U.S. NUCLEAR REGULATORY COMMISSION MANAGEMENT DIRECTIVE (MD)

MD 5.6	INTEGRATED MATERIALS DT-7 PERFORMANCE EVALUATION PROGRAM (IMPEP)	19-09
Volume 5:	Governmental Relations and Public Affairs	
Approved By:	Steve West, Deputy Executive Director for Materials, Waste, Researd State, Tribal, Compliance, Administration, and Human Capital Progra Office of the Executive Director for Operations	ch, ams
Date Approved:	July 24, 2019	
Cert Date:	N/A, for the latest version of any NRC directive or handbook, see the <u>online MD Catalog</u> .	
Issuing Office:	Office of Nuclear Material Safety and Safeguards Division of Materials Safety, Security, State, and Tribal Programs	
Contact Name:	Michelle Beardsley	

EXECUTIVE SUMMARY

Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," is revised to—

- Reflect the merger and revision of the Agreement State Program Policy Statement.
- Incorporate recommendations from two working group reports; directions from the Management Review Board; and additional enhancements identified since 2002.
- Incorporate organizational changes to the Nuclear Regulatory Commission offices.
- Clarify the Management Review Board's roles and responsibilities.
- Incorporate the provisions of MD 5.10, "Formal Qualifications for Integrated Materials Performance Evaluation Program (IMPEP) Team Members," which will be eliminated upon publication of the revised MD 5.6. Therefore, MD 5.10 is being eliminated.

TABLE OF CONTENTS

I.	PO		.2
II.	OE	JECTIVES	.2
III.	ORGANIZATIONAL RESPONSIBILITIES AND DELEGATIONS OF AUTHORITY		
	Α.	Executive Director of Operations	.3
	В.	Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration, and Human Capital Programs (DEDM)	.3
	C.	Chair, Management Review Board	.3
	D.	Director, Office of Nuclear Material Safety and Safeguards (NMSS)	.3
	E.	Director, Division of Materials Safety, Security, State, and Tribal Programs (MSST), NMSS	.3
	F.	General Counsel	.4
	G.	Office Directors and Regional Administrators	.4
IV.	AP	PLICABILITY	.4
V.	DIF	RECTIVE HANDBOOK	.4
VI.	RE	FERENCES	.5

I. POLICY

It is the policy of the U.S. Nuclear Regulatory Commission (NRC) to evaluate the NRC and Agreement State radiation control programs in an integrated manner. This evaluation will take place by teams with sufficient knowledge and qualifications to conduct the reviews, which will evaluate common and non-common performance indicators, to ensure that public health and safety are being adequately protected.

II. OBJECTIVES

- Establish the process by which the Office of Nuclear Material Safety and Safeguards (NMSS), in consultation with the Organization of Agreement States, conducts its periodic assessment to determine the adequacy of the NRC and Agreement States' programs, and to determine the compatibility of Agreement State programs in order to have an orderly pattern of regulation of agreement material throughout the country.
- Provide the NRC and Agreement State management with a systematic and integrated approach to evaluate the strengths and weaknesses of their radiation control programs.

- Provide significant input to the management of the regulatory decisionmaking process and indicate areas in which the NRC and Agreement States should dedicate more resources or management attention.
- Provide training and development for Integrated Materials Performance Evaluation Program (IMPEP) team members and team leaders to meet minimum knowledge, skill, and ability qualification standards through a standardized methodology.

III. ORGANIZATIONAL RESPONSIBILITIES AND DELEGATIONS OF AUTHORITY

A. Executive Director of Operations

Reviews and responds to an appeal that challenges a Management Review Board (MRB) decision to place or keep an Agreement State on monitoring or heightened oversight.

B. Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration, and Human Capital Programs (DEDM)

- 1. Oversees the IMPEP as delegated authority in management directive (MD) 9.17, "Organization and Functions, Office of the Executive Director for Operations," for the portion of regional operations dealing with liaison with States.
- 2. Chairs the Management Review Board.
- 3. Delegates the Chair of MRB to the Director, Office of Nuclear Material Safety and Safeguards (NMSS) or to the appropriate Regional Administrator, when unavailable.

C. Chair, Management Review Board

- 1. Leads the MRB meeting.
- 2. Reviews the MRB members' recommendations for each element. Makes the final determination on each element.
- 3. Signs the final IMPEP report issued to the NRC and Agreement States.

D. Director, Office of Nuclear Material Safety and Safeguards (NMSS)

- 1. Implements the IMPEP within NMSS.
- 2. Participates on MRBs.
- E. Director, Division of Materials Safety, Security, State, and Tribal Programs (MSST), NMSS
 - 1. Establishes a schedule and develops a detailed review regimen for conducting IMPEP reviews of the NRC and Agreement State programs.

- 2. Provides staffing support and training for IMPEP review team members and leaders.
- 3. Participates on MRBs when delegated by the Director of NMSS.
- 4. Monitors the IMPEP process; evaluates and develops IMPEP policy, criteria, and methodology; and assesses the uniformity and adequacy of the implementation of the program.
- 5. Prepares proposed final IMPEP reports for the NRC or Agreement State program IMPEP review for consideration by the MRB.
- 6. Prepares the final IMPEP report for review and signature by the MRB Chair.
- 7. Coordinates with the Organization of Agreement States to provide appropriate representatives for IMPEP reviews and MRB meetings.
- 8. Ensures all personnel serving as IMPEP team members or team leaders achieve and maintain qualifications.

F. General Counsel

- 1. Participates on MRB.
- 2. Ensures legal sufficiency and consistency with current laws, regulations, and agency policy.

G. Office Directors and Regional Administrators

- 1. Implement the IMPEP within their respective offices and regions.
- 2. Provide staffing support for IMPEP review teams, as needed.
- 3. Ensure all personnel serving as IMPEP team members or team leaders achieve and maintain qualifications
- 4. Participate on MRB.

IV. APPLICABILITY

The provisions of this directive and handbook apply to all NRC employees.

V. DIRECTIVE HANDBOOK

Handbook 5.6 describes the performance indicators that will be used, the performance standards against which these indicators will be evaluated, and the frequency and process sequence to be employed. The most commonly used key terminology are defined in Section V, "Glossary," of this handbook.

VI. REFERENCES

Code of Federal Regulations

Code of Federal Regulations, Title 10.

Nuclear Regulatory Commission Documents

Agreement State Program Policy Statement, dated October 18, 2017 82 FR 48535.

Management Directive 5.9, "Adequacy and Compatibility of Program Elements for Agreement State Programs."

Management Directive 9.17, "Organization and Functions, Office of the Executive Director for Operations."

NMSS State Agreements (SA) Procedures (SA-100 through SA-500): <u>https://scp.nrc.gov/procedures.html</u>.

SA-100, "Implementation of the Integrated Materials Performance Evaluation Program (IMPEP)".

SA-101, "Reviewing the Common Performance Indicator, Status of the Materials Inspection Program."

SA-102, "Reviewing the Common Performance Indicator, Technical Quality of Inspections."

SA-103," Reviewing the Common Performance Indicator, Technical Staffing and Training."

SA-104, "Reviewing the Common Performance Indicator, Technical Quality of Licensing Actions."

SA-105, "Reviewing the Common Performance Indicator, Technical Quality of Incident and Allegation Activities."

SA-106, "The Management Review Board."

SA-107, "Reviewing the Non-Common Performance Indicator, "Compatibility Requirements."

SA-108, "Reviewing the Non-Common Performance Indicator, Sealed Source and Device Evaluation Program."

SA-109, "Reviewing the Non-Common Performance Indicator, Low-Level Radioactive Waste Disposal."

SA-110, "Reviewing the Non-Common Performance Indicator, Uranium Recovery Program."

SA-111, "Formal Qualifications for IMPEP Team Members and Team Leaders."

SA-112, "Emergency Suspension of a Section 274b Agreement."

SA-113, "Placing an Agreement State Program on Probation."

SA-114, "Suspension of a Section 274b Agreement."

SA-115, "Termination of a Section 274b Agreement."

SA-121, "Agreement State Liaison to the Management Review Board."

SA-122, "Heightened Oversight and Monitoring."

SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."

SA-201, "Review of State Regulatory Requirements."

SA-300, "Reporting Material Events."

NRC Inspection Manual Chapters (IMCs)-

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

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

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

2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program."

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

2800, "Materials Inspection Program."

2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program."

NRC Inspection Procedures (IPs) — (IPs 87102 through 87654) —

IP 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities."

NUREG-1556 series, "Consolidated Guidance about Materials Licenses."

United States Code

Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

U.S. NUCLEAR REGULATORY COMMISSION DIRECTIVE HANDBOOK (DH)

DH 5.6	INTEGRATED MATERIALS DT-19- PERFORMANCE EVALUATION PROGRAM (IMPEP)	09
Volume 5:	Governmental Relations and Public Affairs	
Approved By:	Steve West, Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration, and Human Capital Programs Office of the Executive Director for Operations	
Date Approved:	July 24, 2019	
Cert. Date:	N/A, for the latest version of any NRC directive or handbook, see the <u>online MD Catalog</u> .	
Issuing Office:	Office of Nuclear Material Safety and Safeguards Division of Materials Safety, Security, State, and Tribal Programs	
Contact Name:	Michelle Beardsley	

EXECUTIVE SUMMARY

Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," is revised to—

- Reflect the merger and revision of the Agreement State Program Policy Statement.
- Incorporate recommendations from two working group reports; directions from the Management Review Board; and additional enhancements identified since 2002.
- Incorporate organizational changes to the Nuclear Regulatory Commission offices.
- Clarify the revisions to the Management Review Board's roles and responsibilities.
- Incorporate the provisions of MD 5.10, "Formal Qualifications for Integrated Materials Performance Evaluation Program (IMPEP) Team Members," which will be eliminated upon publication of the revised MD 5.6. Therefore, MD 5.10 is being eliminated.

TABLE OF CONTENTS

I.	EVALUATION		
	Α.	U.S. Nuclear Regulatory Commission's (NRC's) Oversight Responsibility of Agreement State Radiation Control Programs	
	Β.	Evaluation Frequency	
_			

For updates or revisions to policies contained in this MD that were issued after the MD was signed, please see the Yellow Announcement to Management Directive index (<u>YA-to-MD index</u>).

DH 5.6 INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM (IMPEP)

	~	Evolution Draces Convenes	2
	С. Б	Evaluation Process Sequence	3
	D.	Program (IMPEP)	4
	E.	IMPEP Training and Qualification Process	5
II.	PE	RFORMANCE INDICATORS	5
	A.	Introduction	5
	В.	Common Performance Indicators	6
	C.	Non-Common Performance Indicators	10
III.	ΕV	ALUATION CRITERIA	17
	Α.	General	17
	В.	Common Performance Indicator 1—Technical Staffing and Training	18
	C.	Common Performance Indicator 2—Status of Materials Inspection	
		Program	20
	D.	Common Performance Indicator 3—Technical Quality of Inspections	21
	E.	Common Performance Indicator 4—Technical Quality of Licensing Actions	23
	F.	Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities	25
	G.	Non-Common Performance Indicator 1— Legislation, Regulations, and Other Program Elements	28
	H.	Non-Common Performance Indicator 2—Sealed Source and Device (SS&D) Evaluation Program	30
	I.	Non-Common Performance Indicator 3—Low-Level Radioactive Waste (LLRW) Disposal Program	33
	J.	Non-Common Performance Indicator 4—Uranium Recovery Program	34
IV.	PR	OGRAMMATIC ASSESSMENT	37
	Α.	General	37
	В.	Adequacy Findings for NRC and Agreement State Programs	39
	C.	Compatibility Findings for Agreement State Programs	40
	D.	Guidance for Management Review Board (MRB) Chair Determinations for Agreement State Programs	41
	Ε.	Guidance for MRB Chair Determinations for NRC Programs	43
V .	GL	.OSSARY	44

I. EVALUATION

A. U.S. Nuclear Regulatory Commission's (NRC's) Oversight Responsibility of Agreement State Radiation Control Programs

The NRC has the responsibility to periodically review agreements between the NRC and the States pursuant to Section 274j(1) of the Atomic Energy Act (AEA) of 1954, as amended. Although the NRC has this oversight authority delineated in the AEA, Agreement State staff participate in the current Integrated Materials Performance Evaluation Program (IMPEP) review process under the National Materials Program. The IMPEP process uses a team of NRC and Agreement State staff to assess the Agreement State and the NRC radiation control programs. The NRC and Agreement States maintain their respective regulatory authorities for the safe and secure handling, use, storage, and security of radioactive materials as an integral part of their health and safety mission as it relates to controlling and minimizing the risk of radiation exposure to workers and the public.

B. Evaluation Frequency

The NRC reviews, through the IMPEP process, the performance of the NRC and Agreement State radiation control programs on a periodic basis. The schedule for conducting each review is developed by the Office of Nuclear Material Safety and Safeguards (NMSS). The IMPEP reviews of the NRC and Agreement State radiation control programs are typically scheduled every 4 years. However, the Management Review Board (MRB) Chair may approve a 5-year review frequency if a program has had two consecutive IMPEP reviews with all indicators found satisfactory. The MRB Chair may also shorten the interval between IMPEP reviews due to performance weaknesses based on the review team's recommendation, or other information obtained during the MRB meeting or review period.

C. Evaluation Process Sequence

The evaluation process sequence for the IMPEP review is summarized below (responsible organization in parentheses):

- 1. Develop the IMPEP review schedule for the year (Division of Materials Safety, Security, State, and Tribal Programs (MSST), NMSS, in coordination with regional management).
- 2. Identify and train team members (MSST, NMSS, in coordination with regional management).
- 3. Designate a team leader, team leader in training (when available), and team members for each scheduled IMPEP review (MSST, NMSS, in coordination with regional management).
- 4. Transmit the IMPEP questionnaire to the program scheduled for review in accordance with NMSS procedure State Agreements (SA) SA-100, "Implementation

of the Integrated Materials Performance Evaluation Program (IMPEP)" (IMPEP Team Leader).

- 5. Provide to team members a copy of questionnaire responses and the most current information on the program (IMPEP Team Leader).
- Accompany program inspectors on a sample of inspections at different types of licensed facilities before the onsite portion of the IMPEP review (IMPEP Team Member/Leader).
- 7. Conduct the onsite portion of the IMPEP review, using the criteria specified in this handbook and applicable performance review procedures (IMPEP Team).
- 8. Prepare a draft IMPEP report, with the recommendation for the overall program findings, for review and signature by the Chief, Agreement State Program Branch, MSST, NMSS (IMPEP Team Leader).
- 9. Issue the draft IMPEP report to the respective program for factual comment (MSST, NMSS).
- 10. Review and consider written comments received from the program (IMPEP Team).
- 11. Prepare the proposed final report for consideration by the MRB (MSST, NMSS, and IMPEP Team Leader).
- 12. Conduct the MRB meeting. (NMSS procedure SA-106, "The Management Review Board," contains the criteria and guidelines to be followed by the MRB when conducting MRB meetings for IMPEP reviews and issuing findings for NRC and Agreement State programs). (MSST, NMSS).
- 13. Review and issue the final IMPEP report to the program under review (Chair of MRB).

D. Other Reviews Under the Integrated Materials Performance Evaluation Program (IMPEP)

1. Followup IMPEP Reviews

A followup IMPEP review is a limited scope evaluation specific to findings from a previous IMPEP review. The purpose of the followup IMPEP review is to re-evaluate indicator(s) found less than fully satisfactory in the previous review. Followup IMPEP reviews may be conducted at the request of the Agreement State or the NRC, or at the direction of the MRB Chair, and may be performed in conjunction with a periodic meeting.

2. Special Reviews

An IMPEP special review is a limited scope evaluation that may involve a single or narrow portion of a common or non-common performance indicator. An IMPEP special review may be requested by the NRC or Agreement State program when specific circumstances indicate the need for such a review. These reviews may be technical in nature and may not require the use of the evaluation criteria in Section III of this handbook.

3. Periodic Meetings

Periodic meetings of the NRC and Agreement State radiation control programs, which are held to ensure that the NRC and the Agreement States remain knowledgeable of their respective programs and to plan for future IMPEP reviews, typically occur at the mid-point between routine IMPEP reviews. The meetings also provide an open forum for discussions about a program's status and performance. The interval may be adjusted at the direction of the MRB Chair, based on the IMPEP review team's recommendation or other information obtained during the MRB meeting or review period.

E. IMPEP Training and Qualification Process

The NRC adheres to a formal training and qualification process to provide IMPEP team members and team leaders with sufficient knowledge to conduct thorough reviews of the NRC and Agreement State radiation control programs in accordance with the NRC's policies and procedures. NMSS procedure SA-111, "Formal Qualifications for IMPEP Team Members and Team Leaders," describes the training requirements and guidelines for IMPEP team member and team leader qualifications.

II. PERFORMANCE INDICATORS

A. Introduction

1. A description of the common and non-common performance indicators to be evaluated by the IMPEP team, as appropriate, for the NRC and Agreement State programs is provided in Sections II.B and II.C of this handbook. The evaluation criteria (i.e., performance standards) against which these indicators are to be assessed are described in Section III of this handbook. IMPEP reviews are performance-based and are used to evaluate whether the NRC and Agreement State programs provide adequate protection of public health, safety, and security, as well as to determine compatibility of the Agreement State's program.¹ The IMPEP team in conducting its review should identify potential impacts on public health and safety, as well as potential impacts on the security of radioactive materials. By identifying the

¹ Many of the NRC's security-related regulations and orders were developed using the NRC's authority to regulate common defense and security as well as protect public health and safety. In situations where the NRC issues security orders and regulations using the NRC's public health and safety authority, the Agreement States can adopt and implement the requirements applicable to materials licensees within their regulatory jurisdictions. Conversely, if the NRC issues orders or regulations using only its common defense and security authority, the NRC maintains regulatory authority over the specific requirements, even when they are issued to an Agreement State licensee.

underlying causes in areas where performance does not fully meet the evaluation criteria, the reviews improve the NRC and Agreement State program performance, and lead to improved and more consistent oversight of licensees throughout the National Materials Program.

- 2. The performance indicators should be used as a starting point of inquiry and should lead IMPEP review team members to conduct a careful examination of program performance. If performance deficiencies are identified, review team members should consider whether the root causes of these deficiencies affect more than one indicator. Issues impacting one performance indicator could also have a negative impact on performance with respect to other indicators. As a general matter, a performance deficiency, and associated root causes, should be assigned to only the most appropriate indicator and not counted against multiple indicators.
- 3. If the IMPEP review team identifies performance deficiencies that have resulted in programmatic weaknesses, the team should seek to identify the root cause(s) of the issues, e.g., lack of training, inadequate procedures. In consultation with NRC or Agreement State program management, the review team may consider providing recommendations for corrective actions based on the root causes identified. Any recommendations should be documented in the IMPEP report for consideration by the MRB. NMSS procedure SA-100 contains specific criteria regarding the development and use of recommendations by the IMPEP review team.

B. Common Performance Indicators

1. Common Performance Indicator 1—Technical Staffing and Training

The ability to conduct effective licensing and inspection programs is largely dependent on having a sufficient number of experienced, knowledgeable, and well-trained technical personnel. Under certain conditions, staff turnover could have an adverse effect on the implementation of these programs, and could affect public health and safety. Apparent adverse trends in staffing must be assessed. Review of staffing also requires consideration and evaluation of the levels of training and qualification. The evaluation standard measures the overall quality of training available to, and taken by, materials program personnel. The following items will be considered when evaluating Technical Staffing and Training:

- (a) Rate of staff turnover and underlying causes, and length of time that positions remain vacant.
- (b) Determination as to whether staffing issues are a chronic problem or short-term issue.
- (c) Steps being taken to address staffing issues.
- (d) Impact of staffing issues on other performance indicators.

- (e) Evaluation of training and qualifications of the technical staff. Technical staff should have a bachelor's degree or equivalent training/experience in the physical and/or life sciences. Training requirements for the NRC license reviewers and inspectors are specified in NRC Inspection Manual Chapter (IMC) 1248, "Formal Qualifications Program for Federal and State Material and Environmental Management Programs," which includes qualification journals for license reviewers and inspectors, and NMSS procedure SA-103, "Reviewing the Common Performance Indicator, Technical Staffing and Training." The training requirements include a combination of classroom instruction and practical on-thejob training appropriate to the types of licenses reviewed or inspected. The Agreement States should follow IMC 1248, or they should have a compatible documented program for training and qualification of personnel.
- (f) The overall quality of training available to, and taken by, materials program personnel should be evaluated. The program staff should be afforded opportunities for initial training and refresher training that are consistent with the needs of the program and meet the requirements of IMC 1248 or compatible Agreement State procedure.
- 2. Common Performance Indicator 2—Status of Materials Inspection Program

Periodic inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety and security practices. The frequency of inspections is specified in IMC 2800, "Materials Inspection Program," and is dependent on the amount and type of radioactive material, the type of operation licensed, and the results of previous inspections. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program. The following items will be considered when evaluating the Status of the Materials Inspection Program:

- (a) The frequency of inspections should be at least as frequent as those specified in IMC 2800 or compatible Agreement State procedure, and is dependent on the amount and type of radioactive material, the type of operation licensed, and the results of previous inspections.
- (b) Reviews should include an examination of specific cases in detail when the inspection due date has been exceeded as stated in IMC 2800 or compatible Agreement State procedure. High priority inspections are defined as initial inspections of all licensees and inspections involving Priority 1, 2, or 3 category licensees.
- (c) Reciprocity inspections are performed in accordance with IMC 2800 and applicable guidance, or compatible Agreement State procedures. Agreement State program staff can develop an alternative policy for reciprocity inspections in lieu of the method specified in IMC 2800 and other guidance, using a similar

risk-informed, performance-based approach for determining reciprocity licensees that are candidates for inspection.

- (d) Inspection findings are communicated to licensees in a timely manner
 (30 calendar days, or 45 calendar days for a team inspection), as specified in IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports," or compatible Agreement State procedure.
- 3. Common Performance Indicator 3—Technical Quality of Inspections

Inspections, both routine and reactive, provide reasonable assurance that licensee activities are carried out in a safe and secure manner. Accompaniments of inspectors performing inspections, and the critical evaluation of inspection records, are used to assess the technical quality of an inspection program. The following items will be considered when evaluating the Technical Quality of Inspections:

- (a) Review of this indicator should focus on the scope, completeness, and technical quality of completed inspections and related documentation. The observations by the review team made during inspection accompaniments of program staff is a key aspect to evaluating the program's performance regarding the regulatory oversight of licensees. To the extent practicable, the review team members will accompany program staff on higher priority inspections at different types of licensed facilities to assess the knowledge, skills, and capabilities of the NRC and Agreement State inspectors according to the guidance in NMSS procedure SA-102, "Reviewing the Common Performance Indicator, Technical Quality of Inspections." The review team will also examine adherence to NRC and/or compatible Agreement State inspection procedures. These accompaniments will occur prior to the onsite review of the NRC or Agreement State program to afford the review team sufficient time to observe inspectors at different types of licensee facilities.
- (b) The review team will evaluate inspection casework with respect to completeness, adherence to procedures, thoroughness, technical quality, and consistency, as well as to determine if findings in inspection reports and inspection files are well founded and well documented, and that there is an appropriate level of management review.
- (c) The review team will examine the documentation and implementation of NRC or compatible Agreement State inspection procedures and guidance.
- (d) The review team will conduct in-depth, onsite reviews of a cross-section of completed inspection reports performed by different inspectors with a focus on high priority safety and security inspections.
- (e) The review team will verify that accompaniments of all inspectors are performed on an annual basis by supervisors or designees, such as senior staff, to evaluate

the knowledge, skills, and capabilities of the NRC and Agreement State inspectors.

- 4. Common Performance Indicator 4—Technical Quality of Licensing Actions
 - (a) The quality, thoroughness, and timeliness of licensing actions can have a direct bearing on public health and safety, as well as security. An assessment of licensing procedures, implementation of those procedures, and documentation of communications and associated actions between the regulator and regulated community is a significant indicator of the overall quality of the licensing program.
 - (b) This performance indicator evaluates the technical quality of the licensing program on the basis of an in-depth, onsite review of a representative cross-section of licensing actions. The following items will be considered when evaluating the Technical Quality of Licensing Actions:
 - (i) The review team will examine the documentation and implementation of NRC or compatible Agreement State licensing guidance and procedures.
 - (ii) The review team will evaluate the program's performance for implementing its pre-licensing guidance, and supervisory or peer review of licensing actions, when appropriate.
 - (iii) The review will examine various license types and licensing actions with an emphasis on those involving risk-significant materials and activities, including new licenses, renewals, amendments, terminations, and decommissioning.
 - (iv) The review team will conduct onsite reviews of a representative cross-section of licensing actions as completed by each of the reviewers in the NRC or Agreement State.
 - (v) The review team will examine the timeliness of completed licensing actions according to the guidance in NMSS procedure SA-104, "Reviewing the Common Performance Indicator, Technical Quality of Licensing Actions," or compatible Agreement State procedure. For those licensing actions that have been or are pending for more than a year, the review team should determine whether the failure to act on such requests may have safety and/or security implications.
- 5. Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities

The quality, thoroughness, and timeliness of a regulator's response to incidents and allegations of safety concerns can have a direct bearing on safety and security. A determination of the overall quality of the program with respect to these elements will be made after a careful assessment of incident response and allegation investigation procedures, implementation of those procedures, internal and external coordination, timely incident reporting, and followup actions in accordance with the guidance in

NMSS procedure SA-105, "Reviewing the Common Performance Indicator, Technical Quality of Incident and Allegation Activities," or compatible Agreement State procedure. The following items will be considered when evaluating the Technical Quality of Incident and Allegation Activities:

- (a) The review team will examine the documentation and implementation of incident response and allegation response procedures.
- (b) The review team will conduct in-depth, onsite reviews of a cross-section of incident response and allegation response reports.
- (c) The review team will ensure that notifications of incidents to the NRC Headquarters Operations Center, with appropriate followup reporting to the Nuclear Material Events Database (NMED), as necessary, are performed in accordance with the time frames established in NMSS procedure SA-300 "Reporting Material Events," or compatible Agreement State procedure.

C. Non-Common Performance Indicators

1. Non-Common Performance Indicator 1—Legislation, Regulations, and Other Program Elements

State statutes should authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement with the NRC. The statutes must authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of adequate protection of public health, safety, and security. The State must be authorized through its legal authority to license, inspect, and enforce legally binding requirements, such as regulations and licenses. The NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted in a time frame so that the effective date of the State requirement is not later than three years after the effective date of the NRC's final rule. Other program elements, as defined in Appendix A of NMSS procedure SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements," that have been designated as necessary for maintenance of an adequate and compatible program, should be adopted and implemented by an Agreement State within six months following NRC designation. The following items will be considered when evaluating Legislation, Regulations, and Other Program Elements:

(a) The Agreement State should adopt legally binding requirements, such as regulations and other necessary program elements consistent with Management Directive (MD) 5.9, "Adequacy and Compatibility of Program Elements for Agreement State Programs," and NMSS procedures, SA-201, "Review of State Regulatory Requirements", SA-200, and SA-107, "Reviewing the Non-Common Indicator, "Legislation, Regulations, and Other Program Elements".

- (b) Agreement State statutes should authorize the State to establish a program for the regulation of agreement material, provide authority for the assumption of regulatory responsibility under the agreement with the NRC, and not create gaps or conflicts in the National Materials Program due to compatibility or health and safety discrepancies that need to be addressed.
- (c) Agreement State statutes should be consistent with Federal statutes, as appropriate.
- (d) The NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted and implemented in a time frame so that the effective date of the State requirement is not later than 3 years after the effective date of the NRC's final rule or as approved by the Commission.
- (e) Other program elements that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by an Agreement State within six months following NRC designation and issuance.
- 2. Non-Common Performance Indicator 2—Sealed Source and Device (SS&D) Evaluation Program

Thorough technical evaluations of the SS&D designs are conducted to verify that the SS&Ds will maintain their integrity and that the design is adequate to protect public health and safety. NUREG-1556, Volume 3, "Consolidated Guidance about Materials Licenses: Applications for Sealed Source and Device Evaluation and Registration," provides information on conducting the SS&D reviews and establishes useful guidance for IMPEP teams. Under this guidance, three subelements: Technical Staffing and Training, Technical Quality of the Product Evaluation Program, and Evaluation of Defects and Incidents Regarding SS&Ds, are evaluated to determine if the SS&D program is satisfactory. Agreement States with authority for SS&D evaluation programs that are not performing SS&D reviews are required to commit in writing to having an SS&D evaluation program in place before performing if the SS&D evaluation program is adequate:

- (a) Technical Staffing and Training
 - Evaluation of the SS&D program staffing and training should be conducted in the same manner as the evaluation conducted with respect to Common Performance Indicator 1 (refer to Section II.B.1 of this handbook).
 - (ii) The SS&D program evaluation by the IMPEP review team will focus on training and experience commensurate with the conduct of the SS&D reviews as described in IMC 1248 or compatible Agreement State procedure.

(b) Technical Quality of the Product Evaluation Program

Technical evaluations of the SS&D designs are conducted to verify that the SS&Ds used by both licensees and persons exempt from licensing will maintain their integrity and that the design features are adequate to protect public health and safety. The technical quality of the product evaluation program should be assessed by the IMPEP review team on the basis of an in-depth review of a representative cross-section of evaluations performed on various types of products and actions. To the extent possible, the review team should capture a representative cross-section of completed actions by each of the NRC or Agreement State SS&D reviewers.

(c) Evaluation of Defects and Incidents Regarding SS&Ds

Reviews of the SS&D incidents should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 5 (refer to Section II.B.5 of this handbook) to detect possible manufacturing defects and the root causes for these incidents. The incidents should be evaluated to determine if other products may be affected by similar problems. Appropriate action should be taken and notifications made to the NRC, Agreement States, and others, as appropriate, in a timely manner.

- 3. Non-Common Performance Indicator 3—Low-Level Radioactive Waste (LLRW) Disposal Program
 - (a) Technical evaluations of low-level radioactive waste (LLRW) disposal programs under IMPEP apply to activities involving licensing, control, management, operation, inspection, closure, and/or post-closure under the NRC regulations in 10 CFR Part 61 and/or equivalent Agreement State regulations. The regulation of radioactive materials, waste disposal, and/or waste processing facilities that do not fall under the NRC's 10 CFR Part 61 and/or equivalent Agreement State regulations should be reviewed under the appropriate common performance indicators in Section II.B of this handbook. Radioactive waste processors are service provider licensees and are issued a 10 CFR Part 30 or equivalent Agreement State license.
 - (b) Technical evaluations of the LLRW disposal programs are conducted to verify that NRC or Agreement State LLRW disposal programs are adequate to protect public health and safety, and the environment. Activities and actions with respect to five subelements are evaluated to make this determination: (a) Technical Staffing and Training; (b) Status of the LLRW Inspection Program; (c) Technical Quality of Inspections; (d) Technical Quality of Licensing Actions; and (e) Technical Quality of Incident and Allegation Activities. The review of this indicator includes both active and closed waste sites. The IMPEP review team will use the criteria specified in NMSS procedure SA-109, "Reviewing the Non-Common Performance Indicator, Low-Level Radioactive Waste Disposal Program," to

perform this review. The following subelements will be evaluated to determine if the performance of the NRC or the Agreement State's LLRW disposal program is adequate:

- (i) Technical Staffing and Training
 - Evaluation of staffing and training should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 1 (refer to Section II.B.1 of this handbook).
 - Technical staffing with respect to this indicator can include contractual support or support from other State agencies. Professional staff should have bachelor's degrees or equivalent training in the physical, life or earth sciences, or engineering disciplines. Staff and support contractors' qualifications, training, and experience should also include the disciplines of health physics; civil or mechanical engineering; geology, hydrology, and other earth sciences; decommissioning; and environmental science.
- (ii) Status of the LLRW Inspection Program
 - Evaluation of the status of the LLRW inspection program should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 2 (refer to Section II.B.2 of this handbook).
 - Periodic inspections of the LLRW disposal facilities, from the preoperational through the post-closure phase, are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety practices.
 - Inspections should be performed at least as frequently as those specified in IMC 2401, "Near-Surface Low-Level Radioactive Waste Disposal Facility Inspection Program," for an operational facility; or IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees," for a closed facility. Any deviations from these schedules should be appropriately coordinated and documented. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program for the LLRW disposal program.
- (iii) Technical Quality of Inspections
 - Evaluation of the technical quality of the LLRW inspections should be conducted in the same manner as the evaluation conducted by the

IMPEP review team with respect to Common Performance Indicator 3 (refer to Section II.B.3 of this handbook).

- Review team members will accompany the NRC and Agreement State inspectors, including onsite resident inspectors, to assess the program's performance regarding evaluation of a licensee's adherence to regulatory requirements and the safe and secure use of agreement material at the LLRW disposal facilities during the inspections discussed in Section II.C.3(b) of this handbook. These accompaniments will occur at a time other than the onsite review of the NRC or Agreement State program. Reviews in this area focus on the scope, completeness, and technical accuracy of inspections and related documentation.
- Review teams will conduct in-depth, onsite reviews of completed inspection reports. In addition, review teams will verify that supervisors or designated senior staff conduct accompaniments of inspectors on an annual basis to evaluate the knowledge, skills, and capabilities of the NRC or Agreement State inspectors.
- (iv) Technical Quality of Licensing Actions
 - Evaluation of the technical quality of the LLRW licensing program should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 4 (refer to Section II.B.4 of this handbook).
 - An acceptable program for licensing the LLRW disposal facilities ensures that essential elements of the regulatory licensing program pertaining to waste product and volume, qualifications of personnel, site characterization, performance assessment, facilities and equipment, operating and emergency procedures, financial qualifications and assurances, closure and decommissioning procedures, and institutional arrangements are met in a manner sufficient to establish the basis for a licensing action. This licensing program may be implemented through the use of internal licensing guides, policy memoranda, or NRC compatible guides to ensure technical quality. Licensing decisions should be adequately documented through safety evaluation reports, or similar documentation of the license review and approval process. Opportunities for public hearings should be provided in accordance with applicable State administrative procedure laws during the process of licensing a LLRW disposal facility.
 - The review team should evaluate the technical quality of the licensing program in the areas of health physics, hydrology, and structural

engineering, in addition to an evaluation of the license review process. The subject evaluation should include not only the review of completed actions, but also an examination of any ongoing requests for licenses or renewals that may have safety and security implications.

(v) Technical Quality of Incident and Allegation Activities

Reviews of LLRW program incidents and allegations of safety concerns should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 5 (refer to Section II.B.5 of this handbook).

4. Non-Common Performance Indicator 4—Uranium Recovery Program

Thorough technical evaluations of the NRC or Agreement State uranium recovery programs are essential to determine that NRC or Agreement State programs are adequate to protect public health and safety, and the environment. Activities and actions with respect to five subelements are evaluated to make this determination: Technical Staffing and Training; Status of the Uranium Recovery Inspection Program; Technical Quality of Inspections; Technical Quality of Licensing Actions; and Technical Quality of Incident and Allegation Activities. The IMPEP team will use the criteria specified in NMSS procedure SA-110, "Reviewing the Non-Common Performance Indicator, Uranium Recovery Program," to perform this review. The following subelements will be evaluated to determine if the performance of the NRC or the Agreement State's uranium recovery program is adequate:

- (a) Technical Staffing and Training
 - (i) Evaluation of staffing and training should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 1 (refer to Section II.B.1 of this handbook).
 - (ii) Technical staffing with respect to this indicator can include contractual support or support from other State agencies. Professional staff should have bachelor's degrees or equivalent training in the physical, life, or earth sciences, or engineering disciplines. Staff and support contractors' qualifications, training, and experience should also include the disciplines of health physics; civil or mechanical engineering; geology, hydrology, and other earth sciences; decommissioning; and environmental science.
- (b) Status of the Uranium Recovery Inspection Program
 - (i) Evaluation of the status of the uranium recovery inspections should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 2 (refer to Section II.B.2 of this handbook).

- (ii) Periodic inspections of licensed uranium recovery operations are conducted to verify that activities are being conducted in compliance with regulatory requirements, and consistent with good safety practices. The frequency of inspections is specified in IMC 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program," for in situ leach mining facilities, and in IMC 2801, "Uranium Mill 11e(2) Byproduct Material Disposal Site and Facility Inspection Program," for conventional uranium and thorium mills. Uranium recovery facilities that are on standby or under decommissioning should also be inspected at the frequencies specified. Inspections should occur more frequently if significant regulatory concerns develop, before major changes are made to operations, or if generic problems are identified. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program for the uranium recovery program.
- (c) Technical Quality of Inspections
 - (i) Evaluation of the technical quality of the uranium recovery inspections should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 3 (refer to Section II.B.3 of this handbook).
 - (ii) Review team members will accompany the NRC or Agreement State inspectors to evaluate their knowledge and capabilities. During these accompaniments, review team members will assess the program's performance regarding evaluation of licensee's adherence to regulatory requirements, and the safe and secure use of agreement material at uranium milling facilities during the inspections discussed in Section II.C.3(b)(ii) of this handbook. These accompaniments will occur at a time other than the onsite review of the NRC or Agreement State program. Reviews in this area should focus on the scope, completeness, and technical accuracy of completed inspections and related documentation.
 - (iii) Review teams will conduct in-depth, onsite reviews of completed inspection reports. In addition, review teams will verify that supervisors or designated senior staff conduct accompaniments of inspectors on an annual basis to evaluate the knowledge, skills, and capabilities of the NRC or Agreement State inspectors.
- (d) Technical Quality of Licensing Actions
 - (i) Evaluation of the technical quality of the uranium recovery licensing program should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 4 (refer to Section II.B.4 of this handbook).
 - (ii) An acceptable program for licensing uranium recovery activities ensures that essential elements of the regulatory licensing requirements for radiation

protection, qualifications of personnel, facilities and equipment, operating and emergency procedures, financial qualification and assurance, closure and decommissioning procedures, and institutional arrangements are met in a manner sufficient to establish the basis for a licensing action. This licensing program may be implemented through the use of internal licensing guides, policy memoranda, or NRC compatible guides to ensure technical quality. The review should also evaluate whether pre-licensing inspections of complex facilities are conducted, when appropriate.

- (iii) The review team will conduct an in-depth review of an aspect of the uranium recovery license (e.g., radiation protection, hydrology, or geotechnical engineering) to evaluate the technical quality of the NRC or Agreement State licensing program. The subject evaluation includes not only the review of completed actions, but also an examination of any ongoing requests and license renewals that may have health and safety implications, as well as a review of the Agreement State's compliance with the statutory requirements or prohibitions in Section 2740 of the Atomic Energy Act, as amended.
- (e) Technical Quality of Incident and Allegation Activities

Reviews of the uranium recovery program incidents and allegations of safety concerns should be conducted in the same manner as the evaluation conducted by the IMPEP review team with respect to Common Performance Indicator 5 (refer to Section II.B.5 of this handbook).

III. EVALUATION CRITERIA

The effectiveness of a program is assessed through the evaluation of the criteria listed below for each of the performance indicators. These criteria are not intended to be exhaustive, but provide a starting point for the IMPEP review team to evaluate each indicator. The review team should also take into consideration other relevant mitigating factors that may have an impact on the program's performance under each performance indicator. The review team should consider a less than satisfactory finding when the identified performance issue(s) is/are programmatic in nature, and not isolated to one aspect, case, individual, etc., as applicable.

A. General

1. In terms of general guidance for the IMPEP review team, a finding of "satisfactory" should be considered when none or only a few or small number of the cases or areas reviewed involve performance issues/deficiencies (e.g., inspection, licensing, staffing, etc.); an "unsatisfactory" finding should be considered when a majority or a large number of cases or areas reviewed involve performance issues/deficiencies, especially if they are chronic, programmatic, and/or of high-risk significance; and a finding of "satisfactory, but needs improvement" should be considered when more than a few or a small number of the cases or areas reviewed involve performance

issues/deficiencies in high-risk-significant regulatory areas, but not to such an extent that the finding would be considered unsatisfactory. Specific guidance and examples pertaining to each finding can be found in the applicable NMSS SA procedures for each indicator.

- 2. If the IMPEP review team identifies performance issues/deficiencies that lead to programmatic weaknesses, the IMPEP review team should seek to identify the root cause(s) of the issues, which can be used as the basis for developing recommendations for corrective actions. As noted in Section II.A.3 of this handbook, NMSS procedure SA-100 contains criteria regarding the development of recommendations by the IMPEP team.
- 3. For the non-common performance indicators that contain subelements, a single finding with respect to the overall performance relative to the non-common performance indicator will be made by the review team.

B. Common Performance Indicator 1—Technical Staffing and Training

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) There are sufficient qualified technical and administrative staff to implement the regulatory program with few, if any, staffing vacancies.
- (b) Management commitment to training is clearly evident.
- (c) Staffing trends that could have an adverse impact on the quality of the program are tracked, analyzed, and addressed by program management.
- (d) The program has compatible training and qualification procedures in accordance with the criteria specified in IMC 1248 and NMSS procedure SA-103.
- (e) Staff is completing the training and qualification requirements according to the timelines specified in IMC 1248 or compatible Agreement State requirement.
- (f) New staff members are hired with the scientific or technical backgrounds that would equip them to receive technical training.
- (g) The program's training and qualification standards meet personnel needs.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

(a) Insufficient qualified staff to implement the regulatory program and/or vacant positions not readily filled, that result in performance issues in one other indicator.

- (b) Ineffective or inadequate management attention or actions to deal with staffing problems or training issues.
- (c) Staffing trends that could have an adverse impact on the quality of the program are not consistently tracked, analyzed, or addressed by program management in a timely manner.
- (d) The program's training and qualification procedures do not meet more than a few, but less than most, of the criteria specified in IMC 1248 and NMSS procedure SA-103.
- (e) More than a few, but less than most, of the personnel are not completing all of the training and qualification requirements according to the timelines specified in IMC 1248 or compatible Agreement State requirement.
- (f) More than a few, but less than most, of new staff members are hired without the scientific or technical backgrounds that would equip them to receive technical training.
- (g) The program's training and qualification standards do not meet personnel needs for more than a few, but less than most, of the staff.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of significant performance issues with respect to the other indicators that are determined to be related to one or more of the following conditions:

- (a) There is insufficient staffing, with ongoing vacancies adversely impacting performance in two or more indicators.
- (b) There is little or no management attention or actions to deal with staffing or training problems.
- (c) Staffing trends that could have an adverse impact on the quality of the program are not tracked, analyzed, and addressed by program management.
- (d) The program's procedures are not compatible with most of the criteria in IMC 1248 and NMSS procedure SA-103.
- (e) Most or many personnel are not completing all of the training and qualification requirements according to the timelines specified in IMC 1248 or compatible Agreement State requirement.
- (f) Most new staff members are hired without the scientific or technical backgrounds that would equip them to receive technical training.

(g) The program's training and qualification standards do not meet most personnel needs.

C. Common Performance Indicator 2—Status of Materials Inspection Program

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) Less than 10 percent of initial and high priority licensees (Priority 1, 2, and 3) are inspected at frequencies greater than those prescribed in IMC 2800 or compatible Agreement State procedure.
- (b) Inspection findings are communicated to the licensee according to the criteria prescribed in IMC 2800 and NMSS procedure SA-101, "Reviewing the Common Performance Indicator, Status of the Materials Inspection Program," or compatible Agreement State procedure.
- (c) Reciprocity inspections are performed in a manner that meets the requirements identified in IMC 2800 and applicable guidance or compatible Agreement State procedures, or the Agreement State program has developed and successfully implemented an alternative policy for reciprocity inspections in lieu of IMC 2800 and applicable guidance, using a similar risk-informed, performance-based approach for determining reciprocity licensees that are candidates for inspection.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) More than 10 percent, but less than 25 percent, of all initial and high priority licensees (Priority 1, 2, and 3) due for inspection over the review period are inspected at intervals exceeding the frequencies prescribed in IMC 2800 or compatible Agreement State procedure.
- (b) Inspection findings of non-compliance are not issued to the licensee according to the criteria specified in NMSS procedure SA-101 or compatible Agreement State procedure in more than a few, but less than most, of the cases reviewed.
- (c) A program does not meet the reciprocity inspection criteria defined in IMC 2800 and applicable guidance or compatible Agreement State procedure, or its own alternative policy for reciprocity inspections, in multiple calendar years during the review period.

3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) More than 25 percent of all initial and high priority licensees (Priority 1, 2, and 3) due for inspection over the review period are inspected at intervals exceeding the frequencies identified in IMC 2800 or compatible Agreement State procedure.
- (b) Inspection findings are not issued to the licensee according to the criteria specified in NMSS procedure SA-101 or compatible Agreement State procedure in most cases reviewed.
- (c) A program does not meet the reciprocity inspection requirements as defined in IMC 2800 and applicable guidance or compatible Agreement State procedures, or its own alternative policy for reciprocity inspections, in most calendar years during the review period.

D. Common Performance Indicator 3—Technical Quality of Inspections

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) IMPEP inspector accompaniments indicate that inspectors are knowledgeable of the requirements for license types being inspected; are able to identify potential health, safety, and security concerns; and demonstrate proper inspection technique.
- (b) An evaluation of inspection casework indicates that inspections are complete, inspection findings are well founded, and inspection results are reviewed promptly by program management.
- (c) The program's inspection procedures are compatible with the criteria in IMC 2800, the applicable Inspection Procedure (IP) (IPs 87102 through 87654 series), and NMSS procedure SA-102.
- (d) The program's inspection procedures are implemented by the inspectors.
- (e) Inspection findings lead to appropriate and prompt regulatory action.
- (f) Supervisors or designated senior staff accompany all inspectors on an annual basis.
- (g) Followup actions regarding inspection findings are performed in accordance with the criteria in IMC 2800 and NMSS procedure SA-102, or compatible Agreement State procedure.

2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) IMPEP inspector accompaniments indicate that inspectors are not knowledgeable of the requirements for license types being inspected; may not be able to identify potential health, safety, or security concerns; and do not demonstrate proper inspection preparation, technique, and adherence to established inspection procedures in more than a few, but less than most, accompaniments.
- (b) An evaluation of inspection casework indicates that more than a few, but less than most, of the inspections: 1) fail to address potentially important health, safety or security concerns; 2) are incomplete; 3) indicate problems with respect to thoroughness, technical quality, and consistency; or 4) indicate no management review of inspection results.
- (c) The program's inspection procedures are not compatible with more than a few, but less than most, of the criteria specified in IMC 2800, IPs 87102 through 87654 series, as applicable, and NMSS procedure SA-102.
- (d) Inspection procedures are not implemented by more than a few, but less than most, of the inspectors.
- (e) Inspection findings do not lead to appropriate and prompt regulatory action in more than a few, but less than most, of the cases reviewed.
- (f) Supervisory accompaniments are not performed according to the criteria specified in IMC 2800 and NMSS procedure SA-102, or compatible Agreement State procedures for more than a few, but less than most, inspectors.
- (g) Followup actions regarding inspection findings are not performed in accordance with the criteria in IMC 2800 and NMSS procedure SA-102, or compatible Agreement State procedures, in more than a few, but less than most, of the cases reviewed.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) IMPEP inspector accompaniments indicate that most of the inspectors were not knowledgeable of the requirements for the license types being inspected; failed to demonstrate proper inspection preparation and technique; or failed to identify potential health, safety, or security concerns.
- (b) An evaluation of inspection casework indicates that most of the inspections:1) failed to address potentially important health, safety, or security concerns;

2) were incomplete; 3) indicated problems with respect to thoroughness, technical quality, and consistency; or 4) indicated no management review of inspection results.

- (c) Most of the program's inspection procedures are not compatible with the criteria in IMC 2800, IPs 87102 through 87654 series, as applicable, and NMSS procedure SA-102.
- (d) Inspection procedures are not implemented by most of the inspectors.
- (e) Inspection findings do not lead to appropriate and prompt regulatory action in most of the cases reviewed.
- (f) Supervisory accompaniments of most inspectors are not performed in accordance with the criteria specified in IMC 2800 and NMSS procedure SA-102, or compatible Agreement State procedures.
- (g) Followup actions regarding inspection findings in most cases are not in accordance with the criteria specified in IMC 2800 and NMSS procedure SA-102, or compatible Agreement State procedures.

E. Common Performance Indicator 4—Technical Quality of Licensing Actions

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) Evaluation of licensing casework indicates that licensing actions are thorough, complete, consistent, and of acceptable technical quality.
- (b) Licensing actions adequately address health, safety, and security issues; including cases involving risk-significant activities that have the potential to result in an overexposure, loss of risk-significant radioactive materials, or unintended/unauthorized use of radioactive material.
- (c) License reviewers have the proper signature authority for the cases they review independently.
- (d) License tie-downs and other conditions are stated clearly, enforceable, and appropriate for the type of license.
- (e) Deficiency letters and emails clearly state regulatory positions and are used at the proper time.
- (f) Reviews of renewal applications demonstrate thorough analysis of a licensee's inspection and enforcement history.

- (g) Reviewers are following the criteria specified in the NUREG-1556 series, as applicable, and NMSS procedure SA-104 or compatible Agreement State procedures.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) Evaluation of licensing casework indicates that the licensing actions are not thorough, complete, consistent, and of acceptable technical quality in more than a few, but less than most, of the cases reviewed.
- (b) Licensing actions do not adequately address health, safety, or security issues, including cases involving risk-significant activities that have the potential to result in an overexposure, loss of risk-significant radioactive materials, or unintended/unauthorized use of radioactive material in more than a few, but less than most, of the actions reviewed.
- (c) License reviewers do not have the proper signature authority for the cases they review independently in more than a few, but less than most, of the actions reviewed.
- (d) License tie-downs and other conditions are not stated clearly, enforceable, or appropriate for the type of license in more than a few, but less than most, of the licensing actions reviewed.
- (e) Deficiency letters and emails do not clearly state regulatory positions or are not used at the proper time in more than a few, but less than most, of the licensing actions reviewed.
- (f) Reviews of renewal applications do not demonstrate thorough analysis of a licensee's inspection and enforcement history in more than a few, but less than most, of the licensing actions reviewed.
- (g) Reviewers are not consistently following the criteria specified in the NUREG-1556 series, as applicable, and NMSS procedure SA-104 or compatible Agreement State procedures in more than a few, but less than most, of the actions reviewed.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

(a) Evaluation of licensing casework indicates that most licensing actions are not thorough, complete, consistent, and of acceptable technical quality.

- (b) Evaluation of licensing actions indicates that most do not adequately address health, safety, or security issues that have the potential to result in an overexposure, loss of risk-significant radioactive materials, or unintended/unauthorized use of radioactive material.
- (c) Most of the program's license reviewers do not have the proper signature authority for the cases they review independently.
- (d) License tie-downs and other conditions are not stated clearly, enforceable, or appropriate for the type of license in most of the licensing actions reviewed.
- (e) Deficiency letters and emails do not clearly state regulatory positions or are not used at the proper time in most of the licensing actions reviewed.
- (f) Reviews of renewal applications do not demonstrate thorough analysis of a licensee's inspection and enforcement history in most of the licensing actions reviewed.
- (g) Reviewers are not following the criteria specified in the NUREG-1556 series, as applicable, and NMSS procedure SA-104 or compatible Agreement State procedure, in most of the actions reviewed.

F. Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) Incident response and allegation procedures are compatible with the criteria specified in NMSS procedure SA-105.
- (b) Incident response and allegation procedures are implemented for the type of incident or allegation as specified in NMSS procedure SA-105 or compatible Agreement State procedure.
- (c) Level of effort is commensurate with the potential health, safety, and security significance of an incident or allegation, including on-site investigation of incidents.
- (d) Actions taken are focused, coordinated, and timely for incidents and allegations involving health, safety, and security issues.
- (e) Corrective (e.g., enforcement) actions are taken to achieve compliance and prevent recurrence.
- (f) Program responses to incidents and allegations are conducted by inspectors knowledgeable of the license type and/or radioactive material involved.

- (g) Followup inspections are scheduled and completed, if necessary.
- (h) Notifications to the NRC Headquarters Operations Center, with followup to NMED, as necessary, are performed in accordance with the time frames established in NMSS procedure SA-300 or compatible Agreement State procedure.
- (i) Results of allegation investigations are provided to allegers, and alleger identities are protected in accordance with the applicable State or Federal laws or policies.
- (j) Responses to incidents or allegations are complete, coordinated, and timely for cases that could have resulted in an overexposure, or loss of risk-significant radioactive material.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) Incident response and allegation procedures are not compatible with more than a few, but less than most, of the criteria specified in NMSS procedure SA-105.
- (b) Incident response and allegation procedures are not implemented for the type of incident or allegation consistent with the criteria specified in NMSS procedure SA-105 or compatible Agreement State procedure in more than a few, but less than most, of the cases reviewed.
- (c) Level of effort is not commensurate with the potential health, safety, and security significance of an incident or allegation, including on-site investigation of incidents, in more than a few, but less than most, of the cases reviewed.
- (d) Actions taken are not focused, well-coordinated, and timely for incidents and allegations involving health, safety, or security issues in more than a few, but less than most, of the cases reviewed.
- (e) Corrective actions do not achieve compliance and prevent recurrence in more than a few, but less than most, of the cases reviewed.
- (f) Program responses to incidents and allegations are not conducted by inspectors knowledgeable of the license type and/or radioactive material involved, in more than a few, but less than most, of the cases reviewed.
- (g) Followup inspections are not completed in more than a few, but less than most, of the cases reviewed.
- (h) Notifications to the NRC Headquarters Operations Center, with followup to NMED, as necessary, are not performed in accordance with the time frames established in NMSS procedure SA-300 or compatible Agreement State procedure, in more than a few, but less than most, of the cases reviewed.

- (i) Results of allegation investigations are not provided to known allegers, and alleger identities are not protected in accordance with the applicable State or Federal laws or policies in more than a few, but less than most, of the cases reviewed.
- (j) Responses to incidents or allegations are incomplete, poorly coordinated, and not timely in more than a few, but less than most, of the cases reviewed, that could have resulted in an overexposure, or loss of risk-significant radioactive material.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) Incident response and allegation procedures are not in place or are not compatible with most of the criteria specified in NMSS procedure SA-105.
- (b) Incident response and allegation procedures are not implemented in most cases.
- (c) Level of effort is not commensurate with the potential health, safety, or security significance of an incident or allegation in most of the cases reviewed.
- (d) Actions taken are not focused, well-coordinated, or timely for incidents and allegations involving health, safety, and security issues in most of the cases reviewed.
- (e) Corrective actions do not address the root cause(s) and do not have the potential to achieve compliance or prevent recurrence in most of the cases reviewed.
- (f) Program responses to incidents and allegations are not conducted by inspectors knowledgeable of the license type and/or radioactive material involved, in most of the cases reviewed.
- (g) Followup inspections are not scheduled and/or not completed in most of the cases reviewed.
- (h) Notifications to the NRC Headquarters Operations Center, with followup to NMED, as necessary, are not performed in accordance with the time frames established in NMSS procedure SA-300 or compatible Agreement State procedure, in most of the cases reviewed.
- (i) Results of allegation investigations are not provided to known allegers, or alleger identities are not protected in accordance with the applicable State or Federal laws or policies, in most of the cases reviewed.
- (j) Responses to incidents or allegations are incomplete, poorly coordinated, and not timely in cases that have resulted in an overexposure, or loss of risk-significant radioactive material.

G. Non-Common Performance Indicator 1— Legislation, Regulations, and Other Program Elements

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) State statutes authorize the State to establish a program for the regulation of agreement material, provide authority for the assumption of regulatory responsibility under the agreement with the NRC, and do not create gaps or conflicts in the National Materials Program due to compatibility or health and safety discrepancies.
- (b) The State is authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses.
- (c) State statutes are consistent with Federal statutes, as appropriate.
- (d) The State has legally enforceable measures, such as generally applicable rules, license provisions, or other appropriate measures, necessary to allow the State to ensure adequate protection of public health, safety, and security in the regulation of agreement material.
- (e) The State has compatible legally binding requirements, regulations, and other program elements in accordance with MD 5.9, and NMSS procedures SA-200, SA-201, and SA-107.
- (f) NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety are adopted and implemented within 3 years after the effective date of the NRC's final rule or as approved by the Commission.
- (g) Other program elements that have been designated as necessary for maintenance of an adequate and compatible program are adopted and implemented by an Agreement State within six months of such designation and issuance by the NRC.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

(a) Several State statutes do not fully authorize the State to establish a program for the regulation of agreement material, do not provide authority for the assumption of regulatory responsibility under the agreement with the NRC, or create gaps or conflicts in the six months National Materials Program due to compatibility or health and safety discrepancies.

- (b) The State is not fully authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses.
- (c) More than a few, but less than most State statutes are not consistent with Federal statutes, as appropriate.
- (d) The State does not have more than a few, but less than most of the legally enforceable measures, such as generally applicable rules, license provisions, or other appropriate measures, necessary to allow the State to ensure adequate protection of public health, safety, and security in the regulation of agreement material.
- (e) The State does not have more than a few, but less than most compatible legally binding requirements, regulations, and other program elements in accordance with MD 5.9, and NMSS procedures SA-200, SA-201, and SA-107.
- (f) More than a few, but less than most, of the significant NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety are not in effect and/or not implemented within 3 years after the effective date of the NRC's final rule or as approved by the Commission.
- (g) More than a few, but less than most, of the other program elements that have been designated as necessary for maintenance of an adequate and compatible program, are not adopted and/or implemented by an Agreement State within six months of such designation and issuance by the NRC.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) Most State statutes do not authorize the State to establish a program for the regulation of agreement material, do not provide authority for the assumption of regulatory responsibility under the agreement with the NRC, or create gaps or conflicts in the National Materials Program due to compatibility or health and safety discrepancies.
- (b) The State is not authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses.
- (c) Most State statutes are not consistent with Federal statutes, as appropriate.
- (d) The State does not have most of the existing legally enforceable measures, such as generally applicable rules, license provisions, or other appropriate measures, necessary to allow the State to ensure adequate protection of public health, safety, and security in the regulation of agreement material.

- (e) The State does not have most of the legally binding requirements, regulations, and other program elements in accordance with MD 5.9, and NMSS procedures SA-200, SA-201, and SA-107.
- (f) Most of the NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety, are not in effect and/or implemented within 3 years after the effective date of the NRC's final rule or as approved by the Commission.
- (g) Most other program elements that have been designated as necessary for maintenance of an adequate and compatible program, are not adopted and implemented by an Agreement State within six months of such designation and issuance by the NRC.

H. Non-Common Performance Indicator 2—Sealed Source and Device (SS&D) Evaluation Program

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) The SS&D program meets the criteria for a "satisfactory" finding for the performance indicator, Technical Staffing and Training, as described in Section III.B.1 of this handbook.
- (b) Procedures compatible with NMSS procedure SA-108, "Reviewing the Non-Common Performance Indicator, Sealed Source and Device Evaluation Program," are implemented and followed.
- (c) Concurrence review of the technical reviewer's evaluation is performed by management or staff having proper qualifications and training.
- (d) Product evaluations address health and safety issues; are thorough, complete, consistent, and of acceptable technical quality; and adequately address the integrity of the products under normal conditions of use and likely accident conditions.
- (e) Registrations clearly summarize the product evaluation and provide license reviewers with adequate information in order to license possession and use of the product.
- (f) Deficiency letters clearly state regulatory positions and are used at the proper time.
- (g) Completed registration certificates, and the status of obsolete registration certificates, are clear and are promptly transmitted to the NRC, Agreement States, and others, as appropriate.

- (h) The SS&D reviewers ensure that registrants have developed and implemented adequate quality assurance and control programs.
- (i) There is a means for enforcing commitments made by registrants in their applications and referenced by the program in the registration certificates.
- (j) There are no potentially significant health and safety issues identified from the review, that were linked to a specific product evaluation.
- (k) The SS&D reviewers routinely evaluate the root causes of defects and incidents involving the devices subject to the SS&D program and take appropriate actions, including modifications of the SS&D sheets and notifications to the NRC, Agreement States, and others, as appropriate.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) The SS&D program meets the criteria for a "satisfactory, but needs improvement" finding for the performance indicator, Technical Staffing and Training, as described in Section III.B.2 of this handbook.
- (b) More than a few, but less than most, of the SS&D reviewers do not follow the criteria in NMSS procedure SA-108 or compatible Agreement State procedure.
- (c) Concurrence review of the technical reviewer's evaluation is either not performed or not performed by management or staff having proper qualifications and training, in more than a few, but less than most, of the cases reviewed.
- (d) More than a few, but less than most, of the SS&D evaluations reviewed do not address the integrity of the products and important health and safety concerns with respect to thoroughness, completeness, consistency, clarity, technical quality, adherence to existing guidance in product evaluations.
- (e) More than a few, but less than most, of the registrations do not summarize the product evaluation and provide license reviewers with adequate information in order to license possession and use of the product.
- (f) More than a few, but less than most, of the deficiency letters do not state regulatory positions and are not always used at the proper time.
- (g) More than a few, but less than most, of the completed registration certificates, and the status of obsolete registration certificates, are not clear and promptly transmitted to the NRC, Agreement States, and others, as appropriate.
- (h) More than a few, but less than most, of the product evaluations do not include an evaluation of proposed quality assurance and control programs.

- (i) Commitments made by registrants in their applications, and referenced in the registration certificates, cannot be enforced in more than a few, but less than most, of the cases reviewed.
- (j) More than a few, but less than most, of the cases reviewed identify potentially significant health and safety issues linked to a specific product evaluation.
- (k) The SS&D evaluation program does not fully evaluate the root causes of all defects and incidents involving more than a few, but less than most, of the devices subject to the SS&D program or, when root cause evaluations are performed, the program staff do not always take appropriate actions, including notifications to the NRC, Agreement States, and others, as appropriate.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) The SS&D program meets the criteria for an "unsatisfactory" finding for the performance indicator, Technical Staffing and Training, as described in Section III.B.3 of this handbook.
- (b) In most cases, the SS&D reviewers do not follow the criteria in NMSS procedure SA-108 or compatible Agreement State procedure.
- (c) In most cases, the concurrence review of the technical reviewer's evaluation is either not performed or not performed by management or staff having proper qualifications and training.
- (d) In most cases, the SS&D evaluations do not adequately address the integrity of the product and fail to address important health and safety concerns with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in product evaluations.
- (e) In most cases, the SS&D registrations do not clearly summarize the product evaluation and do not provide license reviewers with adequate information in order to license possession and use of the product.
- (f) In most cases, deficiency letters do not state regulatory positions and are not always used at the proper time.
- (g) In most cases, completed registration certificates, and the status of obsolete registration certificates, are unclear and are not promptly transmitted to the NRC, Agreement States, and others, as appropriate.
- (h) In most cases, product evaluations do not include an evaluation of proposed quality assurance and control programs.

- (i) In most cases, commitments made by registrants in their applications, and referenced in the registration certificates, cannot be enforced.
- (j) In most cases, the review indicates that significant health and safety issues were linked to a specific product evaluation.
- (k) In most cases, the SS&D evaluation program does not ensure evaluation of the root causes of defects and incidents involving the devices subject to the SS&D program, or where root cause evaluations are performed, the program staff do not ensure appropriate actions are taken, including notifications to the NRC, Agreement States, and others, as appropriate.

I. Non-Common Performance Indicator 3—Low-Level Radioactive Waste (LLRW) Disposal Program

1. Satisfactory

A finding of "satisfactory" is appropriate when a review demonstrates the presence of the following conditions:

- (a) The LLRW disposal program meets the "satisfactory" finding for the common performance indicators, Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.1, III.C.1, III.D.1, III.E.1, and III.F.1 of this handbook.
- (b) The LLRW disposal licensees are inspected at prescribed frequencies in accordance with IMC 2401 or compatible Agreement State procedure for an operational facility, or IMC 2602 or compatible Agreement State procedure for a closed facility, and any deviations from these schedules are normally coordinated and documented.
- (c) Procedures compatible with NMSS procedure SA-109 are implemented and followed.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

(a) The LLRW disposal program meets the "satisfactory, but needs improvement" finding for the common performance indicators, Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.2, III.C.2, III.D.2, III.E.2, and III.F.2 of this handbook.

- (b) The LLRW disposal licensees are not consistently inspected at prescribed frequencies in accordance with IMC 2401 or compatible Agreement State procedure for an operational facility, or IMC 2602 or compatible Agreement State procedure for a closed facility, and any deviations from these schedules are not coordinated and documented in more than a few, but less than most of the cases reviewed.
- (c) Procedures compatible with NMSS procedure SA-109 are not consistently implemented and/or not followed by more than a few, but less than most staff.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

- (a) The LLRW disposal program meets the "unsatisfactory" finding for the common performance indicators, Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.3, III.C.3, III.D.3, III.E.3, and III.F.3 of this handbook.
- (b) LLRW disposal licensees are not inspected at prescribed frequencies in accordance with IMC 2401 or compatible Agreement State procedure for an operational facility, or IMC 2602 or compatible Agreement State procedure for a closed facility, and any deviations from these schedules are not coordinated and documented in most cases.
- (c) Procedures compatible with NMSS procedure SA-109 are not implemented and followed in most cases.

J. Non-Common Performance Indicator 4—Uranium Recovery Program

1. Satisfactory

A finding of "satisfactory" is appropriate when the review demonstrates the presence of the following conditions:

- (a) The uranium recovery program meets the "satisfactory" finding for the common performance indicators, Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.1, III.C.1, III.D.1, III.E.1, and III.F.1 of this handbook.
- (b) Uranium recovery licensees are inspected at regular intervals in accordance with frequencies prescribed in IMC 2600 (in situ leach facilities) and IMC 2801 (conventional uranium mills), or compatible Agreement State procedure; inspection schedule deviations are the result of decisions that consider the risk of licensee operation, past licensee performance, and the need to temporarily defer

the inspection(s) to address more urgent or more critical priorities; and there is a plan to reschedule any missed or deferred inspections or a basis established for not rescheduling.

- (c) Inspection findings are well-founded and communicated to licensees at the exit briefings, and confirmed formally in writing in 30 days, or 45 days for a team inspection, after inspection completion.
- (d) Inspector field notes or completed reports indicate that inspections are complete and reviewed promptly by supervisors or management.
- (e) Procedures are in place and implemented to identify root causes and poor licensee performance. Followup inspections address previously identified open items and past violations.
- (f) Inspection findings regarding performance issues lead to appropriate and prompt regulatory action by program staff and management.
- (g) Supervisors or designated senior staff accompany all inspectors on an annual basis.
- (h) Uranium recovery inspections address potentially important health, safety, security, and environmental concerns.
- (i) The results of a review of completed licenses and a representative sample of licensing files indicate that license reviews are thorough, complete, consistent, and of acceptable technical quality.
- (j) Procedures compatible with NMSS procedure SA-110 and other applicable guidance documents are implemented and followed.
- (k) Public hearings have occurred in accordance with the State's administrative laws.
- 2. Satisfactory, But Needs Improvement

Consideration should be given to a finding of "satisfactory, but needs improvement" when a review demonstrates the presence of one or more of the following conditions:

- (a) The uranium recovery program meets the "satisfactory, but needs improvement" finding for the common performance indicators, Technical Staffing and Training, Status of Materials Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.2, III.C.2, III.D.2, III.E.2, and III.F.2 of this handbook.
- (b) More than a few, but less than most licensees of conventional uranium mills are inspected at intervals that exceed the frequencies prescribed in IMC 2801 or compatible Agreement State procedure or, for in situ leach facilities, intervals that

exceed the frequencies prescribed in IMC 2600 or compatible Agreement State procedure.

- (c) Inspection findings are not well-founded, and/or not communicated to licensees at the exit briefings, and are not confirmed formally in writing in 30 days, or 45 days for a team inspection, after inspection completion in more than a few, but less than most, of the cases reviewed.
- (d) The results of a review of inspector field notes or completed reports indicate that inspections are not complete and/or not reviewed promptly by supervisors or management in more than a few, but less than most, of the cases reviewed.
- (e) Compatible inspection procedures are not in place and/or not implemented to identify root causes and poor licensee performance in more than a few, but less than most, of the cases reviewed. Followup inspections do not address previously identified open items and/or past violations in more than a few, but less than most, of the cases reviewed.
- (f) Inspection findings regarding performance issues do not lead to appropriate and prompt regulatory action by program staff and management in more than a few, but less than most, of the cases reviewed.
- (g) Supervisors or designated senior staff do not accompany all inspectors on an annual basis in multiple calendar years.
- (h) Uranium recovery inspections do not address potentially important health, safety, security, and environmental concerns in more than a few, but less than most, of the cases reviewed.
- (i) The results of a review of completed licenses and a representative sample of licensing files indicate that license reviews are not thorough, complete, consistent, and of acceptable technical quality in more than a few, but less than most, of the cases reviewed.
- (j) Procedures compatible with NMSS procedure SA-110 and other applicable guidance documents are not implemented and followed in more than a few, but less than most, of the cases reviewed.
- (k) Public hearings have not always occurred in accordance with the State's administrative laws, or do not address most aspects of the licensing action associated with a uranium recovery facility.
- 3. Unsatisfactory

Consideration should be given to a finding of "unsatisfactory" when a review demonstrates the presence of one or more of the following conditions:

(a) The uranium recovery program meets the "unsatisfactory" finding for the common performance indicators, Technical Staffing and Training, Status of Materials

Inspection Program, Technical Quality of Inspections, Technical Quality of Licensing Actions, and Technical Quality of Incident and Allegation Activities as described in Sections III.B.3, III.C.3, III.D.3, III.E.3, and III.F.3 of this handbook.

- (b) Most licensees are inspected at intervals that exceed the frequencies prescribed in IMC 2801 or compatible Agreement State procedure (for conventional uranium mills), or intervals that exceed the frequencies prescribed in IMC 2600 or compatible Agreement State procedure (for in situ leach facilities).
- (c) In most cases, inspection findings are not well-founded and/or not communicated to licensees at the exit briefings, and are not confirmed formally in writing in 30 days, or 45 days for a team inspection, after inspection completion.
- (d) The results of a review of inspector field notes or completed reports indicate that inspections are not complete and/or not reviewed promptly by supervisors or management in most cases.
- (e) Compatible inspection procedures are not in place and/or not implemented to identify root causes and poor licensee performance. Followup inspections do not address previously identified open items and/or past violations in most cases.
- (f) Inspection findings related to performance issues do not lead to appropriate and prompt regulatory action by program staff and management in most cases.
- (g) Supervisors or designated senior staff do not accompany inspectors on an annual basis in most years.
- (h) Uranium recovery inspections do not address potentially important health, safety, security, and environmental concerns in most cases.
- (i) The results of a review of completed licenses and a representative sample of licensing files indicate that, in most cases, license reviews are not thorough, complete, consistent, and of acceptable technical quality.
- (j) Procedures compatible with NMSS procedure SA-110 and other applicable guidance documents are not implemented and followed in most cases.
- (k) Public hearings have not occurred in accordance with the State's administrative laws and/or do not address all aspects of the licensing action associated with a uranium recovery facility.

IV. PROGRAMMATIC ASSESSMENT

A. General

1. For IMPEP reviews, including followup reviews, the MRB convenes to deliberate performance indicator ratings, adequacy and compatibility findings, the frequency and type of the next review, as well as implementation or discontinuance of

monitoring, heightened oversight, probation, and suspension of an Agreement State program. For an IMPEP special review, the MRB convenes to deliberate the results of the special review including performance indicator ratings, when appropriate. The MRB Chair makes the final determination on each element of an IMPEP review.

- 2. For periodic meetings, the MRB will convene as a special MRB to receive a briefing on periodic meeting outcomes, and deliberate next actions when a program meets any of the following conditions:
 - (a) The program is on monitoring, heightened oversight, or probation.
 - (b) The program was found adequate, but needs improvement or not compatible during the last IMPEP review.
 - (c) A program performance degradation that could result in a less than satisfactory finding for one or more indicators is identified during the periodic meeting.
 - (d) The NRC or Agreement State specifically requests a special MRB to discuss the periodic meeting.
 - (e) The MRB Chair requests a special MRB.
- 3. The MRB deliberations will consider information, which includes the proposed final report, and any trends in program performance during this or previous IMPEP reviews, or other unique circumstances. The overall assessment will also include consideration of information provided by the NRC or Agreement State staff during the MRB meeting. In addition to a recommended overall finding for the NRC or Agreement State program; the proposed final report will contain the IMPEP review team's recommendations for each common performance indicator and each applicable non-common performance indicator. The Chair of the MRB will make the final determination regarding the overall assessment of the NRC or Agreement State's program as an outcome of an IMPEP review and the MRB's deliberations.
- 4. The MRB may direct changes to an IMPEP report, if needed, to ensure that it is complete and clearly articulates the basis for the proposed finding with respect to each of the IMPEP indicators, and the proposed overall finding with respect to the program's adequacy and compatibility. Regarding the overall assessment of the NRC or Agreement State program or the results of a followup IMPEP review, the MRB Chair may direct changes in the level of program oversight and/or the frequency of IMPEP reviews. The MRB Chair may also direct followup or special IMPEP reviews, or adjust the periodic meeting frequency as a means to assess NRC or Agreement State progress on addressing program performance weaknesses.
- 5. The MRB will consist of a group of senior NRC managers, or their designees, as follows:
 - (a) Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance, Administration and Human Capital Programs, as Chair,

- (b) Director, Office of Nuclear Material Safety and Safeguards or designee,
- (c) General Counsel or designee, and
- (d) Regional Administrator or designee. (The Regional Administrator (or designee) should not be from the same region that the Agreement State under review is located.)
- 6. The Organization of Agreement States will be invited to designate a representative as a member of each MRB. In this capacity, the State representative will be provided with applicable documentation and participate in all MRB discussions. NMSS procedure, SA-121, "Agreement State Liaison to the Management Review Board," describes the procedure for the coordination and participation of the Agreement State Liaison to the MRB.
- 7. Representatives from other NRC offices may be requested by the Director of NMSS to serve as subject matter experts and advise the MRB on a specific topic.
- 8. For an NRC program review, the MRB will assess only the adequacy of the program to protect public health and safety. For an Agreement State program review, the MRB will assess both adequacy and compatibility.
- 9. If the Agreement State disagrees with the MRB Chair's decision to continue or enter a period of monitoring or heightened oversight, the State may appeal that decision to the Executive Director of Operations (EDO). Within seven calendar days of the issuance of the final MRB report, the Agreement State must notify the EDO in writing that it is appealing the decision. The EDO will consider the Agreement State's written notification, the final MRB report, timely additional information provided by the Agreement State and the NRC staff, and any other other information that is relevant to the Agreement State's dispute, and will decide the appeal.

B. Adequacy Findings for NRC and Agreement State Programs

1. Finding 1—Adequate To Protect Public Health and Safety

If the MRB Chair determines that an NRC or Agreement State program is satisfactory for all performance indicators, the program will be found adequate to protect public health and safety.

- 2. Finding 2—Adequate To Protect Public Health and Safety, but Needs Improvement
 - (a) If the MRB Chair determines that an NRC or Agreement State program is satisfactory, but needs improvement for one or two performance indicators, and is satisfactory for all remaining performance indicators, the MRB Chair should consider whether to find that the program is adequate to protect public health and safety; or adequate to protect public health and safety, but needs improvement.

- (b) If the MRB Chair determines that an NRC or Agreement State program is satisfactory, but needs improvement for three performance indicators, and is satisfactory for all remaining performance indicators, the MRB Chair should give strong consideration to finding the program adequate to protect public health and safety, but needs improvement.
- (c) If the MRB Chair determines that an NRC or Agreement State program is unsatisfactory for one or more performance indicators, and is satisfactory, or satisfactory, but needs improvement for the remaining performance indicators, the MRB Chair should give strong consideration to finding the program adequate to protect public health and safety, but needs improvement.
- (d) In cases in which previous IMPEP recommendations associated with indicator findings have not been addressed for a significant period of time beyond the originally scheduled completion date, the MRB Chair may determine that the program is adequate to protect public health and safety, but needs improvement.
- 3. Finding 3—Not Adequate To Protect Public Health and Safety

If the MRB Chair determines that an NRC or Agreement State program is unsatisfactory for more than one performance indicator and is not capable of reasonably ensuring public health and safety for any reason, the MRB Chair will find that the program is not adequate to protect public health and safety.

C. Compatibility Findings for Agreement State Programs

- 1. Finding 1—Compatible
 - (a) If the MRB Chair determines that an Agreement State program is satisfactory, or satisfactory, but needs improvement, for the performance indicator, Legislation, Regulations, and Other Program Elements, the MRB Chair will find the program compatible; and
 - (b) If the MRB Chair determines that an Agreement State program does not create conflicts, gaps, duplication², or other conditions that jeopardize an orderly pattern in the collective national effort to regulate agreement materials, the MRB Chair will find the program compatible.
- 2. Finding 2—Not Compatible
 - (a) If the MRB Chair determines that an Agreement State program is unsatisfactory for the performance indicator, Legislation, Regulations, and Other Program

² See Management Directive 5.9, "Adequacy and Compatibility of Program Elements for Agreement State Programs" for definitions of these terms.

Elements, the MRB Chair will find the program not compatible; or

(b) If the MRB Chair determines that an Agreement State program creates gaps, conflicts, duplication², or other conditions that jeopardize an orderly pattern in the collective national effort to regulate agreement materials, the MRB Chair will find the program not compatible.

D. Guidance for Management Review Board (MRB) Chair Determinations for Agreement State Programs

For Agreement State program reviews with findings of satisfactory for all performance indicators, no action other than issuance of the final IMPEP report is needed. For those reviews where the MRB Chair determines that enhanced oversight of the program is appropriate, the following options should be considered:

1. Monitoring

When concerns with a program's performance result in two of the performance indicators being found satisfactory, but needs improvement, or less than fully satisfactory performance for two or more performance indicators, monitoring by the NRC will be considered by the MRB in accordance with NMSS procedure SA-122, "Heightened Oversight and Monitoring." Monitoring is an informal process that allows the NRC to maintain an increased level of communication with an Agreement State program.

2. Heightened Oversight

When concerns with a program's performance result in one or more of the performance indicators being found unsatisfactory, or three or more performance indicators being found satisfactory, but needs improvement, heightened oversight by the NRC will be considered by the MRB in accordance with NMSS procedure SA-122. Heightened oversight is a formal process and includes requests for an Agreement State program improvement plan, periodic Agreement State progress reports, periodic conference calls between the NRC and the Agreement State, and a followup or full IMPEP review in less than four years where appropriate.

3. Probation³

The MRB will consider probation for an Agreement State using NMSS procedure SA-113, "Placing an Agreement State Program on Probation," as a reference. Probation is appropriate for MRB consideration when either the finding for an Agreement State program is adequate to protect public health and safety, but needs

³ If the MRB Chair determines that a State program meets the criteria for probation, suspension, or termination, Commission approval is required.

improvement; or an Agreement State program is determined to be not compatible; and any of the following circumstances occur:

- (a) An Agreement State program has been on heightened oversight for two or more IMPEP cycles which has not resulted in necessary program improvements;
- (b) Previously identified programmatic deficiencies have gone uncorrected for a significant period of time beyond which the corrective actions had been originally scheduled for completion, and the MRB is not confident in the State's ability to correct such deficiencies in an expeditious and effective manner;
- (c) The Agreement State has repeatedly been late in adopting required regulations or other legally binding requirements, and the MRB is not confident in the State's ability to correct such deficiencies in an expeditious and effective manner;
- (d) The Agreement State has repeatedly failed to identify design deficiencies in followup analysis of events or incidents involving sealed sources and devices;
- (e) The Agreement State has failed to respond to incidents that have an impact on public health and safety; or
- (f) Degraded technical quality of inspection and licensing programs have, or could have, an adverse impact on public health, safety, security, or the environment
- 4. Suspension⁴

The MRB will consider suspension of an agreement if immediate action is required to protect public health and safety, or if the Agreement State has not complied with one or more of the requirements in Section 274 of the Atomic Energy Act of 1954, as amended. In accordance with NMSS procedures SA-114, "Suspension of a Section 274b Agreement" or SA-112, "Emergency Suspension of a Section 274b Agreement," the MRB will consider recommending suspension of all or part of an agreement when any of the following conditions occur:

- (a) The MRB Chair determines that program deficiencies related to either adequacy or compatibility require immediate NRC action.
- (b) The Agreement State program has not complied with one or more requirements of the Atomic Energy Act (i.e., the Agreement State program is not compatible with the NRC program, and the State has refused or is unable to address those areas with previously identified compatibility concerns), and the lack of compatibility is disruptive to the National Materials Program for the regulation of material under the Atomic Energy Act.

⁴ If the MRB Chair determines that a State program meets the criteria for probation, suspension, or termination, Commission approval is required.

- (c) Suspension, rather than termination, is the preferred option in those cases in which the MRB Chair has concluded that the State has provided evidence that the program deficiencies are temporary, and that the State is committed to implementing program improvements.
- 5. Termination (see footnote number 4)
 - (a) The MRB will consider termination of an agreement in accordance with NMSS procedure SA-115, "Termination of a Section 274b Agreement," when any of the following circumstances occur:
 - (i) The Agreement State program is found to be not adequate to protect public health and safety, and no compensating action has been implemented.
 - (ii) The Agreement State has been on probation and has failed to respond to NRC concerns regarding the State's ability to carry out a program to protect public health, safety, and security.
 - (iii) The Agreement State program is not compatible with the NRC program and the State has refused, or is unable, to address those areas previously identified with compatibility concerns, and the non-compatibility is significantly disruptive to the National Materials Program.
 - (iv) The Governor of an Agreement State requests termination.
 - (b) The following are examples of situations in which the MRB will consider recommending initiation of formal procedures to terminate an agreement. This list is not all-inclusive and other situations may require consideration of agreement termination:
 - (i) Significant loss of staff, which includes those staff with critical skills coupled with an Agreement State's inability to hire appropriate replacements;
 - (ii) Continual problems that manifest in the State's inability to perform adequate inspections or issue appropriate licenses;
 - (iii) Inability to adopt compatible program elements over a significant period of time (years) and nationally disruptive regulatory program conflicts, gaps, or duplication exists; or
 - (iv) Continued probationary or suspension status for an Agreement State program beyond the period originally established in the program improvement plan.

E. Guidance for MRB Chair Determinations for NRC Programs

If performance concerns are identified in an NRC materials program based on the results of an IMPEP review, the same criteria used to determine the overall adequacy of an Agreement State program (i.e., that a program is not adequate to protect public health and safety, or is adequate to protect public health and safety, but needs

improvement) should be used by the MRB Chair to determine the adequacy of the NRC program. Program monitoring, heightened oversight, probation, suspension, and termination are not applicable to the NRC materials programs because in those circumstances, the NRC must implement immediate action to correct materials program deficiencies that are similar to those that would warrant probation, suspension, or termination actions for an Agreement State. Significant weaknesses or deficiencies in the NRC materials program that could affect public health, safety, and security, will be addressed promptly by an adjustment of priorities and redirection of resources.

V. GLOSSARY

It is important to note that some NRC or Agreement State programs may not define the terms described below identically. In such cases, the IMPEP review team will highlight any differences in its review, but the review team will draw its conclusions and make assessments based on the definitions used by the NRC or Agreement State program at the time of its review.

Agreement Material

The materials listed in Subsection 274b of the Atomic Energy Act of 1954, as amended (AEA), over which the States may receive regulatory authority.

Allegation

A declaration, statement, or assertion of impropriety or inadequacy associated with regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as the media, individuals, or organizations, and through technical audit efforts from Federal, State, or local government offices regarding activities at a licensee's site. Excluded from this definition are matters being handled by more formal processes such as Title 10 of the *Code of Federal Regulations* (10 CFR) 2.206 petitions, hearing boards, appeal boards, and so forth.

Concurrence Review

A concurrence or quality assurance review is an evaluation of the initial safety review and must be performed by a different qualified reviewer. It does not need to be performed to the same level of detail as the initial review. The depth of the quality assurance review should be commensurate with the complexity of the application and the potential risks associated with the use of the source or device. This review should ensure that the proposed product meets all applicable regulations and requirements, that appropriate health and safety concerns have been addressed, and that the device will be safe under the proposed conditions of use and likely accident situations. The quality assurance review should also ensure that the registration certificate for the source or device is accurate and that it provides information essential for proper licensing of the product.

Incident

An event or condition that has the possibility of affecting public health, safety, or security, such as described in 10 CFR or equivalent regulations. NMSS procedure SA- 300, "Reporting Material Events," includes a listing of NRC reporting requirements in Title 10.

Materials Inspection

The definitions in 10 CFR 170.3 and in NRC IMC 2800 should be used to determine what constitutes an inspection. The term includes both routinely scheduled and reactive inspections.

Materials Licensing Action

Reviews of applications for new radioactive materials licenses, license amendments, license renewals, and license terminations.

National Materials Program

The broad collective effort within which both the NRC and Agreement States function in carrying out their respective regulatory programs for agreement material.