



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

April 2, 2021

MEMORANDUM TO: Blake D. Welling, Director  
Division of Nuclear Materials Safety, RI

Mark Franke, Director  
Division of Reactor Safety, RII

Mohammed A, Shuaibi, Director  
Division of Reactor Safety, RIII

Mary C. Muessle, Director  
Division of Nuclear Materials Safety, RIV

FROM: Michael X. Franovich, Director */RA/ Greg Bowman for*  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

SUBJECT: UPDATED SUPPLEMENTAL GUIDANCE FOR RADIATION  
PROTECTION INSPECTIONS UNDER IP 71124 REGARDING  
IMC 2515, APPENDIX E

This memorandum provides an update to the April 24, 2020, communication entitled “Supplemental Guidance Regarding IMC 2515 Appendix E Application to Radiation Safety Inspections” (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20115E269). The purpose of this guidance is to assist the Regions in their assessment of which Inspection Procedure (IP) 71124, “Radiation Safety—Public and Occupational,” baseline IP objectives can be met (i.e., completed) through remote inspection efforts and which inspections cannot be completed remotely or can only be partially completed (i.e., performed) remotely because they require on-site time in order to fully meet inspection objectives. This guidance is to be used during extenuating circumstances, such as the current on-going COVID-19 pandemic, to support completion of specific baseline inspection requirements. The Division of Risk Assessment (DRA) in coordination with Division of Reactor Oversight will continue to assess this guidance and update it as needed.

Section 2515E-07.h of the U.S. Nuclear Regulatory Commission (NRC) Inspection Manual Chapter (IMC) 2515, Appendix E, “Inspection Program Modifications During Pandemics, Epidemics, Or Other Widespread Illnesses or Diseases” (ADAMS Accession No. ML20079E700), provides guidance that in the event of a national state of emergency or widespread implementation of aggressive social distancing, Regions should consider deferring/postponing all onsite inspection activities. In addition, Regions should assess IP objectives and licensee personnel support to determine whether procedures can be performed remotely.

CONTACT: Micheal Smith, NRR/DRA  
301-415-3763

In response to the guidance in IMC 2515, Appendix E, staff in DRA has coordinated with regional health physics inspectors to document the staff's considerations for the appropriateness of remote inspections in the future.

These considerations are based on the knowledge, feedback, and lessons learned from regional reactor health physics inspectors who have performed the IP 71124 inspections both onsite and remotely. In addition to the supplemental guidance for radiation safety inspections provided below, the staff should consider the guidance provided in the February 1, 2021, memorandum, "Calendar Year 2021 Inspection Guidance During Covid-19 Telework Restrictions" (ADAMS Accession No. ML21027A274), in determining when inspections should be performed on-site. In deciding to perform remote radiation safety inspections, the staff should consider the following:

1. The radiation safety inspection program, contained in the IP 71124 series, was originally designed to be completed onsite by qualified health physics inspectors. It is performance-based, dependent on traditional direct interactions with licensee personnel, and requires independent observations of licensee radiation protection programs in practice.
2. The following radiation safety inspection requirements can be completed (i.e., all aspects of the requirement statements met) remotely with minimal impact on the quality of the inspection if properly supported by the licensee.

71124.02 Requirement 03.01 and 03.02
71124.04 Requirement 03.01*
71124.05 Requirements 03.02 and 03.03
71124.06 Requirements 03.02 - 03.04
71124.07 Requirements 03.02 and 03.03
71124.08 Requirements 03.03 and 03.05
*Remaining requirements can be completed remotely provided inspectors can address and satisfy information security associated with records.

3. IPs and requirements not listed above cannot be fully completed solely through remote inspection methods.
4. Remote inspection is heavily dependent on the licensee. Their willingness and ability to support a remote inspection, along with the quality of support (e.g., the quality of videotaped activities and the view of the activities and equipment provided in the video) will factor heavily into the success of a remote inspection. The burden placed on the licensee must be considered when determining if an inspection should be completed remotely. In many cases, even though an item is a candidate for a remote inspection, the level of effort required by the licensee to support an inspection that meets NRC standards could be substantial (e.g., additional documentation, videotaping events, teleconferencing, etc.).
5. Seven of eight radiation safety procedures have inspection cycles of two or three years

and thus can be deferred entirely until later in the inspection cycle without significant impact to the program objectives or licensees.

6. IP 71124.01, "Radiological Hazard Assessment and Exposure Controls," is the radiation safety inspection program's only annual procedure. This procedure is designed to be completed at a site engaged in an outage or significant radiological work. Five of the six requirements (requirements 03.02 thru 03.06) of IP 71124.01 have portions that require direct inspector observations or significant recent inspector experience with the licensee's program to complete. These requirements should not be designated as having been completed solely through remote inspection. Rather, there are portions of the individual inspection requirements that can be performed remotely with ultimate completion dependent upon onsite follow-up at some later time. Experience performing inspections under IP 71124.01 at Arkansas Nuclear One and at Limerick indicates that the level of effort associated with this inspection was substantial on the part of the inspector and the licensee. Note that significant inspector experience and knowledge of the radiation protection program at Limerick enabled performance of the inspections. Without that experience/knowledge, only portions of the requirements can be performed with actual completion contingent upon onsite inspector follow-up in the future.
  
7. Resident inspectors may be able to assist in completing some aspects of the radiation safety inspections at the site that do not require a significant amount of time or effort or detailed training in radiation protection. The extent to which resident inspectors can contribute to the completion of radiation safety inspections is dependent on resident inspector availability and personal experience in radiation protection. However, in order to perform these tasks, resident inspectors may need to devote some time discussing the inspection, including receiving informal training on radiation safety inspection needs, with the health physics inspectors. Examples of activities that resident inspectors may be able to assist with include inspecting postings and physical controls for high radiation areas and ensuring plant personnel minimize radiation exposures when practical. Inspection activities that require more detailed health physics knowledge should be performed by health physics inspectors. Examples of these activities include walkdowns of effluent discharge pathways, inspections related to radioactive material packaging and transportation, and inspection of radiation detection and monitoring equipment.

Per IMC 2515, Appendix E, the Regions have the discretion to perform inspections remotely as supported by their own assessments. In general, Regional inspection staff should defer completion of radiation safety inspections to a period when inspectors can resume normal access to sites (e.g., following the COVID-19 public health emergency). For inspections that cannot be deferred to a later date, it should be determined if the inspections can be adequately completed during the inspection cycle by either onsite inspection, remote inspection, or a combination of the two. If circumstances (e.g., NRC or licensee resources, lack of access to site, etc.) do not allow completion of specific inspection requirements or procedures, then the non-completion of the inspection should be properly documented in accordance with IMC 0306, "Planning, Scheduling, Tracking, and Reporting of the Reactor Oversight Process."

SUBJECT: UPDATED SUPPLEMENTAL GUIDANCE FOR RADIATION PROTECTION  
INSPECTIONS UNDER IP 71124 REGARDING IMC 2515, APPENDIX E  
DATED: 4/02/2021

DISTRIBUTION:  
PUBLIC

CMiller, NRR  
RFelts, NRR  
GBowman, NRR  
KHsueh, NRR  
EStutzcage, NRR  
WRautzen, NRR  
JBream, NRR  
THipschman, NRR  
DCollins, RGN I  
ADimitriadis, RGN I  
BDesai, RGN II  
SOrth, RGN III  
GWarnick, RGN IV  
NGreene, RGN IV  
JO'Donnell, RGN IV

ADAMS Accession No.: ML21089A218

NRR-106

OFFICE	NRR/DRA/ARCB	NRR/DRA/ARCB: BC	RIII/DRS: DD	RIV/DNMS: DD
NAME	MSmith	KHsueh	MShuaibi ( <b>Steve Orth</b> ) <i>RA for</i>	MMuessle
DATE	3/26/21	3/26/21	3/30/2021	4/02/2021
OFFICE	RI/DNMS: DD	RII/DRS: DD	NRR/DRA: DD	
NAME	BWelling	MFranke	MFranovich ( <b>GBowman</b> ) <i>RA for</i>	
DATE	3/26/2021	3/29/2021	4/02/2021	

**OFFICIAL RECORD COPY**