



## STP Procedure Approval

### *Reviewing **the** Common Performance Indicator #2, Technical Quality of Inspections - SA-102*

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Issue Date:

Expiration **Review** Date:

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#### ***NOTE***

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***Reviewing *the* Common Performance Indicator  
#2, Technical Quality of Inspections***  
**Procedure Number: SA-102**

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## I. INTRODUCTION

This document describes the procedure for conducting reviews of **U.S. Nuclear Regulatory Commission (NRC)** Regional Offices and Agreement States using **the Common Performance Indicator #2, Technical Quality of Inspections** [NRC Management Directive (MD) 5.6, *Integrated Materials Performance Evaluation Program (IMPEP)*].

## II. OBJECTIVES

- A. To ensure that inspections of licensed activities ~~are performance and risk-based and focus on health and safety issues~~ **in accordance with NRC Manual Chapter 2800, *Materials Inspection Program***.
- B. To ensure that inspection findings are well-founded and well-documented in reports ~~describing the scope of each inspection, all violations and health and safety matters, the scope of each licensee's program, discussions with licensee management and each licensee's response.~~
- C. To verify that inspections are complete and reviewed promptly by supervisors or management.
- D. To determine that procedures are in place and used to help identify root causes and poor licensee performance.
- E. To confirm that follow-up inspections address previously identified open items and/or past violations.
- F. To verify that inspection findings lead to appropriate and prompt regulatory action.
- G. To confirm that supervisors conduct annual accompaniments of each inspector to assess performance and assure application of appropriate and consistent policies and guides.
- H. For Regions or **Agreement** States with separate licensing and inspection staffs, to verify that procedures are established and followed to provide feedback

information to license reviewers.

- I. For **Agreement** States, to determine that inspection guides are consistent with NRC guidance, and that they are being used consistently by inspectors to assure uniform and complete inspection practices.
- J. To determine the status of **complex decommissioning sites formerly managed by the NRC under the Site Decommissioning Management Plan (SDMP) sites** and transferred to States whose Agreements became effective after August 26, 1999.

### III. BACKGROUND

This performance indicator provides a qualitative balance to **the** Common Performance Indicator #1, Status of Materials Inspection Program, which looks at the status of an inspection program on a quantitative basis. Review team members will accompany a sample of inspectors at different types of licensed facilities to evaluate the knowledge and capabilities of inspectors firsthand. Review team members will also conduct in-depth, on-site reviews of a cross section of completed inspection reports. These reviews will focus on the scope, completeness, and technical accuracy of completed inspections and related documentation.

### IV. ROLES AND RESPONSIBILITIES

- A. Team Leader.

The team leader for the Regional or **Agreement** State review will determine which team member(s) is assigned lead review responsibility for this performance indicator. The principal reviewer should meet the appropriate requirements, as specified in MD 5.10, *Formal Qualifications for Integrated Materials Performance Evaluation Program (IMPEP) Team Members*.

- B. Principal Reviewer.

The principal reviewer is responsible for conducting inspector accompaniments (unless they are completed by an **alternative alternate** team member), selecting license files/inspection reports to be reviewed, reviewing relevant documentation,

conducting staff discussions, and maintaining a reference summary of all those reviewed.

## V. GUIDANCE

### A. Scope.

1. This procedure applies only to the review (for adequacy, accuracy, completeness, clarity, specificity, and consistency) of the technical quality of completed materials inspection actions taken by the Region or Agreement State in the period since the last review. The principal reviewer for this indicator may, nonetheless, find it necessary to review earlier inspections to assure outstanding items found in a previous review of inspections files have been addressed.
2. This procedure specifically excludes inspections of non-Atomic Energy Act materials or licensees, and inspections conducted by NRC Headquarters personnel.

### B. Evaluation Procedures.

1. The principal reviewer should refer to Part III, (*Evaluation Criteria*), of MD 5.6 for specific evaluation criteria. The Directive's Glossary defines definitions of the terms "Materials Inspection" and "Overdue Core Inspections" can be found in the Directive's Glossary.
2. All materials inspections conducted by Regions or Agreement States since the last performance review are potential candidates for review. Inspections of license terminations, bankruptcies, and complex decommissioning will be treated as a subset of this common performance indicator.
3. Depending upon the size of the Regional or Agreement State program under review, the principal reviewer should select 10-25 inspection casework examples for review, concentrating on inspections of Priority 1, 2, and 3 licenses and core licenses (i.e., initial inspections or Priority 1-3 as described in NRC Inspection Manual Chapter 2800, *Materials Inspection Program*). The selected casework should represent a cross section of the Region's or Agreement State's workload, including as many different inspectors, license categories, and geographic locations as practical. A

~~representative~~ mix of medical and academic use (e.g., universities, community hospitals; ~~medical centers~~; brachytherapy licenses, including high-dose rate remote afterloaders teletherapy; gamma stereotactic radiosurgery, and emerging technologies licenses, physicians, broad scope facilities, etc); research and academic use (e.g., research/development laboratories and colleges/universities); manufacturing and distribution, including nuclear pharmacies; and industrial use (e.g., ~~research and development~~, industrial radiography, irradiators, and well logging, etc.) licenses should be ~~sought~~ selected for review. Inspections of complex decommissioning activities sites should also be ~~sought~~ reviewed if available, including inspections of sites formerly managed by the NRC under SDMP sites for that were transferred to States whose Agreements became effective after August 26, 1999 should be reviewed. Reciprocity and termination inspections may be included, as appropriate.

4. The review of inspection casework should focus on more significant actions undertaken from a risk standpoint.
45. If the initial review indicates a systematic weakness on the part of one inspector, or problems with respect to one or more inspection procedures, additional similar inspection files should be obtained and reviewed, in order to determine the magnitude of the programmatic weakness and its root cause.
6. If previous reviews indicate a programmatic weakness in a particular area, additional casework in that area should be reviewed to assure that the weakness has been addressed.
67. If the evaluation of the 10-25 casework examples does not reveal any programmatic weaknesses, no additional casework needs to be reviewed.
78. For the Regions, no attempt should be made to evaluate performance on a state-by-state basis for this indicator.

C. Review Guidelines.

1. Prior to the on-site review, the principal reviewer should review:
  - 1a. The response generated by the Region or Agreement State to relevant questions in the IMPEP questionnaire. The response to

the questionnaire relative to this indicator should be used to focus the review.

- 2b. For the Regions, tallies of completed inspections can be obtained from the Licensing Management License Tracking System (LMTS). This information can be obtained prior to the Regional visit from the Office of Nuclear Material Safety and Safeguards, Division of Industrial and Medical Nuclear Safety, Materials Safety and Inspection Branch. The LMTS has limited ability to sort these records, depending on the needs of the principal reviewer. Once the appropriate files are selected, a call to the Regional office can be made to have the inspection files pulled, and ready for review at the time of the visit.
- 3c. For Agreement States, inspection reports are not normally submitted to the Office of State and Tribal Programs. The principal reviewer should work with the IMPEP team leader in selecting the appropriate inspection files for review.

D. Review Details.

For the technical quality of inspections, the principal reviewer should evaluate the following:

- 1. For each ~~compliance action~~ case selected, that the inspection report adequately documents (as appropriate);
  - a. the scope of the inspection and the licensed program;
  - b. the licensee's organization and the persons contacted;
  - c. the licensee's administrative controls and procedures; facilities and equipment; radiation safety procedures for procurement, use, transfer and disposal; posting and labeling; personnel monitoring; gaseous and liquid effluents; surveys and bioassay; incidents and overexposures; and radioactive waste packaging and shipping;
  - d. operations observed including operations at temporary job sites, field stations or satellite facilities;
  - e. interviews of workers;
  - f. independent measurements;
  - g. status of previous violations;
  - h. new violations noted;

- i. the exit interview with management;
  - j. the substance of discussions with licensee's management;
  - k. licensee's response to any violations.
2. ~~Any information missing from the file, e.g.,~~ The completeness of the inspection files. The reviewer should ensure that all relevant documents, letters, file notes, and telephone conversations are complete and in the file;
  3. Inspection reports are sufficiently detailed to show that each inspection was adequate to address the health and safety of licensed operations;
  4. All violations and safety recommendations are substantiated;
  5. Appropriate regulatory action was taken for violations;
  6. The documentation of violations is written in appropriate regulatory language and dispatched in a timely manner;
  7. Any unresolved items or misunderstandings by the licensee were pursued to a satisfactory conclusion;
  8. The inspection report was reviewed by management;
  9. Management notes report deficiencies (e.g., such as unsupported conclusions and opinions in the report, violations not properly substantiated, and apparent violations not cited, etc.) and brings these deficiencies to the attention of the inspector;
  10. The licensee's response was reviewed for adequacy and any subsequent action taken by management;
  11. Instrumentation is adequate, calibrated, and functioning properly for surveying license operations (e.g., survey meters, air samples, lab counting equipment for smears, and identification of isotopes, etc.);
  12. The effectiveness of the Region's or Agreement State's internal program to evaluate its inspectors in the field. Regional or Agreement State supervisors should evaluate all inspectors on at least one inspection in the field per year;
  13. Appendix A, "IMPEP Compliance Inspection File Reviewer Guidance,"<sup>22</sup> was developed to assist in reviewing certain completed inspection reports.

However, the principal reviewer should not feel compelled to address every item in the guidance.

E. Review Information Summary.

At a minimum, the summary maintained by the principal reviewer will include:

1. The licensee name, city, and state;
2. The license number;
3. The inspection priority;
4. The type of license operation (e.g., program code or license category);
5. The inspector's initials;
6. The type of inspection (e.g., routine, reactive, ~~closeout~~ follow-up, announced, unannounced, team, other, etc.);
7. The date of inspection;
8. The date inspection findings were issued;
9. **Comments related to performance issues.**

F. Inspector Accompaniments/Field Evaluations.

1. In addition to performing a file review of the selected inspections, the principal reviewer for this indicator (or another qualified IMPEP team member, as appropriate), should complete an appropriate number of accompaniments of the Region's or **Agreement** State's inspectors to observe, on a first-hand basis, the inspectors' demonstration of proper inspection techniques, and areas of emphasis. Accompaniments should be performed prior to the **on-site portion of the** IMPEP review ~~at the Region or State~~. In accordance with the Region's or **Agreement** State's work schedules, the reviewer should observe a representative sample of inspectors and licensee types, concentrating on inspections of licensed facilities which have greater health and safety potential. One-day inspections are preferable for accompaniment so that the reviewer may observe the entire inspection process from entrance to exit.

2. In most cases, the goal for an **Agreement** State review is to accompany one-half of the program's inspectors. For larger **Agreement** States and NRC Regions, the goal is to accompany four or five inspectors. Priority should be given to newly qualified inspectors and those that have not been accompanied during previous IMPEP reviews.
3. IMPEP accompaniments are performance-based evaluations of inspector effectiveness. It is important that these accompaniments focus on health and safety ~~type~~ issues. It is not the role of the reviewer to help with the inspection effort, but rather to observe the inspector's work.
4. Prior to the inspection, the reviewer and inspector should discuss:
  - a. the extent of the reviewer's participation in the inspection (observation not active participation);
  - b. the way the reviewer's presence will be explained to the licensee; and
  - c. the method that will be used in evaluating the inspector's performance.
5. **Unless determined otherwise by the team leader, results of the inspector accompaniments should be communicated to the inspector and program management the week of the accompaniment, especially if the evaluation uncovers performance deficiencies. If possible, the team member completing the accompaniments should schedule a close-out meeting with program management to ensure that all findings are fully communicated and understood. The team member performing the accompaniments should communicate to the State/Regional program management that the results of the accompaniments are preliminary and will be used in the overall assignment of a finding for this indicator. ~~If evaluation uncovers significant difference, these should be discussed with the inspector's supervisor within one week of the accompaniment. Otherwise, feedback should be conveyed at the time of the IMPEP review.~~**
6. Appendix B, "IMPEP Inspector Fieldwork Evaluation Reviewer Guidance,"<sup>22</sup> was developed to assist the reviewer in completing the inspection accompaniments. The reviewer should not feel compelled to address every item on the evaluation form. Accompaniment information should be summarized as discussed in Section E, above.

G. Discussion of Findings with Region or State

The reviewer should follow the guidance given in STP Procedure SA-100, *Implementation of the Integrated Materials Performance Evaluation Program (IMPEP)*, for discussing technical findings with reviewers, supervisors, and management.

## VI. APPENDICES

- A. IMPEP ~~Compliance~~ **Inspection** File Reviewer Guidance.
- B. IMPEP Inspector Fieldwork Evaluation Reviewer Guidance.
- C. **Frequently Asked Questions**

## VII. REFERENCES

- ~~1. NRC Inspection Manual Chapter 2800, *Materials Inspection Program*.~~
21. NRC Management Directive 5.6, *Integrated Materials Performance Evaluation Program (IMPEP)*.
32. NRC Management Directive 5.10, *Formal Qualifications for Integrated Materials Performance Evaluation Program (IMPEP) Team Members*.
3. **NRC Manual Chapter 2800, *Materials Inspection Program*.**
4. STP Procedure SA-100, *Implementation of the Integrated Materials Performance Evaluation Program (IMPEP)*.





ITEM	O.K.	COMMENTS OR QUESTIONS
GAS & LIQUID EFFLUENT RECORDS		
WASTE DISPOSAL		
USE OF FIELD OR TEMP JOB SITES AS APPROVED		
INSPECTION FINDINGS		
CONDUCTED IN SUFFICIENT DEPTH & SCOPE		
REPORT COMPLETE AND IN STANDARD FORMAT		
REPORT CLEARLY IDENTIFIED VIOLATIONS VS RECS		
EXIT MEETING AT APPROPRIATE MANAGEMENT LEVEL		
FINDINGS INDICATIVE OF NEED FOR LICENSE CHANGES RELAYED TO LICENSING STAFF (VERIFY IN FILE)		
ENFORCEMENT		
VIOLATIONS PROPERLY CITED		
REPEATED VIOLATIONS TAKEN INTO ACCOUNT		
LETTER CLEARLY IDENTIFIED VIOLATIONS VS RECS		
PROPER REGULATORY LANGUAGE IN LETTERS		
SUITABLE FOLLOW-UP TO LICENSEE'S RESPONSE		
ENFORCEMENT ACTION APPROPRIATE		
COMPLIANCE INSPECTION FILE		
FILE ORDERLY AND COMPLETE		
INCIDENT & COMPLIANCE INSPECTION FILES CROSS-REFERENCED		
ADEQUATE SUPERVISORY REVIEW OF REPORTS, LETTERS AND LICENSEE RESPONSES		
SUPERVISORY REVIEW		
ALL DEFICIENCIES IDENTIFIED BY SUPERVISOR		

COMMENTS FOR DISCUSSION WITH STAFF







## Appendix C

### Frequently Asked Questions

Q: How often should an inspector be accompanied by their supervisor?

A: Inspectors should be accompanied by their supervisor at least annually as described in the Nuclear Regulatory Commission's Inspection Manual Chapter 2800, *Materials Inspection Program*. In the event that an inspector is not accompanied by his/her supervisor a particular calendar year, it should be documented in the inspector's personnel file. The documentation should include an explanation, a proposed schedule for the next expected accompaniment, and the supervisor's signature.

Q: What if the inspector only does occasional inspections, such as a cross-trained license reviewer?

A: If the inspector only performs occasional inspections, the inspector should still be accompanied by his/her supervisor annually, if possible, unless the Agreement State or Region has a policy or procedure that allows a longer interval between accompaniments. If there is a policy or procedure that allows for a longer interval, the Agreement State or Region should perform accompaniments of inspectors who perform occasional inspections in accordance with that policy or procedure. We are aware of an NRC Region that has a policy in place to perform accompaniments of cross-trained license reviewers every 18 months. This is acceptable because their policy is documented.

Q: Should the supervisor who performs the accompaniments be experienced?

A: Yes, supervisors that perform accompaniments should be experienced in the Agreement State's or Region's inspection practices and procedures. The supervisor should also at least be familiar with the type of license being inspected during the accompaniment. The experience and knowledge will allow the supervisor to perform a better evaluation of the inspector. A supervisor experienced in inspections will know areas of concerns for certain license types and will be able to provide more constructive feedback of the inspector's competency.

Q: In Agreement States, can senior staff conduct accompaniments?

A: Yes, it is acceptable to have senior staff perform inspector accompaniments under certain circumstances. In Agreement States where the program manager is the immediate supervisor, accompaniments may be performed by experienced senior staff instead of the program manager if the program manager is fulfilling other obligations. In an Agreement State that is experiencing staffing issues where there is a vacancy in a supervisory position, the accompaniments may be performed by experienced senior staff during the time the vacancy is unfilled. It is the expectation that supervisors generally conduct the accompaniments; however, it is preferable to have the accompaniments conducted by an experienced, qualified inspector in the circumstance that the supervisor is not available to accompany the inspectors.

Q: What should the reviewer do if during the accompaniment it is discovered that the inspector has not been qualified to perform that particular type of inspection?

A: In the circumstance that the reviewer discovers that an inspector is not qualified to perform a particular type of inspection during that type of inspection, the reviewer should document the issue and discuss with the inspector and his/her supervisor following the review. The reviewer should allow the inspection to continue as long as there are no health and safety concerns. In the event that the inspector's lack of qualification causes health and safety concerns to go unnoticed or undocumented, the reviewer should bring the concern to the attention of the Agreement State or Regional management. The Agreement State or Regional management should explain the health and safety concern to the licensee. During the accompaniment close-out meeting, the reviewer should mention to the inspector's supervisor and/or program management that the inspector was not qualified to perform that type of inspection.

Q: All the inspectors were accompanied during the last IMPEP, does the review team need to conduct any accompaniments during the current review?

A: Yes, even if all the State's or Region's inspectors were accompanied during the last IMPEP review, the review team should still conduct inspector accompaniments. The review team member responsible for performing the accompaniments must ensure that the technical quality of inspections and the technical competency of the inspectors has remained adequate over the review period.

Q: What if the State is performing only compliance-based inspections?

A: There are no requirements that prohibit States from performing compliance-based inspections. It is at the State's discretion to implement a performance-based inspection policy. The review should be conducted in a manner that is consistent with all IMPEP guidance documents applicable to this indicator and the inspection policy of the State.

Q: If the reviewer has evaluated 15 files, three for each of the State's inspectors which have no deficiencies identified, should the reviewer continue to review additional files?

A: No, if the reviewer has evaluated a random sample of inspection files covering a variety of the State's license types and has looked at files from all the State's inspectors, the reviewer does not need to evaluate any additional files. It is unnecessary to continue to review inspection files until a deficiency is found. Based on the sample, the reviewer should be able to draw the conclusion that the inspection files are of sufficient technical quality.

Q: If a supervisor routinely performs inspections in an Agreement State, should the supervisor be accompanied annually also?

A: Yes, supervisors who routinely perform inspections should be accompanied. During an IMPEP review during NRC Fiscal Year 2003, a recommendation was made to the NRC to develop specific guidance on what level of supervisor needs to be accompanied, how often, and what documentation is necessary. Until this guidance is finalized, it should be assumed that any supervisor that performs inspections should be accompanied at least annually.

Q: What if there are concerns regarding an inspector's performance during an inspection accompaniment?

A: If concerns about an inspector's performance are raised during an inspection accompaniment, the reviewer should evaluate the potential implications. If the concerns are not of health and safety significance, the reviewer should allow the accompaniment to continue, but document the concerns in the accompaniment report and discuss the issues with the inspector and his/her supervisor after the accompaniment. If the concerns are of health and safety significance, it is the responsibility of the reviewer to bring the concerns to the attention of the inspector and his/her supervisor. During the accompaniment close-out meeting, the team member should discuss the performance issues with the inspector and his/her supervisor and/or program management.