**NRC INSPECTION MANUAL** MSTB

INSPECTION PROCEDURE 87139

PORTABLE NUCLEAR GAUGE PROGRAMS

Effective Date: 05/16/2022

PROGRAM APPLICABILITY: IMC 2800

# 87139-01 INSPECTION OBJECTIVES

01.01 To determine if licensed activities are being conducted in a manner that will protect the health and safety of workers and the general public.

01.02 To determine if licensed programs are being conducted in accordance with U.S. Nuclear Regulatory Commission (NRC) requirements using a risk-informed, performance-based regulatory approach.

# 87139-02 INSPECTION REQUIREMENTS

The review of the licensed activities will be commensurate with the scope of the licensee's program. The inspector’s evaluation of a licensee’s program will be based on direct observation of work activities, interviews with workers, demonstrations by workers performing tasks regulated by NRC, and independent measurements of radiation conditions at the facility, rather than exclusive reliance on a review of records. Additionally, the inspector should use a risk-informed approach to perform the inspection, such as choosing the activities that carry the highest risk to inspect first. This can help ensure that in cases of limited time with the licensee due to varying circumstances, the most risk-significant licensee activities are reviewed for each inspection.

For instance, an activity that may carry a significant amount of risk is the licensee’s transportation of the portable nuclear gauge to a temporary job site. The licensee may lose the portable gauge while traveling to the job site due to the improper securing of the gauge within the transportation vehicle. This may, in turn, result in a member of the public finding the gauge on the side of the road, potentially exposing themselves and others to unnecessary radiation exposure. Additionally, portable gauges have been stolen from trucks during transportation and overnight stays, or from temporary job sites. For these reasons, it is important for the inspector to review how the licensee secures gauges in these situations.

The structure and the emphasis of the inspection should be on the following risk modules that describe the outcomes of an effective portable nuclear gauge radiation safety program. Risk modules (RMs) are defined as program areas that present higher risk, or expected to effectively reduce risk, to health, safety, and security that are identified in each inspection procedure in order to focus inspection effort on these particular program areas. To consider an inspection complete, the inspector should review applicable RMs based on ongoing activities at the time of the inspection. The RMs that carry the highest risk components should always be completed to the best of the inspector’s ability. Additional inspection elements that carry less risk can be found as an appendix to this inspection procedure. These additional elements are not required to be reviewed as part of a risk-informed inspection approach but may be reviewed if the inspector has additional time, if the additional elements are related to safety issued identified in the RMs, or if multiple violations were identified through review of the following RMs.

## 02.01 RM-1: Security of Licensed Material

The licensee should control access to and prevent loss of licensed material in accordance with 10 CFR 20.1801 and 1802, as well as 10 CFR 30.34(i). This should include gauges that are being used at temporary job sites, as well as gauges that are in storage at the licensee’s facilities.

## 02.02 RM-2: Observation of Licensed Activities at Temporary Job Sites

If possible, the inspector should observe any licensed activities that may be ongoing during the inspection. This can be determined during the entrance meeting with the licensee. Since this is the most important part of a portable gauge inspection, priority should be given to actually observing the licensee’s work at these temporary job sites whenever possible.

## 02.03 RM-3: Radiation Surveys, Postings, and Personnel Dosimetry

The licensee should possess (or have ready access to) radiation instrumentation to monitor radiation levels in areas where portable nuclear gauges are used and stored, in accordance with 10 CFR 20.1501. Additionally, the licensee should post certain areas where portable nuclear gauges are used and stored with appropriate signage, in accordance with 10 CFR 20.1901 and 1902. If the licensee monitors personnel for radiation exposure, then dosimetry records should be reviewed as well.

## 02.04 RM-4: Material Control and Accountability

The inspector should verify that licensed material is controlled and accounted for through periodic physical inventories in accordance with applicable license conditions (usually required at 6-month intervals). This should include a comparison of the licensee’s latest physical inventory with the portable gauges that are actually possessed and verified by the inspector through direct observation.

## 02.05 RM-5: Training of Employees

The licensee should ensure that workers are knowledgeable of radiation uses and safety practices in both normal and accident conditions, in accordance with 10 CFR Parts 19 and 20. Additionally, licensee workers should feel empowered to implement the radiation safety program, which is indicative of a safety conscious work environment.

## 02.06 RM-6: Management Oversight

The licensee’s management system should be appropriate for the scope of use and should ensure the appropriate implementation of the radiation protection program, and that periodic audits are performed, in accordance with 10 CFR 20.1101. Additionally, assessments of past performance, present conditions and future needs should be performed, and appropriate action taken when needed.

# 87139-03 INSPECTION GUIDANCE

General Guidance

The following inspection guidance is designed to assist the inspector in evaluating the performance of the licensee’s radiation safety program. The guidance is organized by the individual risk modules described above; however, this does not mean that the risk modules should be reviewed in this specific order. Instead, the inspector should use a risk-informed approach to decide which of the risk modules to inspect first. This is likely going to be predicated upon what licensed activities are ongoing when the inspector arrives at the licensed facility. Furthermore, inspectors should not feel constrained by the guidance in this procedure. If an inspector obtains information that indicates that a problem may exist in an area within the NRC’s jurisdiction that is not specifically addressed in this procedure, the inspector should redirect, or otherwise expend, inspection effort to address that problem.

An examination of the licensee's records should not be considered the primary part of the inspection. Rather, observations of activities in progress, equipment, facilities and use areas, etc., will be a better indicator of the licensee's overall radiation safety program than a review of records alone.

During the records review, look for trends such as increasing radiation doses to personnel or unusually high or increasing radiation levels. Records such as surveys, receipt and transfer of licensed materials, and training may be examined randomly until the inspector is satisfied that the records are being maintained and are complete. Other records that are more closely related to health and safety (such as personnel dose-monitoring records and incident reports) should be examined in detail.

Common elements to all inspections include entrance and exit meetings with appropriate licensee management, including the radiation safety officer (RSO), observations of facilities and work in progress, independent confirmatory surveys, and the evaluation of program scope and any special license conditions. Specific guidance regarding these common elements can be found in Inspection Manual Chapter (IMC) 2800.

Each of the following elements should be reviewed, as appropriate, during each inspection of a portable nuclear gauge licensee.

Specific Guidance

## 03.01 RM-1: Security of Licensed Material

The licensee should control access to and prevent loss of licensed material in accordance with 10 CFR 20.1801 and 1802, as well as 10 CFR 30.34(i). This should include gauges that are being used at temporary job sites, as well as gauges that are in storage at the licensee’s facilities.

* Upon arrival at the licensee’s facility, the inspector should ascertain the level of security used to protect licensed material against unauthorized removal. Look for any open gates or doors that may normally be closed, especially if it appears that gauges may be stored there either temporarily or permanently.
* Additionally, the inspector should look inside the back of any pickup trucks in the parking lot to see if the licensee may have inadvertently left a portable gauge there without the required locks/chains. Any portable gauge that is not under constant surveillance must be secured with at least two independent physical barriers, in accordance with 10 CFR 30.34(i).
* Once inside the licensee’s facility, and after introductions are made (usually through an entrance meeting with licensee management), the inspector should ask where the gauges are used/stored, and how many are present at the facility. Some of the gauges may currently be in use at a temporary job site. If so, the inspector should determine where the job site is located, and if it is close enough in proximity, should attempt to observe actual use of the portable gauges at this temporary job site.
* A facility tour should be performed by the inspector at some point during the inspection, accompanied by licensee personnel. As for the gauges present at the licensee’s facility, the inspector should ensure that they are appropriately secured. Keep in mind that barriers for security purposes can also include licensee personnel as a barrier, and not just physical barriers such as doors and locks.

## 03.02 RM-2: Observation of Licensed Activities at Temporary Job Sites

If possible, the inspector should observe any licensed activities that may be ongoing during the inspection. This can be determined during the entrance meeting with the licensee. Since this is the most important part of a portable gauge inspection, priority should be given to observing the licensee’s work at these temporary job sites whenever possible.

Although the majority of the review of this RM should be based on observations of activities and interviews with personnel, it may be necessary to perform a limited review of records documenting these activities. If this limited review results in the identification of possible weaknesses in the licensee’s program, the inspector may expand the review as necessary to determine the extent of these issues.

If observations of activities cannot be performed at temporary job sites, the inspector should ask the licensee to demonstrate these activities. Ask the licensee if any non-routine activities are performed, such as disassembly of gauges for cleaning.

* During inspections of licensed activities at temporary job sites, verify that licensee personnel ensure that devices are protected from heavy construction equipment, welding equipment, high voltage lines, and other industrial hazards. Since portable gauges have been damaged during accidents at temporary job sites, the inspector should attempt to observe the licensee’s performance of licensed activities at the job sites. Significant examples include damage to the point where the sealed source is permanently detached from the source rod; this can sometimes be attributed to the gauge user not maintaining constant surveillance of the gauge while it was being used. Additionally, events have occurred while the gauge is being transported to a temporary job site; during these events, the gauge may not have been properly blocked and braced within the transport vehicle.
* IMC 2800 Section 05.01.b.4 Observation of Actual Facilities and Licensed Activities emphasizes the importance of inspecting licensed activities at temporary job sites. Furthermore, IMC 2800 Section 05.03.b.3. provides flexibility to announce an inspection at temporary job sites. Therefore, the determination of whether to perform these observations on either an announced or unannounced basis should be left to the judgement of the inspector based on the circumstances at hand.
* Transportation. Verify that the licensee's procedures and documentation are sufficient to ensure that licensed material is transported in accordance with 10 CFR Part 71 and U. S. Department of Transportation (DOT) regulations for transportation of radioactive materials. For example, the person driving the vehicle should have within their reach a bill of lading and emergency response paperwork required by 49 CFR 172.602. Many events have occurred in the past when licensees have transported portable gauges to or from temporary job sites where the gauge was lost during transit. The inspector should observe the licensee prepare a portable gauge for transport to ensure proper blocking and bracing is utilized.
* Non-routine Maintenance. The inspector should ascertain whether the licensee is performing non-routine maintenance activities, and whether the licensee is authorized to perform such activities. Maintenance or servicing (beyond routine cleaning and lubrication), that involves detaching the source or source rod from portable gauges, must be performed by the gauge manufacturer or a person specifically authorized by the NRC or an Agreement State. The license will contain a condition if the licensee is authorized to perform these activities, and the procedures for this activity may be tied down to the license. Since this activity carries with it more risk than routine maintenance, the inspector should ensure that these procedures are reviewed and discussed with the licensee as part of the routine inspection.

The inspector should be attentive to potential industrial safety hazards, for referral to the U.S. Department of Labor's Occupational Safety and Health Administration (see Manual Chapter 1007). The focus should be on potential non-radiological hazards personally observed or brought to the inspector’s attention by licensee staff.

## 03.03 RM-3: Radiation Surveys, Postings, and Personnel Dosimetry

The licensee should possess (or have ready access to) radiation instrumentation to monitor radiation levels in areas where portable nuclear gauges are used and stored, in accordance with 10 CFR 20.1501. Additionally, the licensee should post certain areas where portable nuclear gauges are used and stored with appropriate signage, in accordance with 10 CFR 20.1901 and 1902. If the licensee monitors personnel for radiation exposure, then dosimetry records should be reviewed as well.

* It is suggested that the inspector have their survey meter powered on and perhaps audible upon arrival at the licensee’s facility. Incidents have occurred in the past where inspectors have inadvertently walked into a radiation field because they did not know licensed activities were ongoing. Additionally, licensees have lost radioactive sources in their parking lot in the past, and if the inspector has their survey meter on when they arrive, they may be able to avoid unnecessary radiation exposure.
* Radiation surveys should be performed by the inspector in locations where licensed material is stored and/or used; ambient radiation level surveys are appropriate. Surveys should include the exterior surface of any storage rooms, while paying particular attention to those areas where members of the public may have access. It is important to remember that members of the public can also include employees of the licensee that do not require access to or actively participate in the licensee’s use of portable nuclear gauges.
* If the licensee also possesses and uses radiation detection instruments, the inspector should ask the licensee to demonstrate how they perform radiation surveys, and should be performed side by side to the inspector’s surveys so that a comparison can be made of the readings. The inspector should also ask the licensee how often they perform surveys, where they are performed, and how they are documented. Keep in mind that licensees that only possess portable gauges are not necessarily required to possess their own survey meters but should at least have access to one. In this case, the inspector should ask the licensee where they would obtain a survey meter if an emergency should occur.
* If the licensee is required to use radiation detection instruments, the current calibration should be reviewed by the inspector for each instrument on hand. If the licensee possesses a large number of instruments, a random selection of these calibration certificates may be appropriate. Gauge licensees should calibrate their instruments at intervals not to exceed 12 months, as determined by licensees’ procedures.
* While performing radiation surveys, the inspector should observe any and all postings and signage, and should ensure that each area is appropriately posted based on ambient radiation levels. Proper labeling of gauges should also be observed, to include isotope type and quantity, as well as “caution-radioactive material” labeling.
* The inspector should observe licensed activities in progress and should visually identify whether licensee personnel are appropriately wearing their personal dosimeters, while keeping in mind that some gauge licensees are not required to monitor their workers for radiation exposure (those not likely to receive greater than 10 percent of the annual limits).
* Dosimetry records are one of the few records that should be reviewed even as part of a performance-based inspection. Records of annual exposure should be reviewed for each radiation worker back to the previous inspection; particular attention should be given to identifying possible upward trends in personnel exposure.

## 03.04 RM-4: Material Control and Accountability

The inspector should verify that licensed material is controlled and accounted for through periodic physical inventories in accordance with applicable license conditions (usually required at 6-month intervals). This should include a comparison of the licensee’s latest physical inventory with the gauges that are actually possessed and verified by the inspector through direct observation.

Although the majority of the review of this RM should be based on observations of activities and interviews with personnel, it may be necessary to perform a limited review of records documenting these activities. If this limited review results in the identification of possible weaknesses in the licensee’s program, the inspector may expand the review as necessary to determine the extent of these issues.

* The inspector should review the inventory of gauges that the licensee possesses. This is usually performed by asking for a copy of the licensee’s latest physical inventory record. The inspector would then compare the physical inventory record to the actual gauges possessed by the licensee. For licensees that possess a large number of gauges, a random sample review of the inventory may be appropriate.
* While reviewing the licensee’s inventory of gauges, the inspector should also compare this inventory to the gauge types and quantities authorized on the license.
* The inspector should ask the licensee how they perform a physical inventory, and how often. The inspector should ensure that the licensee performs inventories of the gauges themselves, and not of just the gauge’s transport containers. Events have occurred in the past where licensees were performing physical inventories of the transport containers for the gauges, without opening the transport containers, which led to the licensee not being aware that some of the gauges that were not routinely used had been missing for years. By observing the licensee perform a physical inventory, instead of simply reviewing the records of physical inventories, the inspector can identify this weakness and ensure corrective actions are taken.
* Through interviews of the RSO and selected licensee personnel, determine whether the licensee has experienced any events since the last inspection, involving lost, missing, stolen or damaged gauges. Review and evaluate any such incident or unusual occurrence that took place since the last inspection. If such incidents were required to be reported, verify, through interview of the RSO and review of event reports, that a complete and timely report was made to the NRC. For incidents or unusual occurrences that were not required to be reported, determine whether the licensee performed sufficient investigation to identify the cause of the incident, and took appropriate corrective actions to prevent recurrence of the situation leading to the incident or unusual occurrence.

## 03.05 RM-5: Training of Employees

The licensee should ensure that workers are knowledgeable of radiation uses and safety practices in both normal and accident conditions, in accordance with 10 CFR Parts 19 and 20. Additionally, licensee workers should feel empowered to implement the radiation safety program, which is indicative of a safety conscious work environment.

Although the majority of the review of this RM should be based on observations of activities and interviews with personnel, it may be necessary to perform a limited review of records documenting these activities. If this limited review results in the identification of possible weaknesses in the licensee’s program, the inspector may expand the review as necessary to determine the extent of these issues.

* Through observations of activities and interviews with personnel, determine that appropriate training and initial instructions are being accomplished as specified in the license and/or regulations. The interviews should include discussions about actual or hypothetical emergency conditions, especially involving emergencies at temporary job sites, in order to assess the worker’s response to such conditions. Observe licensed activities in progress or a demonstration of activities to assess the worker’s understanding of the radiation protection requirements associated with their assigned activities.
* If an employee is observed performing licensed activities, and the performance indicates that the employee is knowledgeable of proper radiation safety techniques, the inspector has satisfied this portion of the training review. Likewise, if the inspector interviews a worker on how they perform routine maintenance on a portable gauge, and the worker describes all parts of the process as required by regulatory requirements and/or operating procedures, then the inspector has satisfied this portion of the training review.
* Records review would be appropriate for those circumstances where licensed activities were not able to be observed, and workers were perhaps not available for interviews. The requirements for certain kinds of training and instruction are found in the regulations, while the procedures for their implementation are generally found in the procedures included in the license’s “tie-down” condition. Discuss with the licensee how, and by whom, training is conducted, and the content of the training provided to workers (generally found in the license application).
* If the licensee is authorized to perform non-routine maintenance activities, the inspector should ensure that employees are trained on this non-routine maintenance as a part of their periodic training regimen.

## 03.06 RM-6: Management Oversight

The licensee’s management system should be appropriate for the scope of use and should ensure the appropriate implementation of the radiation protection program, and that periodic audits are performed, in accordance with 10 CFR 20.1101. Additionally, assessments of past performance, present conditions and future needs should be performed, and appropriate action taken when needed.

Although the majority of the review of this RM should be based on observations of activities and interviews with personnel, it may be necessary to perform a limited review of records documenting these activities. If this limited review results in the identification of possible weaknesses in the licensee’s program, the inspector may expand the review as necessary to determine the extent of these issues.

* Review the licensee’s oversight of their safety program. Performing a review of the safety program at the end of the inspection could allow the inspector to use what they identified (or did not identify) during the course of the inspection to better inform how the licensee reviewed their safety program. For instance, if the inspector identified one or more violations during the inspection, then the inspector could review the most recent annual radiation safety review to ascertain whether the RSO also identified the issue during the audit. Alternatively, the inspector may want to begin the inspection with a review of management oversight so that they can focus on the areas where the licensee has found deficiencies. The decision of when to review this RM is left at the inspector’s discretion.
* The review of management oversight should also include interviews with the RSO’s supervisors, if available. This is important for portable gauge licensees because the use of portable nuclear gauges is sometimes ancillary to the primary function of the facility (i.e., primary functions could be construction or a multi-faceted engineering firm). For this reason, the upper-level managers of these facilities need to understand the importance of radiation safety with respect to the possession/use of these nuclear gauges, as they sometimes are unaware of the presence of these gauges.
* It is important that licensees understand the importance of self-identification of violations through periodic audits of their safety program. The inspector should take some time during a review of management oversight to discuss with the licensee how the NRC dispositions violations that are self-identified and self-corrected prior to the inspection to encourage a robust safety review is performed by the licensee.
* Periodic audits by management should include a review of the most risk-significant portions of the licensee’s program. This could include a licensee’s activities at temporary job sites, and how they are implemented by the gauge users.
* If no violations or weaknesses in the licensee’s radiation safety program were observed by the inspector, then a review of records of annual audits may not be necessary.

# 87139-04 RESOURCE ESTIMATE

A typical portable gauge licensee’s inspection may be based on the number of portable nuclear gauges possessed by the licensee, as well as the number of locations the portable gauges are used and/or stored.  The typical on-site portable gauge inspection may be approximately two to four hours, with additional time possibly necessary for travel to multiple locations of use and/or storage and observations of licensed activities at temporary jobsites.

# 87139-05 REFERENCES

A listing of IMCs and IPs, applicable to the inspection program for materials licensees, can be found in IMC 2800. These documents are to be used as guidelines for inspectors in determining the inspection requirements for operational and radiological safety aspects of various types of licensee activities.

END

Appendix:
Appendix A: Additional Inspection Elements

Attachment:
Attachment 1: Revision History for IP 87139

# Appendix A: Additional Inspection Elements

# 87139A-01 PURPOSE

The guidance in this Appendix is intended to supplement inspection requirements and associated guidance provided in this procedure. The additional inspection guidance provided herein may be used as time allows or to assist in completing a rounded performance-based inspection.

# 87139A-02 BACKGROUND

Risk modules are defined as program areas that present higher risk, or expected to effectively reduce risk, to health, safety, and security that are identified in each inspection procedure in order to focus inspection effort on these particular program areas. The risk profile for each licensed program could be different and some programs may need more in-depth review. Therefore, the additional inspection elements included herein may be used to expand the scope inspection effort and/or supplement the risk modules in this procedure.

# 87139A-03 GUIDANCE

## 03.01 Leak Tests

Verify that leak tests of sealed sources are performed at the required frequency. Also verify that leak test samples are analyzed in accordance with the license requirements.

* If records of leak test results show contamination in excess of the regulatory requirements, then verify that the licensee made appropriate notifications and removed the source from service. Additionally, the inspector should determine if contamination to equipment or the facility occurred as a result of the leaking source, and if so, how the licensee handled the situation (i.e., decontaminated the area themselves or requested assistance from an outside source).
* Through performance-based observations, determine how the leak tests are being performed. Ensure that licensees are following the manufacturer’s instructions on performing the leak tests.

## 03.02 Fire Protection

Materials licensees are not required by NRC regulations to implement a fire protection program. However, in many cases, the risk posed to radiological safety by fires is comparable to or exceeds the risk from other events involving licensed activities. Determine if licensees have a plan in place for preventing fires and combating fires that might occur. Any perceived problems/deficiencies (i.e., improper storage of combustible or flammable material, fire extinguishers out of service, lack of fire alarm or detection system, lack of fire suppression system) noted by the inspector should be brought to the licensee’s attention and discussed with regional management. Proper fire protection systems can be evidenced by the licensee’s involvement with the local fire department. Additional guidance for reporting fire protection concerns can be found in IMC 1007 “Interfacing Activities Between Regional Offices of NRC and OSHA.”

## 03.03 Authorized Users

Authorized users may either be named in the license application or be appointed by the licensee, depending on the type of license issued and/or the wording in the license. For those appointed by the licensee, verify that the authorized user is trained in accordance with the approved criteria and has knowledge commensurate with operational duties. Typically, successful completion of one of the following is considered as evidence of adequate training and experience for operating gauging devices:

* Gauge manufacturer’s course for users; or
* Equivalent course that meets Appendix D criteria in either NUREG 1556, Volume 1, Program-Specific Guidance About Portable Gauge Licenses” or NUREG 1556, Volume 1, Program-Specific Guidance About Portable Gauge Licenses.”
* Authorized users are required to either be physically present or to otherwise supervise the use of gauges. The level of supervision will depend on the wording in the license conditions or regulations. Some licenses have conditions such as “. . . used by or under the supervision of . . .” For some licenses that have the condition “. . . under the direct supervision of . . . ,” the authorized user must be physically present at the facility for easy contact or to observe the individual(s) working. Another phrase used is “. . . may only be used by . . .” Finally, “. . . under the direct supervision and physical presence of . . .” means the authorized user must directly supervise and be present at the work station. Considering the many license condition phrases, the inspector must exercise judgment to interpret the role of the authorized users.
* When the wording of the license condition is “. . . used by or under the supervision of . . . ,” an authorized user named on the license is considered to be supervising the use of licensed materials when he or she directs personnel in the conduct of operations involving the licensed material. This does not imply that the authorized user must be present at all times during the use of such materials. The authorized user is responsible for assuring that personnel under his/her supervision have been properly trained and instructed and is responsible for the supervision of operations involving the use of licensed materials, whether he or she is present or absent.

03.04 Operating and Emergency Procedures

During the licensing process, the licensee may have committed to developing, implementing, and maintaining operating and emergency procedures that meet regulatory guidance.  The effectiveness of those operating and emergency procedures will need to be evaluated through interviews, observations and review of the written procedures by the inspector during the inspection. The licensee may also have committed to implementing the standard procedures found in NUREG-1556 Volumes 1 and 4.

* Verify that licensee personnel are knowledgeable of the operational procedures by observing the performance of tasks at selected work stations and by a comparison of their performance with established procedures. Assess the licensee's emergency procedures to determine that these procedures are as approved by or described to NRC. Through interview of workers, verify that licensee personnel understand and implement the established procedures and are aware of procedural revisions.
* Licensees should be aware of relative radiological risks and not try to protect the device to the extent that they would be subjected to fire or other life-threatening situations (e.g., attempting to rescue a portable gauge from the path of approaching soil compacting equipment.)
* Some licensees may have agreements with other agencies (i.e., fire, law enforcement, and medical organizations) regarding response to emergencies. Through interviews of licensee officials, determine what actions the licensee has taken to ensure that such agencies (involved in such agreements) understand their roles in emergency responses.

## 03.05 Radiation Safety Officer

Through the review of records, and interviews of the Radiation Safety Officer (RSO) and authorized users, verify that the RSO has been appointed by licensee management, identified on the license, and is responsible for implementing the radiation safety program. Determine, through interviews, that this individual is knowledgeable about the program, and ensures that activities are being performed in accordance with approved procedures and the regulations. Determine that, when deficiencies are identified, the RSO has sufficient authority, without prior approval of the RSC or licensee management, to implement corrective actions, including termination of operations that pose a threat to health and safety.

END

# Attachment 1: Revision History for IP 87139

| Commitment Tracking Number | Accession NumberIssue DateChange Notice | Description of Change | Description of Training Required and Completion Date | Comment Resolutionand Closed FeedbackForm Accession Number(Pre-Decisional, Non-Public Information) |
| --- | --- | --- | --- | --- |
| N/A | ML22048A18004/26/22CN 22-008 | New inspection procedure. The inspection guidance for portable gauges was previously housed in IP 87124 ([CN 03-037](https://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2003/03-037.html)). The guidance was revised and placed in this new procedure. Specific changes include: (1) divided inspection guidance into risk-modules; (2) included inspectors’ observations; (3) updated inspection guidance; (4) added an estimated level of effort to complete an inspection; and (5) developed new appendix titled “Additional inspection elements.” | N/A | ML22048A181 |