
INSPECTION MANUAL CHAPTER 2515 APPENDIX E

INSPECTION PROGRAM MODIFICATIONS DURING PUBLIC HEALTH EMERGENCIES OR OTHER CONDITIONS RESTRICTING INSPECTOR ONSITE PRESENCE

Effective Date: 01/01/2024

2515E-01 PURPOSE

During public health emergencies or other conditions including local, state, or federal public emergencies (e.g., flooding, hurricane, etc.) restricting inspector onsite presence, the U.S. Nuclear Regulatory Commission's (NRC's) inspection implementing strategy should be agile and allow for flexibility in the performance of the inspection program at affected facilities. The inspection program provides reasonable assurance that licensees **comply** with their licenses and regulations. Licensees have the ultimate responsibility to safely operate their plants in accordance with their operating licenses.

The NRC will use a graded approach, **incorporating consistent criteria, resources, evaluation methodologies, and inspection prioritization (for example, as described in IMC 2515, Appendix E, sections 07g, 07i, and 07j)**, to meet the objectives of the oversight program. A graded approach allows for deferring or rescheduling planned inspections, changing the inspection periodicity, adjusting inspection levels (number of completed samples), **adjusting inspection methodologies**, or a combination of these actions, while seeking to maintain as much of the normal inspection program as possible. This would be based on the conditions being experienced and information and guidance from federal, state, and local government agencies, keeping in full view the health and safety of the personnel involved.

Additional background information for public health emergencies or other conditions can be found in the following two non-public documents: Continuity of Operations Procedure 429, "Agency Pandemic Plan," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14030A634) and "Continuity of Operations Plan" (ML14024A688).

2515E-02 OBJECTIVES

To provide direction for modifying the inspection program in the event of public health emergencies or other conditions restricting inspector onsite presence.

2515E-03 APPLICABILITY

See Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program—Operations Phase" section 2515-03.

The Office of Nuclear Reactor Regulation (NRR) or the regional offices may supplement, alter, or suspend the provisions of this guidance by memorandum as the situation warrants. The director of the Division of Reactor Oversight (and the chief of the Reactor Inspection Branch) should be consulted when conditions requiring additional guidance are warranted.

2515E-04 DEFINITIONS

None.

2515E-05 RESPONSIBILITIES AND AUTHORITIES

See section 2515-05 of IMC 2515.

2515E-06 REQUIREMENTS

See section 2515-14 of IMC 2515.

2515E-07 GUIDANCE

In the event of public health emergencies or other conditions restricting inspector onsite presence, the following considerations are in effect:

- a. The regions are expected to make a reasonable effort to complete the minimum number of samples for each inspection activity. However, the Regional Administrator, with concurrence from the director of NRR, can suspend implementation of the baseline inspection program should conditions warrant (such as a site quarantining). If this should occur, the primary function of resident inspectors and the regional office would be to maintain situational awareness and the ability to respond to emergency situations.
- b. Regions should continue to adequately evaluate and respond to events at a facility. If onsite inspections by NRC personnel are not possible, then the regions should collect information on the event remotely.
- c. Site coverage requirements remain in effect (see IMC 2515, section 11.01). If site coverage requirements cannot be met, regions should notify NRR and the Deputy Executive Director for Reactor and Preparedness Programs. In this situation, regions should **arrange** with the licensee to monitor plant activities remotely.

Staff who are in temporary resident inspector positions may need to be recalled due to travel limitations (e.g., access to lodging and food). Regions may need to consider using backup sites, other nearby sites, or regional or NRC Headquarters personnel to help cover any gaps that may occur because the temporary resident inspector needs to leave the area to return home.

- d. At the onset of **such emergencies or conditions**, and periodically thereafter, the regions should contact the U.S. Department of Homeland Security or designated state contacts to confirm the ability of affected states to perform their associated emergency response functions.
- e. At the onset of **such emergencies or conditions**, and periodically thereafter, the resident inspectors should verify that the licensees have sufficient staffing levels in key positions (e.g., operations, emergency response organization, security). Additionally, evaluate deferred maintenance and other activities, use of overtime, and the need for licensing or other regional support.

Regulatory Issue Summary 2010-04, "Monitoring the Status of Regulated Activities during a Pandemic," dated May 25, 2010 (ML100539611) contains useful guidance and several questions that the resident inspectors should consider during routine business contacts with the licensees. The information obtained will enable the NRC to effectively respond to licensees with potential challenges. Resident inspectors should recognize that licensees' resources may be strained. Therefore, resident inspectors should work with licensees to obtain the best information possible given the circumstances.

- f. Inspectors should be cautious when accessing licensee facilities and use conservative judgment so as not to unnecessarily risk their health and safety or the health and safety of licensee employees. A graded approach, **as discussed in section 01 of this appendix and** based on the current licensee response posture, should be considered for determining inspector site access.

NRC staff members at or visiting sites should strive to follow any licensee plans in place. Additionally, inspectors should follow any applicable federal, state, or local guidance in effect to determine if it is appropriate to enter a site and interact with licensee personnel. **Inspectors should also ensure regional offices are informed of this guidance to enable a consistent, graded approach to conditions is applied across the affected area.**

If licensees are conducting health screenings to permit site access, inspectors should generally comply with those requests similar to their adherence to Occupational Safety and Health Administration or other industrial safety requirements. Legal counsel, whether regional counsel or **the Office of the General Counsel (OGC)**, should be given the opportunity to review any health screening forms, statements, waivers, or acknowledgements before use and signature by inspectors. Inspectors should make their management aware of any changes to normal access to the site; if unfettered site access would be denied or restricted as a result of any such changes, inspectors should coordinate with their management, along with regional counsel or OGC, to determine an appropriate course of action.

- g. **In responding to emergencies and other conditions that restrict inspector onsite presence, the regions, in coordination with each other and NRR program offices, should identify consistent criteria, resources, evaluation methodologies, and inspection prioritizations that will be evaluated by staff and their immediate management for implementation. See attachment 1 for some general guidance in the method of evaluation.** Consider modification to the baseline inspection program in consultation with NRR **based on the impact in the vicinity of inspectors, licensee, and methods of transportation to the site, as follows:**

- 1. Heightened awareness

- (a) Resident inspectors: conduct onsite activities as normal.

- (1) Utilize Plant Status activities and inspection sample opportunities to monitor licensee plans and preparation for conditions that could impact plant operations or restrict onsite access for licensee and NRC personnel.

- (b) Region-based inspections: conduct activities as normal.

- (1) Maintain awareness of local conditions for changes. Consider modifying the inspection plan if conditions are projected to deteriorate and health and safety of NRC or licensee staff becomes a concern.
2. Local implementation of restrictions (e.g., canceling after-school activities, limiting public gatherings, advising nonessential workers to remain home, social distancing, or sheltering recommendations)
 - (a) Resident inspectors: Reduced onsite activities in affected areas. Assess the use of resident inspector in-office staggering (i.e., a single resident inspector on site at a time, only coming on site for risk-significant in-plant operations—including for those sites undergoing refueling outages—applying flexibility with the 3-day rule) to reduce face-to-face interaction for affected personnel. Identify opportunities to leverage technology to work remotely for portions of time to perform preparation, documentation, and inspection activities that do not require in-plant observations or walkdowns per the inspection procedure (IP).
 - (1) Identify opportunities to leverage technology to inspect remotely. Potential inspection candidates include, but are not limited to, problem identification and resolution samples, licensee event report closeouts, heat sink, maintenance effectiveness, operability assessments, plant modifications, and performance indicators.
 - (2) Remote access to licensee information can broaden the spectrum of activities that can be inspected.
 - (b) Region-based inspections: Assess the potential to postpone or reschedule onsite inspections. Assess the potential to **accomplish** inspection activities through remote **or hybrid inspection**.
 - (1) Identify opportunities to leverage technology to inspect remotely. Potential candidates include, but are not limited to, problem identification and resolution samples, licensee event report closeouts, and heat sink, etc.
3. Local, state, or federal state of emergency (e.g., recommended or mandatory evacuation of non-essential or non-emergency personnel; mandatory sheltering; closure of schools, public parks, and nonessential businesses; requiring nonessential workers to remain home; widespread implementation of aggressive social distancing).
 - (a) Resident inspectors: May limit day-to-day site coverage; however, resident inspector site coverage should be maintained in accordance with the provisions of IMC 2515.
 - (1) Monitor plant status and activities remotely to the maximum extent practicable.
 - (2) Monitor uncomplicated events and transients remotely. Obtain management approval for an onsite response to an event or transient.
 - (3) Coordinate site access with the licensee.

(b) Region-based inspections: Consider deferring or postponing all onsite inspection activities.

(1) Assess IP objectives and licensee personnel support to determine whether procedures can be performed remotely.

(c) Regional office: In consultation with the Office of Nuclear Security and Incident Response, consider the need to staff a portion of the Incident Response Center to monitor plant status and coordinate NRC activities.

If the licensee implements social distancing or quarantine controls in excess of the local or national stance, consider implementing controls similar to those specified above.

h. Regional offices should also consider the following:

1. Plant status activities should continue to the extent possible; however, consideration should be given to all means to access information remotely using technological resources available through the licensee. This could include virtual attendance at licensee meetings (by phone or computer). If resident inspectors are not available at the site, consideration should be given towards sending region-based inspectors to the facility if possible. However, this could be challenging due to staff illness, travel restrictions, licensee quarantine actions, and other factors. If plant status activities cannot be performed on site, remote means should be considered. The regions should **arrange** with licensees to obtain information from a remote location. Resident inspectors can achieve this by accessing the licensee's computer systems and networks, licensees providing key information packages and logs electronically, conducting discussions by phone or video with licensee personnel, using licensee cameras, performing physical walkdowns with video capture, and looking for other online indications, for example.
2. For control room access during public health emergencies or other conditions, inspectors should minimize visits to the extent practicable in accordance with licensee health-protective measures. Resident inspectors should make efforts not to loiter in the control room or other public areas longer than necessary to obtain the plant status. Inspectors should communicate by telephone rather than face-to-face and use remote monitoring and technology to the maximum extent practicable.
3. For event response, the regions should consider the threshold at which onsite response is needed for an event. For example, the NRC may be able to perform remote monitoring of unplanned down powers or uncomplicated reactor trips, depending on the accessibility of the licensee's network. If onsite response is appropriate, the regions could consider limiting the response, such as having the senior resident inspector respond to the emergency response facility or technical support center only.
4. For inservice inspections, inspectors should maximize the use of record reviews, remote video or recorded inservice inspections where possible.
5. Resident inspectors should reduce, as appropriate, the selected baseline inspections they perform.

6. The NRC should postpone scheduled supplemental inspections, temporary instructions, and special and infrequently performed inspections (see IMC 2515 Appendix C, "Special and Infrequently Performed Inspections").
 7. For annual assessment meetings, the NRC should evaluate use of virtual meetings or the deferral of such meetings, within program requirements.
 8. The NRC should reduce, as appropriate, management site visits required in accordance IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities." In addition, the requirement for regional management to tour containment during outages may be waived.
 9. In consultation with program office, the regions should determine whether the suspension of site coverage metrics would be acceptable during the period of increased health concerns.
- i. To promote consistency, NRR, in consultation with the regions, **should** consider providing more detailed guidance on inspection program implementation at the start of, and periodically throughout, national events such as public health emergencies. **When deciding to perform remote inspection activities, the inspector(s) should take into consideration any negative impacts to safety and/or security margins when replacing onsite inspections, including taking into consideration additional preparation time licensees may require to support remote inspections. Guidance should strive to provide and use consistent criteria, resources, evaluation methodologies, and inspection prioritizations.** Examples of such guidance provided via memorandums can be found in the following documents:
1. Memorandum titled, "Updated Implementation of Resident Inspector Site Coverage During COVID-19," April 6, 2020 (ML20097E538).
 2. Memorandum titled, "Inspection Guidance During Transition From COVID-19 Mandatory Telework," dated May 28, 2020 (ML20141L766).
 3. Memorandum titled, "Calendar Year 2021 Inspection Guidance During COVID-19 Telework Restrictions," dated February 1, 2021 (ML21027A274).
 4. Memorandum titled, "Implementation Of Inspection Programs Following Re-Entry From The Public Health Emergency For The Reactor Safety Program," dated November 2, 2021 (ML21295A302).
- j. Some best practices and lessons learned from the COVID-19 public health emergency can be found in the following documents:
1. "Comprehensive Baseline Inspection Program Review - Calendar Year 2021," (ML21252A154).
 2. "Initial Report On Challenges, Lessons Learned And Best Practices From The 2020 COVID-19 Public Health Emergency," (ML20308A389)
 3. "Final Report for the Follow-On Review of the Lessons Learned, Best Practices, and Challenges During the COVID-19 Public Health Emergency," (ML22172A159)

2515E-08 REFERENCES

“Final Report for the Follow-On Review of the Lessons Learned, Best Practices, and Challenges During the COVID-19 PHE,” (ML22172A159)

“Initial Report On Challenges, Lessons Learned And Best Practices From The 2020 Covid-19 Public Health Emergency,” (ML20308A389)

Comprehensive Baseline Inspection Program Review - Calendar Year 2021 (ML21252A154)

Continuity of Operations Plan (ML14024A688) (Non-public)

Continuity of Operations Procedure 429, “Agency Pandemic Plan” (ML14030A634) (Non-public)

IMC 0102, “Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities”

IMC 2515, “Light-Water Reactor Inspection Program—Operations Phase”

IMC 2515, Appendix C, “Special and Infrequently Performed Inspections”

IMC 2515, Appendix D, “Plant Status”

Memorandum titled, “Calendar Year 2021 Inspection Guidance During COVID-19 Telework Restrictions,” dated February 1, 2021 (ML21027A274)

Memorandum titled, “Cancellation Of Inspection Programs Memoranda Regarding The Public Health Emergency For The Reactor Safety Program,” dated April 21, 2023 (ML23082A106)

Memorandum titled, “Implementation Of Inspection Programs Following Re-Entry From The Public Health Emergency For The Reactor Safety Program,” dated November 2, 2021 (ML21295A302)

Memorandum titled, “Inspection Guidance During Transition From COVID-19 Mandatory Telework,” dated May 28, 2020 (ML20141L766)

Memorandum titled, “Updated Implementation of Resident Inspector Site Coverage During COVID-19,” April 6, 2020 (ML20097E538)

Regulatory Issue Summary 2010-04, “Monitoring the Status of Regulated Activities during a Pandemic” (ML100539611)

END

Attachment 1: Be risk SMART Template/Example

<p><u>Be</u> clear about the problem</p>	<p>During a PHE or other event affecting safe travel or site access, which of the following inspection options should be selected for an upcoming inspection?</p> <p>Option 1: Conduct Routine Inspection</p> <ul style="list-style-type: none"> • All assigned inspectors actively participate in the inspection • Inspection includes on-site inspection activities in close contact with licensee staff • Inspection includes on-site or remote document and record reviews <p>Option 2: Conduct On-site Inspection with Mitigation Strategies</p> <ul style="list-style-type: none"> • Utilize a reduced number of inspectors to perform onsite inspection activities • Only minimally required onsite activities should be performed • All inspection that can be performed offsite is completed at temporary offsite lodging <p>Option 3: Conduct 100 percent Remote Inspection</p> <ul style="list-style-type: none"> • Utilize available technology to remotely perform onsite inspection activities to the maximum extent practicable • Perform administrative reviews remotely <p>Option 4: Conduct Remote Inspection with Onsite Follow-Up</p> <ul style="list-style-type: none"> • Perform all elements of Option 3. • Conduct follow-up onsite inspection at a later date. All document reviews will be performed remotely, and the inspection remains open until an inspector can safely travel to the site to perform required onsite inspection activities. <p>Option 5: Cancel Inspection</p> <ul style="list-style-type: none"> • Risk of site travel (e.g., contracting virus, local environmental conditions) too high to conduct onsite inspection • Remote inspection not a viable alternative • Remote administrative reviews insufficient to credit inspection completion
<p><u>Spot</u></p>	
<p>What can go right?</p>	<p>1) Inspectors perform a successful on-site, remote, or hybrid inspection.</p>
<p>What can go wrong?</p>	<p>2) Inspector exposed to unnecessary personal hazard 3) Remote inspection unable to fully evaluate licensee performance 4) External stakeholder concerns with NRC's ability to conduct an effective inspection 5) Unavailable lodging in the surrounding community 6) Critical NRC inspection unable to be performed due to unacceptable risk to NRC inspectors and licensee staff.</p>

What are the consequences?	1) Successful Inspection: Reasonable assurance provided that licensee operations are conducted safely 2) Personal Hazard: Potential life-threatening conditions to NRC inspectors or licensee staff 3) Remote Inspection/Licensee Performance: NRC cannot determine whether operations were conducted safely 4) External Stakeholder Concerns: Loss of external stakeholder confidence 5) Unavailable Lodging: Onsite inspection activities may be unable to be conducted 6) Critical Inspection Unable to be Performed: Enter Specific Consequence Here
How likely is it?	1) Successful Inspection: Likely – with appropriate Be riskSMART decision-making 2) Personal Hazard: Enter High/Medium/Low Here - Dependent on local conditions and identified hazards 3) Remote Inspection/Licensee Performance: Enter High/Medium/Low Here; “Manage...what you can actions” may reduce likelihood 4) External Stakeholder Concerns: Enter High/Medium/Low Here; “Manage what you can actions” may reduce likelihood 5) Unavailable Lodging: Enter High/Medium/Low Here – Depending on local conditions and hazards 6) Critical Inspection Not Completed: Enter High/Medium/Low Here
<u>Manage</u> what you can	Options available to manage and/or mitigate the likelihood and consequences of exposure to personal hazards includes the following: <ul style="list-style-type: none"> • Assess the options available to complete the inspection. Discuss with the inspection team and management the capability to accomplish the inspection requirements remotely. • Limit the number of inspectors that conduct onsite inspection activities to minimize potential exposure. • Ensure that local lodging is available. • Discuss risks with inspectors and management. Assess any concerns and inspector(s)’ willingness to travel. • Consider the overall history of the licensee program area being inspected. • Test the practicality of remote interfaces and understand the capabilities and limitations of these remote interfaces. • Review state and local restrictions due to identified hazards prior to travel to minimize risks and remain compliant with state guidelines to the extent practicable (if applicable). • Consider the necessity to perform the inspection. • Consider precautionary testing just prior to travel, if PHE-related event. • Assess the overall risk and risk appetite for travel.

<p><u>A</u>ct on a decision</p>	<p>When making a decision, be sure to consider risk appetite. Risk appetite establishes the context for making a decision. As determined by the entire organization, it is the amount of risk the organization is willing to accept in pursuit of strategic objectives.</p> <p>Risk Factors and Considerations:</p> <ul style="list-style-type: none"> • Demonstrated capability and success of remote technology systems. • Adequate camera coverage verified (if applicable). • Number and significance of previous findings in subject inspection area. • Process changes that have occurred since previous subject area inspection. • Benefits of performing onsite inspection to address public perception and oversight risk. • Impact to licensee if inspection not completed (e.g., operator licensing (OL) examinations, OL program inspections, etc.)
<p><u>R</u>ealize the result</p>	<ul style="list-style-type: none"> • Realize the result by implementing the decision while managing what you can and measuring your performance and progress. • Carry out actions resulting from the decision, including identified “Manage what you can” actions
<p><u>T</u>each others what you learned</p>	<ul style="list-style-type: none"> • Use Be riskSMART to choose the best solution among many options. • Consider risk in all areas of NRC activity—oversight, public perception, and any others that are present.

Attachment 2: Revision History for IMC 2515 Appendix E

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-decisional, Non-public Information)
N/A	ML062640337 01/26/07 CN 07-004	Initial issuance of Appendix E	n/a	n/a
N/A	ML20079E700 03/27/20 CN 20-018	Revisions were made to update guidance regarding reactor oversight process inspection program modifications, resident inspector site staffing, the expanded use of technology and other considerations to perform inspections remotely. The format of the appendix was revised to adopt the formatting required by IMC 0040, "Preparing, Revising and Issuing Documents for the NRC Inspection Manual."	n/a	n/a
N/A	ML23055B053 06/26/23 CN 23-018	Revisions were made to: 1) incorporate recommendations from the Comprehensive Baseline Inspection Program Review - Calendar Year 2021, 2) reference memorandums issued during the COVID-19 pandemic, 3) incorporate revisions made to the Continuity of Operations Procedure 429 and the Continuity of Operations Plan, and 4) adopt formatting required by IMC 0040, "Preparation, Revision, Issuance, and Ongoing Oversight of NRC Inspection Manual Documents."	n/a	ML23073A395
N/A	ML23307A009 01/02/24 CN 24-001	Incorporated recommendations from the COVID Lessons Learned working group.	n/a	ML23310A271