



FEMA

October 6, 2022

John Benson, Director
Iowa Department of Homeland Security and Emergency Management
7900 Hickman Road, Suite 500
Windsor Heights, IA 50324

Subject: Closure of Level 1 Finding for Quad Cities Generating Station

Dear Director Benson:

The State of Iowa and Clinton County have taken the corrective actions noted below to address the issues included in the Level 1 Finding, which was assessed subsequent to the Quad Cities Generating Station Biennial Radiological Emergency Preparedness Exercise conducted on July 12, 2022.

Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium iodide (KI) and other supplies are sufficient to support emergency operations.

- *Sufficient quantities of potassium iodide (KI) were not available for emergency workers and institutionalized individuals.*
- *Sufficient quantities of Permanent Record Dosimeters were not available for emergency workers.*
- *Sufficient quantities of Direct-Reading Dosimeters (DRDs) adequate to read the administrative reporting limit as required by the plans and procedures were not available for emergency workers.*

Corrective actions completed:

1. The state conducted training during the State REP Workshop held on September 5-6, 2022, regarding proper document control procedures to ensure unapproved plans and procedures are not used during an actual event or exercise. A summary of the training provided and attendee sign-in list were provided to FEMA Region 7.
2. An update of the Clinton County Radiological Emergency Response Plan (RERP) Attachment A (Radiological Emergency Response Equipment Listing) was provided. The revised list specifies a total of six hundred (600) packets of KI which includes one hundred and five (105) packets of KI for institutionalized individuals. This quantity of KI for institutionalized individuals was determined based on the maximum operational capacity of the jail and is considered adequate. During the exercise on July 12, 2022, 600 packets of KI were observed at the Clinton County EOC.
3. A redemonstration was conducted virtually on September 19, 2022, during which Clinton County displayed six hundred and forty (640) Thermoluminescent Dosimeters (TLDs) (a type of Permanent Record Dosimeter) and three control TLDs. This is in excess of the six hundred and fourteen (614) TLDs required per the Clinton County RERP.
4. The State has procured five hundred and fifty (550) 0-5R range Direct Reading Dosimeters (DRDs) and has delivered them to Clinton County. IA HSEMD has instructed the Clinton

County EMD to make a correction to the County RERP and associated procedures that both a 0-5R and a 0-20R DRD will be issued to emergency workers.

5. The State has also stated their intention to revise the emergency worker exposure control procedures (which may include correction factors, administrative limits, and turn-back values) during their next plan revision in 2023. This may result in a change to the appropriate dosimetry to issue to emergency workers. FEMA Region 7 will work with the state as they develop and implement these plan changes.

Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to emergency workers in accordance with the plans/procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate recordkeeping of the administration of KI to emergency workers.

- *The emergency worker (EW) radiological briefing did not include information regarding the increased radiation risk or additional requirements related to lifesaving, protection of valuable property, or protection of large populations missions.*
- *The capability to provide emergency workers with adequate Direct-Reading Dosimeters (DRDs) was not demonstrated.*

Corrective actions completed:

1. A redemonstration was conducted virtually on September 19, 2022. During the redemonstration, the Dosimetry Control Officer provided a limited radiological briefing in accordance with the Extent of Play Agreement. The additional radiological risks associated with missions involving protection of valuable property, life-saving, and protection of large populations were explained. Additional dosimetry, forms, and instructions were issued.
2. As noted under Criterion 1.e.1 above, the State has provided Clinton County with an adequate supply of 0-5R DRDs and directed the county to update their RERP and procedures to issue both a 0-5R and a 0-20R dosimeter to emergency workers.
3. Also as noted under Criterion 1.e.1 above, FEMA Region 7 will work with the state as they develop and implement any plan changes related to emergency worker exposure control.

Criterion 3.b.1: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals is maintained.

- *Sufficient quantities of potassium iodide (KI) were not available for institutionalized individuals at the Clinton County Law Enforcement Center.*

Corrective actions completed:

1. As noted under Criterion 1.e.1 above, the Clinton County RERP Attachment A has been updated to include 105 packets of KI for institutionalized individuals.

In accordance with 44 CFR 350.9(d) and the FEMA REP Program Manual, these issues and the Level 1 Finding for the Quad Cities Generating Station Biennial Radiological Emergency Preparedness Exercise conducted on July 12, 2022, are considered corrected and closed. The final After Action Report/Improvement Plan for the exercise will reflect this status.

Should you have any questions or concerns regarding this matter please contact Tom Morgan, Technological Hazards Branch Chief, at Thomas.Morgan5@fema.dhs.gov or (816) 808-2756.

Sincerely,

Andrea Spillars
Regional Administrator
FEMA Region 7

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