leader, as appropriate. This cover sheet should be signed by the IMPEP team member and the Director, NMSS, or designee. A copy of the completed cover sheet should be provided to the IMPEP Project Manager.
2. Each IMPEP team member should complete the IMPEP Basic Training Requirements form (Appendix B). A copy of the completed form should be provided to the IMPEP Project Manager.
 - a. Any grandfathering, interim qualification, or other alternative means of qualification used (including journal qualification under NRC Inspection Manual Chapter 1248, Formal Qualification Program in the Federal and State Material and Environmental Management Programs, etc.) in the "Alternative Criteria/Comments" sections provided in the IMPEP Basic Training Requirements form. Attach additional sheets, if necessary.
3. Each IMPEP team member should complete the applicable Indicator-Specific Qualification forms or Team Leader form (Appendix C). A copy of the completed form should be provided to the IMPEP Project Manager.

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B. Updating Qualifications

1. Each time a new indicator qualification is completed or a team leader qualification is completed, the team member should complete the appropriate Appendix C form. A copy of the completed form should be provided to the IMPEP Project Manager.
2. A new IMPEP Qualification Form cover sheet (Appendix A) should be completed each time an IMPEP participant becomes qualified an additional indicator or as team leader. A copy of the completed form should be provided to the IMPEP Project Manager.

C. Refresher Training

Refresher training will include IMPEP Team Member Training a minimum of once every 2 years, and other courses as determined by NRC management. Refresher training is not required for IMPEP team members who have

participated in an IMPEP as a team member within two years. The IMPEP Project Manager will track refresher training for all team members.

II. Alternative Provisions

A. Equivalency Examinations

Equivalency examinations to validate specific course work may be taken by IMPEP team members or team leaders who, through prior experience and education, possess sufficient knowledge to otherwise meet the minimum requirements. Requests for equivalency examinations should be made from the individual's supervisor, along with any necessary additional management concurrence, to the Chief Learning Officer, Human Resources Training and Development, Office of the Chief Human Capital Officer. The supervisor should consider the candidate's ability to act as principal reviewer for a specific IMPEP performance indicator without the benefit of the additional knowledge and regulatory perspective that would be gained by attending the course. Use of these examinations is generally expected to be a rare occurrence.

B. Waivers

The Director, NMSS (or designee), Regional Administrator (or designee), and Agreement State Radiation Control Program Director (or designee) have the authority to permanently waive any requirement or extend the time period for any requirement listed for an IMPEP team member in this procedure. Justification for the waiver or extension must be documented and maintained in the individual's training file in the ilearn system.

C. Grandfathering on the Basis of Previous Experience and Training

An individual may be designated as qualified to independently review any IMPEP performance indicator(s) through grandfathering. A grandfathering qualification process, determined on the basis of previous IMPEP experience, may be applied to any individual who has sufficient experience in Agreement State and/or regional IMPEP reviews conducted before the effective date of this management directive. The individual's immediate supervisor in consultation with the IMPEP Project Manager should consider the candidate's ability to act as principal reviewer for a specific IMPEP performance indicator without receiving the benefit of the additional training and/or on-the-job experience. The supervisor should notify his or her branch chief, Office Director, Regional Administrator, or Agreement State Radiation Control Program Director that the individual is recommended as qualified to conduct independent reviews of specified IMPEP

performance indicators through grandfathering. Post qualification training should be considered for all individuals grandfathered into IMPEP. The Director NMSS (or designee), Regional Administrator (or designee), or Agreement State Radiation Control Program Director (or designee) will issue grandfathering qualification. Justification for grandfathering must be documented and maintained in the individual's training file (for NRC staff this will be maintained in the ilearn system).

D. Interim IMPEP Team Member Qualification

An IMPEP team member who has not completed all requirements for final qualification under the applicable listing in the procedure may obtain interim qualification to take part in an IMPEP review. The individual's supervisor in consultation with the IMPEP Project Manager will evaluate the individual's qualifications, identify the performance indicator(s) for which interim qualification is appropriate, and request management approval. A request will then be generated through the individual's management for interim qualification in the identified area(s). The request will be approved by the Director NMSS (or designee) for NMSS staff; by the appropriate Regional Administrator (or designee) for NRC regional staff; or by the appropriate Agreement State Radiation Control Program Director (or designee) for Agreement State staff. Approval of interim qualification will be documented and a record kept in the individual's training file in the ilearn system.

E. Post Qualification Training

This section identifies training requirements beyond those that are required for initial qualification for the experienced IMPEP team member or team leader. For team members who have received certification of initial qualification, additional training is identified in "Supplemental Training" and "Refresher Training," respectively, for each indicator in Section V. as applicable. Refresher training is required as specified and must be taken at the given frequency following initial qualification. This additional training recognizes that an IMPEP team leader or team member training does not stop with initial qualification, but that supplemental and refresher training should be made available for experienced team members on the basis of need, special circumstances, and the necessity of keeping current with NRC and Agreement State materials programs.

F. Program Revisions

This procedure will be periodically revised to reflect the training needs of IMPEP team members and team leaders as determined by changes to the IMPEP

review program. When a revision is issued, personnel who qualified under previous requirements shall remain qualified, but must complete any new training requirements in their area within 3 years from the date of the revision, if they wish to retain their eligibility. Personnel in the process of qualifying when a revision is issued, may complete their qualification under their original requirements, but must complete any new formal classroom training requirements in their area within 3 years from the date of the revision, if they wish to retain their eligibility. Exemptions to specific newly revised formal training requirements and extensions to the 3-year time period can be granted using the procedures outlined in Section VII.2 of this procedure.

III. APPENDICES

Appendix A - IMPEP Qualification Cover Sheet

Appendix B - IMPEP Basic Training Requirements Form

Appendix C – Indicator-Specific Qualification Forms and Team Leader Qualification Form

IV. DEFINITIONS

Core Training

The IMPEP Team Member Training course is the minimum formal classroom experience required for an IMPEP team member or team leader.

Equivalency Examination

An examination administered through the TTC, its contractors, or by management in lieu of specific course attendance.

Grandfathering

Qualification of an IMPEP team member to conduct independent State or regional program reviews in specific areas on the basis of previous experience and training.

Indicator-Specific Training

Minimum formal classroom experience required for an IMPEP team member to perform a review of an IMPEP indicator.

Interim Qualification

Qualifications of an IMPEP team member to conduct independent State or regional program reviews in specified areas before completion of all IMPEP Training and Qualification Records requirements.

Refresher Training

Training designed to update and maintain qualification.

Self-Study Documents

Documents with which the general use and/or application an IMPEP team member should have a general understanding.

Supplemental Training

Additional training beyond that identified as required initial training to enhance a team member's technical expertise. The additional training will be determined by the individual's supervisor in consultation with the IMPEP Project Manager.

V. REFERENCES

Title 10 of the Code of Federal Regulations (10 CFR), "Energy": 10 CFR Parts 19, 20, 30, 37, 39, 40, 61, 70, 71 and 150

Inspection Manual Chapters (IMC):

IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports."

IMC 1220, "Processing of NRC Form 241 and Inspection of Agreement State Licensees Operating under 10 CFR 150.20, Areas of Exclusive Federal Jurisdiction and Offshore Waters."

IMC 1248, "Formal Qualifications Program for Federal and State Material and Environmental Management Programs."

IMC 2401, "Near-Surface Low-Level Radioactive Waste Disposal Facility Inspection Program."

IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees."

IMC 2641, "In-Situ Leach Facilities Inspection Program."

IMC 2800, "Materials Inspection Program."

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[IMC 2801, "Uranium Mill 11e.\(2\) Byproduct Material Disposal Site and Facility Inspection Program."](#)

[NRC Inspection Procedures \(IP\):](#)

[IP 87100 Series, "Licensed Materials Programs"](#)

[Management Directives \(MD\):](#)

[MD 5.6, "Integrated Materials Performance Evaluation Program \(IMPEP\)."](#)

[MD 5.8, "Proposed 274b Agreements with States."](#)

[MD 5.9, "Adequacy and Compatibility of Agreement State Programs."](#)

[MD 8.2, "NRC Incident Response Program."](#)

[MD 8.3, "NRC Incident Investigation Program."](#)

[MD 8.8, "Management of Allegations."](#)

[NMSS State Agreement \(SA\) Procedures:](#)

[NMSS SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."](#)

[NMSS SA-201, "Review of State Regulatory Requirements."](#)

[NUREGs:](#)

[NUREG-1199, "Standard Format & Content of a License Applications for a Low-Level Radioactive Waste Disposal Facility."](#)

[NUREG-1200, "Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility."](#)

[NUREG-1303, "Incident Investigation Manual."](#)

[NUREG-1274, "Review Process for Low-Level Radioactive Waste Disposal License Applications Under Low-Level Radioactive Waste Policy Amendments Act."](#)

[NUREG-1556 series](#)

[NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications."](#)

[NUREG 1573, "A Performance Assessment Methodology for Low-Level Radioactive Waste Facilities."](#)

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[NUREG-1620, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act."](#)

[Regulatory Guide:](#)

[Regulatory Guide 6.9, "Establishing Quality Assurance Programs for the Manufacture and Distribution of Sealed Sources and Devices Containing Byproduct Material."](#)

[ANSI PUBLICATIONS:](#)

[ANSI N538-1979, "Classification of Industrial Ionizing Radiation Gauging Devices."](#)

[ANSI N542-1977, "Sealed Radioactive Source Classification."](#)

XI. ADAMS REFERENCE DOCUMENTS

[For knowledge management purposes, all previous revisions of this procedure, as well as associated correspondence with stakeholders, that have been entered into the NRC's Agencywide Document Access Management System are listed below.](#)

No.	Date	Document Title/Description	Accession Number
1	12/1/00	STP Procedure SA-111	ML003781945
2	8/31/06	STP-06-079, Opportunity to Comment on Draft Revisions to STP Procedure SA-111	ML062440119
3	8/31/06	Draft STP Procedure SA-111	ML062440126
4	1/5/99	MD and Handbook 5.10	ML041410573

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Appendix A



IMPEP QUALIFICATION COVER SHEET

IMPEP Team Member:

Signature Date

Printed Name Title

Office Director, Regional Administrator, or Agreement State Program Director (or Designee):

Signature Date

Printed Name Title

QUALIFICATION AUTHORIZATION
(Please check all applicable boxes)

COMMON PERFORMANCE INDICATORS:

- ☐ Technical Staffing and Training
- ☐ Status of Materials Inspection Program
- ☐ Technical Quality of Inspections
- ☐ Technical Quality of Licensing Actions
- ☐ Technical Quality of Incident and Allegation Activities

☐ TEAM LEADER

NON-COMMON PERFORMANCE INDICATORS:

- ☐ Compatibility Requirements
- ☐ Sealed Source and Device Evaluation Program
- ☐ Low-Level Radioactive Waste Disposal Program
- ☐ Uranium Recovery Program

NOTE

Based on the guidelines established in Management Directive 5.10, Formal Qualifications for IMPEP Team Members, the supervisor above verifies that this IMPEP team member is fully qualified to act as principal reviewer and/or team leader, as noted.

Appendix B

IMPEP BASIC TRAINING REQUIREMENTS
(for all IMPEP Team Members)

STAFF NAME:

<u>A. CORE TRAINING</u>	<u>COMPLETED?</u> (Y/N)	<u>COURSE DATE</u>
<u>IMPEP Team Member Training</u>		
<u>B. REFRESHER TRAINING</u>		<u>COURSE/IMPEP</u> <u>DATE</u>
<u>IMPEP Team Member Training or participation in IMPEP every</u> <u>two years</u>		
<u>C. SELF-STUDY</u>	<u>COMPLETED?</u> (Y/N)	
<u>NRC Management Directive 5.6, "Integrated Materials Performance Evaluation</u> <u>Program (IMPEP)"</u>		
<u>10 Code of Federal Regulations (CFR) 19 and 20</u>		
<u>10 CFR 30-37 and 39</u>		
<u>10 CFR 40, 61, 70 and 71</u>		
<u>10 CFR 150</u>		
<u>D. PROFESSIONAL EDUCATION/EXPERIENCE</u>		
<u>Bachelor's Degree or equivalent training or experience in the physical/life</u> <u>sciences, engineering, or other appropriate field</u>		
<u>2 years of experience with a radioactive materials program (including</u> <u>Agreement State program, fuel cycle, radioactive waste, or sealed source and</u> <u>device evaluation) before and within 5 years of participating in an IMPEP</u> <u>review</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

APPENDIX C

INDICATOR-SPECIFIC QUALIFICATION FORMS AND TEAM LEADER QUALIFICATION FORM

TECHNICAL STAFFING AND TRAINING

STAFF NAME:

<u>A. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COMPLETION</u> <u>DATE</u>
<u>NRC IMC 1248, "Formal Qualification Programs for Federal and State Material and Environmental Programs"</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
		<u>COMPLETED?</u> <u>(Y/N)</u>
<u>C. PROFESSIONAL EXPERIENCE - 2 years of experience with a radioactive materials program (including Agreement State program, fuel cycle, radioactive waste, or sealed source and device evaluation) before and within 5 years of participating in an IMPEP review.</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

STATUS OF MATERIALS INSPECTION PROGRAM

STAFF NAME:

<u>A. INDICATOR-SPECIFIC TRAINING</u>	<u>COMPLETED? (Y/N)</u>	<u>COMPLETION DATED</u>
<u>Inspection Procedures (G-108)</u>		
<u>Inspecting for Performance - Materials Version (G-304)</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>B. SELF-STUDY</u>		<u>COMPLETED? (Y/N)</u>
<u>NRC IMC 2800, "Materials Inspection Program"</u>		
<u>NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20".</u>		
<u>NRC IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"</u>		
<u>C. PROFESSIONAL EXPERIENCE - 2 years of experience with a radioactive materials program (including Agreement State program, fuel cycle, radioactive waste, or sealed source and device evaluation) before and within 5 years of participating in an IMPEP review.</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

TECHNICAL QUALITY OF INSPECTIONS

STAFF NAME:

<u>A. INDICATOR-SPECIFIC TRAINING</u>	<u>COMPLETED? (Y/N)</u>	<u>COURSE DATE</u>
<u>Inspection Procedures (G-108)</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>NRC Materials Control, Security Systems & Principles (S-201)</u>		
<u>Inspecting for Performance Course - Materials Version (G-304)</u>		
<u>Advanced Health Physics (H-201)</u>		
<u>Diagnostic and Therapeutic Nuclear Medicine (H-304)</u>		
<u>Safety Aspects of Industrial Radiography (H-305)</u>		
<u>Transportation of Radioactive Materials (H-308)</u>		
<u>Brachytherapy, Gamma Knife and Emerging Technologies (H-313)</u>		
<u>Gathering Information for Inspections through Interviews (PDC)</u>		
<u>Effective Communication for NRC Inspectors (PDC)</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Environmental Monitoring for Radioactivity (H-111)</u>		
<u>Air Sampling for Radioactive Materials (H-119)</u>		
<u>Characterization and Planning for Decommissioning (H-115)</u>		
<u>Respiratory Protection (H-311)</u>		
<u>Internal Dosimetry & Whole Body Counting (H-312)</u>		

Safety Aspects of Well Logging (H-314)		
Irradiator Technology (H-315)		
C. SELF-STUDY		COMPLETED? (Y/N)
NRC IMC 2800, "Materials Inspection Program"		
NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20"		
NRC IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"		
NRC Inspection Procedure 87100 Series, "License Materials Programs"		
All applicable Temporary Instructions (TIs) related to materials programs		
D. PROFESSIONAL EXPERIENCE - 2 years as an independent inspector before and within 5 years of participating in IMPEP		

[Alternative Qualifications/Comments \(attach additional sheets as necessary\):](#)

TECHNICAL QUALITY OF LICENSING ACTIONS

STAFF NAME:

<u>A. INDICATOR-SPECIFIC TRAINING</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COURSE</u> <u>DATE</u>
<u>Licensing Practices and Procedures (G-109)</u>		
<u>Advanced Health Physics (H-201)</u>		
<u>Diagnostic and Therapeutic Nuclear Medicine (H-304)</u>		
<u>Safety Aspects of Industrial Radiography (H-305)</u>		
<u>Transportation of Radioactive Materials (H-308)</u>		
<u>Brachytherapy, Gamma Knife and Emerging Technologies (H-313)</u>		
<u>NRC Materials Control, Security Systems & Principles (S-201)</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Inspection Procedures (G-108)</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>Air Sampling for Radioactive Material (H-119)</u>		
<u>Environmental Monitoring for Radioactivity (H-111)</u>		
<u>Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (H-121)</u>		
<u>Internal Dosimetry & Whole Body Counting (H-312)</u>		
<u>Safety Aspects of Well Logging (H-314)</u>		
<u>Irradiator Technology (H-315)</u>		

<u>C. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>
<u>NRC IMC 2800, "Materials Inspection Program"</u>	
<u>NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20"</u>	
<u>NRC Inspection Procedure 87100 Series, "License Materials Programs"</u>	
<u>NRC NUREG-1556 Series, "Consolidated Guidance About Materials Licenses"</u>	
<u>D. PROFESSIONAL EXPERIENCE - 2 years as an independent license reviewer before and within 5 years of participating in IMPEP</u>	

Alternative Qualifications/Comments (attach additional sheets as necessary):

TECHNICAL QUALITY OF INCIDENT AND ALLEGATION ACTIVITIES

STAFF NAME:

<u>A. INDICATOR-SPECIFIC TRAINING</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COURSE</u> <u>DATE</u>
<u>Inspection Procedures (G-108)</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>Advanced Health Physics (H-201)</u>		
<u>Diagnostic and Therapeutic Nuclear Medicine (H-304)</u>		
<u>Safety Aspects of Industrial Radiography (H-305)</u>		
<u>Transportation of Radioactive Materials (H-308)</u>		
<u>Brachytherapy, Gamma Knife and Emerging Technologies (H-313)</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Environmental Monitoring for Radioactivity (H-111)</u>		
<u>Air Sampling for Radioactive Material (H-119)</u>		
<u>Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (H-121)</u>		
<u>Internal Dosimetry & Whole Body Counting (H-312)</u>		
<u>Safety Aspects of Well Logging (H-314)</u>		
<u>Irradiator Technology (H-315)</u>		
<u>C. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	
<u>NRC MD 8.2, "NRC Incident Response Program"</u>		
<u>NRC MD 8.3, "NRC Incident Investigation Program"</u>		
<u>NRC IMC 2800, "Materials Inspection Program"</u>		

NUREG-1303, "Incident Investigation Manual"	
Handbook on Nuclear Materials Event Reporting in the Agreement States	
NRC MD 8.8, "Management of Allegations"	
Nuclear Materials Event Database (NMED)	
<i>D. PROFESSIONAL EXPERIENCE - some involvement with incident response before and within 5 years of participating in IMPEP</i>	

[Alternative Qualifications/Comments \(attach additional sheets as necessary\):](#)

COMPATIBILITY REQUIREMENTS

STAFF NAME: _____

<u>A. SUPPLEMENTAL TRAINING</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COURSE</u> <u>DATE</u>
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>B. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	
<u>NRC MD 5.8, "Proposed Section 274b Agreements With States"</u>		
<u>NRC MD 5.9, "Adequacy and Compatibility of Agreement State Programs"</u>		
<u>SA-200, "Compatibility Categories and Health & Safety Identification for NRC Regulations and Other Program Elements"</u>		
<u>SA-201, "Review of State Regulatory Requirements"</u>		
<u>C. PROFESSIONAL EXPERIENCE - direct involvement in some aspect of the promulgation of NRC or Agreement State regulations before and within 3 years of participating in IMPEP or the review of two Agreement State regulations for compatibility before and within 2 years of participating in IMPEP</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

SEALED SOURCE AND DEVICE EVALUATION PROGRAM

STAFF NAME:

<u>A. INDICATOR-SPECIFIC TRAINING</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COURSE</u> <u>DATE</u>
<u>Sealed Source and Device Workshop (G-116)</u>		
<u>Advanced Health Physics (H-201)</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>Safety Aspects of Industrial Radiography (H-305)</u>		
<u>Brachytherapy, Gamma Knife and Emerging Technologies (H-313)</u>		
<u>Safety Aspects of Well Logging (H-314)</u>		
<u>C. SELF-STUDY</u>		<u>COMPLETED?</u> <u>(Y/N)</u>
<u>NUREG-1556, Vol. 3, "Consolidated Guidance About Materials Licenses"</u>		
<u>ANSI N538-1979, "Classification of Industrial Ionizing Radiation Gauging Devices"</u>		
<u>ANSI N542-1977, "Sealed Radioactive Source Classification"</u>		
<u>Regulatory Guide 6.9, "Establishing Quality Assurance Programs for the Manufacture and Distribution of Sealed Sources and Devices Containing Byproduct Material"</u>		
<u>D. PROFESSIONAL EXPERIENCE - 2 years' experience as an independent SS&D reviewer before and within 5 years of participating in IMPEP</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

LOW-LEVEL RADIOACTIVE WASTE DISPOSAL PROGRAM

STAFF NAME:

A. SUPPLEMENTAL TRAINING

COMPLETED?
(Y/N)

COURSE
DATE

Root Cause/Incident Investigation Workshop (G-205)

B. SELF-STUDY

COMPLETED?
(Y/N)

NUREG-1199, "Standard Format & Content of a License Application for a Low-Level Radioactive Waste Disposal Facility"

NUREG-1200, "Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Disposal Facility"

NUREG-1274, "Review Process for Low-Level Radioactive Waste Disposal License Applications Under Low-Level Radioactive Waste Policy Amendments Act"

NRC IMC 2401, "Near Surface Low-Level Radioactive Waste Disposal Facility Evaluation Program"

NUREG 1573, "A Performance Assessment Methodology for Low-Level Radioactive Waste Facilities"

10 CFR Part 61

C. PROFESSIONAL EXPERIENCE - 2 years working as an inspector, license reviewer, or as a developer of regulatory programs for ensuring safety of LLRW disposal before and within 5 years of participating in IMPEP

Alternative Qualifications/Comments (attach additional sheets as necessary):

URANIUM RECOVERY PROGRAM

STAFF NAME: _____

<u>A. SUPPLEMENTAL TRAINING</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	<u>COURSE</u> <u>DATE</u>
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>B. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>	
<u>10 CFR Part 40, Appendix A</u>		
<u>NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications"</u>		
<u>NUREG-1620, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act"</u>		
<u>NRC IMC 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program"</u>		
<u>NRC IMC 2641, "In Situ Leach Facility Inspection Program"</u>		
<u>C. PROFESSIONAL EXPERIENCE - 2 years working as an inspector, license reviewer, or as a developer of regulatory programs for ensuring safety of uranium recovery operations before and within 5 years of participating in IMPEP</u>		

Alternative Qualifications/Comments (attach additional sheets as necessary):

TEAM LEADER QUALIFICATIONS

STAFF NAME:

<u>A. TEAM LEADER SPECIFIC TRAINING</u>	<u>COMPLETED? (Y/N)</u>	<u>COURSE DATE</u>
<u>Inspection Procedures (G-108)</u>		
<u>Licensing Practices and Procedures (G-109)</u>		
<u>Advanced Health Physics (H-201)</u>		
<u>B. SUPPLEMENTAL TRAINING</u>		
<u>Root Cause/Incident Investigation Workshop (G-205)</u>		
<u>Inspection for Performance - Materials Version (G-304)</u>		
<u>Diagnostic and Therapeutic Nuclear Medicine (H-304)</u>		
<u>Safety Aspects of Industrial Radiography (H-305)</u>		
<u>Transportation of Radioactive Materials (H-308)</u>		
<u>Brachytherapy, Gamma Knife and Emerging Technologies (H-313)</u>		
<u>Safety Aspects of Well Logging (H-314)</u>		
<u>Irradiator Technology (H-315)</u>		
<u>NRC Materials Control, Security Systems & Principles (S-201)</u>		
<u>Leading NRC Work Teams (PDC)</u>		
<u>Effective Communications for NRC Inspectors (PDC)</u>		

<u>C. SELF-STUDY</u>	<u>COMPLETED?</u> <u>(Y/N)</u>
<u>NRC Inspection Manual Chapter 1220, "Processing of NRC Form 241, 'Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction and Offshore Waters,' and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20"</u>	
<u>NRC IMC 1248, "Formal Qualification Programs in the Federal and State Material and Environmental Programs"</u>	
<u>NRC IMC 2800, "Materials Inspection Program"</u>	
<u>NRC MD 8.8, "Management of Allegations"</u>	
<u>D. PROFESSIONAL EXPERIENCE</u>	
<u>5 years' experience with a radioactive materials program before and within 10 years of participating in IMPEP</u>	
<u>Qualified to act as principal reviewer for at least one performance indicator</u>	
<u>Participation in at least one IMPEP review as a principal reviewer for any indicator</u>	
<u>Participation as Team Leader In Training for at least one IMPEP Review</u>	

Alternative Qualifications/Comments (attach additional sheets as necessary):

REFRESHER TRAINING

STAFF NAME:

[illegible]