

Revision of NRC's Material Inspection Procedures

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Recent Inspection Program Revisions

2017: IMC 2800 (Materials Inspection Program)

- Revised to allow additional time extensions between inspections (Phase 1)

2020: IMC 2800 (Materials Inspection Program)

- Major revision to further risk-inform the materials inspection program (Phase 2). Changes included:
 - Enhance coordination and communication among the NRC regional offices and the regional offices and the Agreement States
 - Change the documentation of materials inspections
 - Allow flexibility for in-office reviews

Phase 3 (Latest) Inspection Program Changes

- In 2020, started revising the routine inspection procedures (IPs) to implement modern risk-informed approaches to the materials inspection program
- Developing changes to IMC 2800 to address:
 - Disposition of low safety-significant issues identified during materials inspections
 - Enhance communications and overall inspection efforts between NRC regions for multi-regional licensees
 - Strengthen and leverage the collective inspection and oversight efforts of the National Materials Program
 - Provide further information regarding “programmatic” issues
 - Develop additional guidance for unannounced and remote inspections and timeliness and adjustments to inspection intervals
- Initiate changes to materials inspection frequencies and priorities for several types of materials licensees based on data and information obtained during Phase 2

Overall Changes to Existing Routine Inspection Procedures

- Changed “focus elements” to “risk modules” to highlight specific risk activities for each unique inspection area (e.g., nuclear medicine)
- Added “level of effort” estimates to each of the new/revised inspection procedures
- Separated some of the inspection areas listed in existing IPs into additional procedures to provide more focus on specific risks activities

Risk Activities Focus in New Draft Inspection Procedures

- Fixed Gauges
 - Lock-out, tag-out
- Portable Gauges
 - Security of gauges, especially during transportation
 - Activities at temporary jobsites
- Broad Scope (formerly part of IP 87126 (Industrial/Academic/Research))
 - Unsealed materials
 - Oversight and storage of materials, including inventory controls
- Veterinary Use (formerly part of IP 87126)
 - Monitoring of potential exposure pathways from use of radioactive materials in animals
- Nuclear Medicine
 - Observation of positron emission tomography (PET) and therapy treatments
 - Security and control of materials (diagnostic and therapeutic)

Future Routine Inspection Procedure Changes

- Well Logging
- Irradiators
- Industrial Radiography
- Radiopharmacy Programs
- Materials Processor/Manufacturing Programs
- Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs
- Brachytherapy Programs
- 10 CFR Part 37 Materials Security Programs

Other Future Activities and Schedule

- IP revisions to be reviewed by the Agreement States in at least 3 groups
 - First group of IP revisions scheduled for June/July 2021
 - Second group scheduled for August/September 2021
 - Third group scheduled for November/December 2021
- IP revisions to be issued in at least 3 groups
 - First group of IP revisions scheduled for Fall 2021
 - Second group scheduled for Winter 2021
 - Third group scheduled for Spring 2022
- IMC 2800 changes scheduled for Agreement States review in October/November 2021 and issuance in Winter 2021
- Outreach/training planned immediately after each group of procedures issued. IMC 2800 changes will be covered with the second group of IPs.

Questions?

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