



**Office of Nuclear Material Safety and Safeguards
Procedure Approval**

***Reviewing the Non-Common Performance Indicator,
Uranium Recovery Program, Interim State Agreements (SA)
Procedure SA-110***

Issue Date:

Review Date:

Michael C. Layton
Director, NMSS/MSST

Date:

Paul Michalak
Branch Chief, NMSS/MSST/SALB

Date:

Stephen Poy
Procedure Contact, NMSS/MSST/SALB

Date:

Terry Derstine
Organization of Agreement States, Chair

Date:

NOTE

*Any changes to the procedure will be the responsibility of the NMSS Procedure Contact.
Copies of NMSS procedures will be available through the NRC Web site at
<https://scp.nrc.gov>.*

DRAFT

I. INTRODUCTION

This document describes the procedure for conducting reviews of Agreement State uranium recovery program activities and U.S. Nuclear Regulatory Commission (NRC) uranium recovery program activities using the Non-Common Performance Indicator, Uranium Recovery Program [NRC [Management Directive \(MD\) 5.6](#), *Integrated Materials Performance Evaluation Program (IMPEP)*.]

II. OBJECTIVES

- A. To verify adequacy of an Agreement State or NRC uranium recovery program through the evaluation of performance with respect to five sub-elements: 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. Review of the activities and actions should confirm that:
1. Technical staffing and training is adequate and well managed, as generally assessed according to Office of Nuclear Material Safety and Safeguards (NMSS) State Agreements (SA) Procedure [SA-103](#), *Reviewing the Common Performance Indicator, Technical Staffing and Training*.
 2. Licensees are inspected at prescribed frequencies and to verify that statistical data on the status of the inspection program is maintained and can be retrieved, as generally assessed according to NMSS Procedure [SA-101](#), *Reviewing the Common Performance Indicator, Status of Materials Inspection Program*.
 3. Technical quality of inspections is adequate, as generally assessed according to NMSS Procedure [SA-102](#), *Reviewing the Common Performance Indicator, Technical Quality of Inspections*.
 4. Technical quality of licensing actions is adequate, as generally assessed according to NMSS Procedure [SA-104](#), *Reviewing the Common Performance Indicator, Technical Quality of Licensing Actions*.
 5. Response to incidents and allegations is adequate, as generally assessed according to NMSS Procedure [SA-105](#), *Reviewing the Common Performance Indicator, Technical Quality of Incident and Allegation Activities*.
- B. To conduct a performance-based evaluation of the uranium recovery program, considering unique programmatic needs and risk information into consideration when possible.

III. OVERVIEW

An effective uranium recovery licensing and inspection program depends on having a sufficient number of experienced, knowledgeable, and well-trained technical personnel.

Periodic inspections of licensed operations are essential to ensure that activities are conducted in compliance with regulatory requirements and consistent with good safety practices. The inspection frequency is dependent on the amount and type of radioactive material, the type of operation licensed, and the results of previous inspections. Modifications to the inspection frequency take licensee performance and inspection history into account. Information regarding the number of overdue inspections is a significant measure of the status of a uranium recovery inspection program, and thus the capability for maintaining and retrieving statistical data on the status of an inspection program must exist.

The licensing program evaluation includes review of licensing actions, decommissioning actions, and financial surety reviews, including notifications and examination of any actions that have been pending for a significant amount of time, to demonstrate effective and efficient regulation.

Responses to incidents and allegations must be conducted appropriately and in a timely manner in order to protect health, safety, and the environment, as well as maintain public confidence.

Regarding NRC's uranium recovery program, only NRC Region IV performs radiation safety inspections at uranium recovery facilities. NRC Headquarters staff often accompanies Region IV staff during uranium recovery inspections to provide expertise and support in specialized areas, such as ground and surface water hydrology. NRC licensing of uranium recovery facilities is performed by NRC Headquarters staff. Future reviews on the NRC's uranium recovery program will have to take this into account regarding the five sub-elements.

IV. ROLES AND RESPONSIBILITIES

A. Team Leader

In coordination with the IMPEP Program Manager, the Team Leader determines which team member is assigned lead review responsibility for this performance indicator.

B. Principal Reviewer

1. Selects, reviews, and evaluates relevant documentation; conducts interviews with staff; conducts inspector accompaniments for this indicator (unless performed by another team member); evaluates the quality of inspection, licensing, incident, and allegation casework; and maintains a summary of the review for this indicator, including a summary of all casework files reviewed.
2. Coordinates the review of the indicator with other reviewers, if needed.

V. GUIDANCE

A. Scope

1. This procedure applies only to the review of uranium recovery program activities common to the Agreement States and the NRC, including 11e.(2) byproduct and source material inspections and licensing activities related to yellowcake production; and the construction, operation, and decommissioning of these facilities.
2. This procedure applies only to the review of uranium recovery actions performed by the Agreement States or the NRC Region in the period since the last review. The principal reviewer for this indicator may review earlier actions to ensure that outstanding items found in a previous review of the uranium recovery program have been addressed.

B. Evaluation Procedures

1. The principal reviewer should specifically refer to MD 5.6, Part II (Performance Indicators) and Part III (Evaluation Criteria), Non-Common Performance Indicator, Uranium Recovery Program. These criteria should apply to program data for the entire review period. A finding of “satisfactory” is appropriate when a review demonstrates the presence of the following conditions:
 - a. The uranium recovery program meets the “satisfactory” finding for the following 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 identified in Sections II.B.1, II.C.1, II.D.1, II.E.1, and II.F.1 of 5.6 Directive Handbook, respectively.
 - b. Uranium recovery licensees are inspected at regular intervals in accordance with frequencies prescribed in IMC 2641 and 2801, or compatible Agreement State procedure; inspection schedule deviations are generally 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. 1A review of inspector field notes or completed reports indicates that inspections are complete and reviewed promptly by supervisors or management.
 - e. Procedures are in place and implemented to help identify root causes and poor licensee performance. Followup inspections address previously identified open items and/or past violations.
 - f. Inspection findings of 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. Review indicates that uranium recovery inspections address potentially important radiological health, safety, and environmental concerns.
 - i. Review of completed licensing actions and a representative sample of licensing files indicates that licensing actions are thorough, complete, consistent, and of acceptable technical quality.
 - j. Procedures compatible with the NMSS procedures listed in the Section VII. References to SA-110 and other applicable guidance documents are implemented and followed. In determining compatibility, the principle reviewer should exercise flexibility by taking into account the uranium recovery facilities and the type of uranium recovery operations (e.g., conventional, in-situ recovery, heap leach, etc.) the program regulates during the review period.
 - k. Public hearings have occurred in accordance with the State's administrative laws.
2. Evaluation for each sub-element for this Non-Common Performance Indicator should be conducted in a manner similar to, but not necessarily part of, the respective Common Performance Indicators.

3. In applying the evaluation criteria, the principal reviewer should exercise flexibility to determine the rating for this indicator. The team should take into account the current status of the program and any mitigating factors that may have affected performance. The team should also take into account the life cycle of the uranium recovery facilities and the type of uranium recovery operations (e.g., conventional, in-situ recovery, heap leach, etc.) the program regulates during the review period.

C. Review Guidelines

1. The response generated by the Agreement State or the NRC Region to relevant questions in the IMPEP questionnaire should be used to focus the review.
2. The principal reviewer should be familiar with the following NRC Inspection Manual Chapters (IMC) with regard to the sub-elements, Technical Staffing and Training and Technical Quality of Uranium Recovery Inspections:

IMC 1248, Appendix H, Training Requirements and Qualification Journal for Uranium Recovery Inspector;
IMC 1248, Appendix I, Training Requirements and Qualification Journal for Uranium Recovery Project Manager/Technical Reviewer;
IMC 2801, *Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program*;
IMC 2641, *In-Situ Leach Facilities Inspection Program*; and
IMC 2620, *On- Site Construction Reviews at Inactive Uranium Mill Tailings Sites*.

3. The principal reviewer should be familiar with the following NUREGs with regard to the sub-element Technical Quality of Licensing Actions: NUREG-1620, *Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites* and NUREG-1569, *Standard Review Plan for In-Situ Leach Uranium Extraction License Applications*.
4. **When reviewing a uranium recovery inspection program**, consider NRC Inspection Procedure (IP) 89001, *In-Situ Leach Facilities*; IP 87654 *Uranium Mill, In-Situ Leach Uranium Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection*; and current applicable NMSS policy.
5. Any issues or recommendations identified during the previous IMPEP review should be resolved in accordance with Section V.H.4, NMSS Procedure [SA-100](#), *Implementation of the Integrated Materials Performance Evaluation Program (IMPEP)*.

D. Review Details

1. Technical Staffing and Training

To determine technical staffing and training, in addition to the applicable guidance noted in NMSS Procedure SA-103, *Reviewing the Common Performance Indicator, Technical Staffing and Training*, the evaluation of staffing and training should be conducted in the same manner and as part of Management Directive Handbook 5.6 in Section II. Performance Indicators Common Performance Indicator 1.

The staffing for 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 sciences, life or earth sciences, or engineering. Staff and support contractors' qualifications, training, and experience should include the disciplines of health physics; civil or mechanical engineering; geology, hydrology and other earth sciences; or environmental science, depending on the life cycle of the uranium recovery facilities and the type of uranium recovery operations (e.g., conventional, in-situ recovery, heap leach, etc.) the program regulates during the review period.

The following steps for review of this indicator are recommended:

Step 1: Prior to the onsite review, read the questionnaire responses with respect to the technical staffing and training identified by the Agreement State or the NRC during the review period.

Step 2: During the onsite review, interview the staff to verify positions, expertise required for position, education history and years of experience. Document the staff responses and any change in the number and types of positions and expertise of the staff from last IMPEP.

Step 3: During onsite review, ask the staff to provide an assessment of their workload and their opinion on whether current staffing and training is sufficient to conduct the required inspections, review licensing actions, prepare licensing documents, and conduct all required responsibilities. Document the staff responses to these questions.

Step 4: Provide daily debriefs to the team leader about the performance of the uranium recovery program during the review period and any issues that were identified.

Step 5: Provide a written summary of the onsite review to the team leader prior to the exit meeting with management, if requested.

Step 6: Provide a report write-up for this indicator by the due date requested by the team leader.

Step 7: Prepare notes to present and discuss the results of this indicator review at the Management Review Board meeting.

2. Status of the Uranium Recovery Inspection Program

To determine the status of the uranium recovery inspection program, in addition to the applicable guidance noted in NMSS Procedure SA-101, *Reviewing the Common Performance Indicator, Status of Materials Inspection Program*, the evaluation of the status of the uranium recovery inspections should be conducted in the same manner and as part of the Management Directive Handbook 5.6 in Section II. Performance Indicators Common Performance Indicator 2.

Periodic inspections of licensed uranium recovery operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety practices. The frequency of inspections is specified in IMC 2601, "In-situ Leach Facilities Inspection Program," for in situ leach mining facilities and in IMC 2801, "Uranium Mill and 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 also should 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.

The following steps for review of this indicator are recommended:

Step 1: Prior to the onsite review, read the questionnaire responses with respect to the status of the uranium recovery inspections identified by the Agreement State or the NRC during the review period.

Step 2: During the onsite review, interview the staff to verify the number of inspectors and required inspections for each licensee. Document the staff responses and any change in the number and types of licensee inspections conducted each year since the last IMPEP.

Step 3: During onsite review, ask the staff to provide their assessment of the status of the uranium recovery inspections. Ask the staff how many inspections were on time, and how many were late or missed. Ask inspectors about reasons for late or missed inspections. Document the staff responses to these questions.

Step 4: Provide daily debriefs to the team leader about the performance of the uranium recovery program during the review period and any issues that were identified.

Step 5: Provide a written summary of the onsite review to the team leader prior to the exit meeting with management, if requested.

Step 6: Provide a report write-up for this indicator by the due date requested by the team leader.

Step 7: Prepare notes to present and discuss the results of this indicator review at the Management Review Board meeting.

3. Technical Quality of Uranium Recovery Inspections

To determine technical quality of uranium recovery inspections, in addition to the applicable guidance noted in NMSS Procedure SA-102, *Reviewing the Common Performance Indicator, Technical Quality of Inspections*, the evaluation of the technical quality of the uranium recovery inspections should be conducted in the same manner and as part of the Management Directive Handbook 5.6 in Section II. Performance Indicators Common Performance Indicator 3.

The principal reviewer or other review team members will accompany the Agreement State or NRC inspectors to evaluate their knowledge and capabilities. During these accompaniments, 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 above will also be assessed. Ideally, these accompaniments will occur at a time other than the onsite review of the Agreement State or the NRC program. Reviews of this sub-element focus on the scope, completeness, and technical accuracy of completed inspections and related documentation. The principal reviewer will conduct in-depth, onsite reviews of completed inspection reports. In addition, the principal reviewer will verify that supervisors or designated senior staff generally conduct accompaniments of inspectors on an annual basis to provide management quality assurance.

The following steps for review of this indicator are recommended:

Step 1: Prior to the onsite review, read the questionnaire responses with respect to the technical quality of uranium recovery inspections identified by the Agreement State or the NRC during the review period.

Step 2: Prior to the onsite review, read the applicable Agreement State or NRC inspection procedures, and accompany an inspection at a uranium recovery site. Observe the inspectors conducting the inspection and their adherence to applicable inspection procedures. Document your observations and the staff responses to questions.

Step 3: During onsite review, ask inspectors to explain how inspection reports and findings are transmitted to licensee. Ask inspectors how safety concerns or violations are addressed during inspection and what actions licensees are expected to take to respond to safety concerns and violations uncovered during the inspection. Document the staff responses.

Step 4: During the onsite review, ask the staff to provide inspection reports, including those where safety concerns or violations were identified for your review. Review inspection reports against applicable inspection guidance. Review the quality and clarity of these inspection documents. Also review any required actions taken by the licensee to respond to any inspection safety concerns or violation findings.

Step 5: During onsite review, ask the staff to provide their assessment of the technical quality of the uranium recovery inspections and if any improvements are needed to enhance the quality of the inspections or applicable inspection guidance. Document the staff responses to these questions.

Step 6: Provide daily debriefs to the team leader about the performance of the uranium recovery program during the review period and any issues that were identified.

Step 7: Provide a written summary of the onsite review to the team leader prior to the exit meeting with management, if requested.

Step 8: Provide a report write-up for this indicator by the due date requested by the team leader.

Step 9: Prepare notes to present and discuss the results of this indicator review at the Management Review Board meeting.

4. Technical Quality of Licensing Actions

To determine technical quality of licensing actions, in addition to the applicable guidance noted in NMSS Procedure SA-104, *Reviewing the Common Performance Indicator, Technical Quality of Licensing Actions*, the evaluation of the technical quality of the uranium recovery licensing program should be conducted in the same manner and as part of the Management Directive Handbook 5.6 in Section II. Performance Indicators Common Performance Indicator 4.

The program reviewer will ensure 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 program may be accomplished through the preparation and use of internal licensing guides, policy memoranda, or use of the NRC compatible guides to ensure technical quality in the licensing program. Pre-licensing inspection of complex facilities are conducted, when appropriate.

The following steps for review of this indicator are recommended:

Step 1: Prior to the onsite review, read the questionnaire responses with respect to the technical quality of licensing actions identified by the Agreement State or the NRC during the review period.

Step 2: Prior to the onsite review, if possible, or at the beginning of the onsite review, read the applicable NRC or Agreement State licensing procedures

Step 3: During the onsite review, ask the staff to provide several examples of documentation of licensing actions completed since the last IMPEP. These should include new licensing actions, license renewals, license amendments, license termination, surety reviews, major construction or decommissioning decisions, and any others if possible. Review the quality and clarity of these licensing action documents and their adherence to any applicable guidance

Step 4: During onsite review, ask the staff to provide their assessment of the technical quality of the licensing actions and if any improvements are needed to enhance the quality of the licensing actions or applicable guidance. Document the staff responses to these questions.

Step 5: Provide daily debriefs to the team leader about the performance of the uranium recovery program during the review period and any issues that were identified.

Step 6: Provide a written summary of the onsite review to the team leader prior to the exit meeting with management, if requested.

Step 7: Provide a report write-up for this indicator by the due date requested by the team leader.

Step 8: Prepare notes to present and discuss the results of this indicator review at the Management Review Board meeting.

5. Technical Quality of Incident and Allegation Activities

To determine technical quality of incident and allegation activities, in addition to the applicable guidance noted in NMSS Procedure SA-105, *Reviewing the Common Performance Indicator, Technical Quality of Incident and Allegation Activities*, the evaluation of the uranium recovery program incidents and allegations of safety concerns should be conducted in the same manner and as part of Management Directive Handbook 5.6 in Section II. Performance Indicators Common Performance Indicator 5.

The following steps for review of this indicator are recommended:

Step 1: Prior to the onsite review, read the questionnaire responses with respect to the incidents and allegations identified by the NRC or Agreement State during the review period.

Step 2: Prior to the onsite review, perform a search of the Nuclear Material Events Database (NMED) to determine if there were any events in this indicator identified for the program under review.

Step 3: Prior to the onsite review, if possible, or at the beginning of the onsite review, read the applicable NRC or Agreement State incident response and allegation procedures.

Step 4: Request a summary list of incident and allegation cases and select specific case files to review.

Step 5: Review and evaluate the quality of the case files to determine if the response was thorough and commensurate with the safety significance of the incident or allegation.

Step 6: Interview incident and allegation response staff to gain an understanding of the process by which incidents and allegations are resolved, and to answer any questions about the case files that were reviewed.

Step 7: Document the case information required by the appendices to SA-105.

Step 8: Provide daily debriefs to the team leader about the performance of the UR program during the review period and any issues that were identified.

Step 9: Provide a written summary of the onsite review to the team leader prior to the exit meeting with management, if requested.

Step 10: Provide a report write-up for this indicator by the due date requested by the team leader.

Step 11: Prepare notes to present and discuss the results of this indicator review at the Management Review Board meeting.

VI. APPENDICES

Appendix A – Examples of Less than Satisfactory Programs

VII. REFERENCES

1. NRC Inspection Manual Chapters:
IMC 1248, Appendix H, Training Requirements and Qualification Journal for Uranium Recovery Inspector.
IMC 1248, Appendix I, Training Requirements and Qualification Journal for Uranium Recovery Project Manager/Technical Reviewer
IMC 2801, *Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program*.
IMC 2641, *In-Situ Leach Facilities Inspection Program*.
IMC 2620, *On-Site Construction Reviews at Inactive Uranium Mill Tailings Sites (Title I, Uranium Mill Tailings Radiation Control Act)*.

2. NRC Inspection Procedures:
IP 87654, *Uranium Mill, In-Situ Leach Uranium Recovery, and 11e.(2) Byproduct Material Disposal Site Decommissioning Inspection*.
IP 89001, *In-Situ Leach (ISL) Facilities*.
3. NRC Management Directives:
MD 5.6, *Integrated Materials Performance Evaluation Program (IMPEP)*.
4. Memorandum to M. Virgilio, Re: Adjustments to the Uranium Recovery Inspection Program February 13, 2004 (ADAMS Accession No. ML040480067).
5. NUREG Series:
NUREG-1569, *Standard Review Plan for In Situ Leach Uranium Extraction License Applications*, June 2003. (ADAMS Accession No. ML032250177)
NUREG-1620, Rev. 1, *Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978*, June 2003. (ADAMS Accession No. ML032250190)
6. NRC Regulatory Guides:
RG 3.11, Rev. 3, *Design, Construction Design, Construction, and Inspection of Embankment Retention Systems at Uranium Recovery Facilities*, November 2008.
RG 4.14, Rev.1, *Radiological Effluent and Environmental Monitoring at Uranium Mills*, April 1980.
RG 8.11, Rev. 0, *Applications of Bioassay for Uranium*, June 1974.
RG 8.22, Rev. 1, *Bioassay at Uranium Mills*, August 1988.
RG 8.30, Rev. 1, *Health Physics Surveys in Uranium Recovery Facilities*, May 2002.
RG 8.31, Rev. 1, *Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Recovery Facilities Will be As Low As is Reasonably Achievable*, May 2002.
7. NRC Regulatory Issue Summaries (RIS):
RIS 2000-023, *Recent Changes to Uranium Recovery Policy*, November 30, 2000. RIS 2009-005, *Uranium Recovery Policy Regarding: (1) the Process for Scheduling Licensing Reviews of Applications for New Uranium Groundwater Facilities, and (2) the Restoration of Groundwater at Licensed Uranium in-situ Recovery Facilities*. April 29, 2009. □

8. NMSS Procedures:
SA-100, *Implementation of the Integrated Materials Performance Evaluation Program (IMPEP)*.
SA-101, *Reviewing the Common Performance Indicator, Status of 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-300, *Reporting Material Events*.
9. Memorandum of Understanding Between the NRC and OSHA; Worker Protection at NRC- Licensed Facilities, July 19, 2013. (ADAMS Accession No. ML11354A432)
10. Memorandum of Understanding Between the NRC and MSHA, 45 FR 1315, January 4, 1980. (ADAMS Accession No. ML093020131)

VIII. AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (ADAMS) REFERENCE DOCUMENTS

For knowledge management purposes, all previous revisions of this procedure, as well as associated correspondence with stakeholders, that have been entered into ADAMS are listed below.

No.	Date	Document Title/Description	Accession Number
1	7/2/2004	Request for Comments on Draft of Two New IMPEP Procedures Regarding Review of Uranium Recovery Programs and Low Level Waste Programs (STP-04-047)	ML041880157
2	4/14/2004	Summary of Comments on SA-110	ML060450028
3	8/30/2005	Final STP Procedure SA-110	ML052440571
4	1/22/2010	Revised FSME Procedure SA-110	ML093420327

Appendix A

EXAMPLES OF LESS THAN SATISFACTORY PROGRAMS

Note: This list is not all inclusive and will be maintained and updated in the IMPEP Toolbox on the state communications portal website.

The following are examples of potential review findings that could result in a determination of a program being found "Satisfactory, but needs improvement" for this indicator.

- a) The program's questionnaire response indicated that there were no allegations received during the review period. However, in reviewing the list of incidents and concerns, the review team identified a few (xxx) concerns that should have been identified as allegations. Each of the concerns was a statement or assertion of impropriety or inadequacy associated with regulated activities, in which the validity had not been established.
- b) Based on the accompaniments and discussion with staff, the review team found that the uranium recovery program staff did not consistently use instrumentation to perform independent and confirmatory survey measurements.
- c) Overall, based on a review of inspection records and interviews with staff, the review team identified deficiencies in the radiation safety inspections performed since the last IMPEP review. Specifically, for a uranium recovery facility, all of the elements identified in IMC 2801 were not evaluated.
- d) The review team determined that the uranium recovery program training and qualification program that was established during the review period was not compatible with IMC 1248, Appendix H, because it did not contain the essential objectives of IMC 1248, Appendix H, (e.g., on the job training, training classes, etc.).
- e) A few (xxx out of yyy) licenses in the uranium recovery program were inspected at intervals that exceeded the IMC frequency, as per IMC 2641 or IMC 2801 (whichever is applicable), by more than 150 percent., and at the time of the IMPEP review, one inspection was overdue and not yet completed.
- f) The review team determined that inspection results for the uranium recovery program were not communicated by formal correspondence to the licensee within 30 days. Additionally, closeout letters were sent out in only a few (xxx of yyy) inspections.
- g) During inspector accompaniments, the review team observed one inspector was unable to independently perform a complete inspection. For example, the inspector did not demonstrate proper inspection techniques, familiarity with the license being inspected, use of survey instrumentation, knowledge of proper postings/other regulatory requirements, or an understanding of the uranium recovery operations at the facility's inspected (DH 5.6 III D.2.a).
- h) Formal licensing procedures did not exist during the entire review period. The lack of formal written licensing procedures led to some inconsistent, incomplete, and inaccurate licensing actions during the review period (DH 5.6 III D.2.a).

i)

Note: This list is not all inclusive and will be maintained and updated in the IMPEP Toolbox on the state communications portal website.

The following are examples of potential review findings that could result in a determination of a program being found “Unsatisfactory” for this indicator.

- a) On the inspection accompaniment, the reviewer noted that the inspector did not address any of the groundwater inspection procedures addressing groundwater protection for ISLs (e.g. IP89001). The reviewer observed several aspects of the ISL groundwater operations that should have triggered concerns or questions from the inspector; however, those items are not addressed during the inspection. During the site review, the reviewer determined that the uranium recovery program routinely conducted inspections but found the program systemically did not inspect the groundwater protection provisions as required by the program. Furthermore, the reviewer was informed by staff that the program is not their responsibility as another State agency (i.e., under the SDWA) conducts inspections for similar provisions. The reviewer informed the staff that while it is up to a program to determine how its regulations are implemented, the program under the AEA cannot abdicate its responsibility for compliance with its regulations entirely to another program which is operating under auspices of another statute and not subject to a review.
- b) For the review period, the radioactive materials program did not receive reports of any incidents related to the uranium recovery program even though there were incidents during the review period. It was determined by the review team that the program while revising their current incident and allegations procedures, does not have currently have incident and allegations procedures to follow, nor are any incident response and allegations procedures being implemented.
- c) It has been determined by the review team that most (xxx of yyy) 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 2641 or compatible Agreement State procedure (for in situ leach facilities).
- d) Members of the review team accompanied a uranium recovery program inspector during an inspection of uranium recovery facilities. In most cases, (xxx of yyy) 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. Inspection findings related to performance issues did not lead to appropriate and prompt regulatory action by program staff and management in most cases.
- e) The review team determined that 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) The review team has determined that 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.