After Action Report/ Improvemnet Plan

Comanche Peak Nuclear Power Plant - TX
Radiological Emergency Preparedness Exercise
Exercise Date: 09/21/2022

12/20/2022

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Executive Summary

On September 21, 2022 a Radiological Emergency Preparedness (REP) exercise was conducted at Comanche Peak Nuclear Power Plant (CPNPP) located near Glen Rose, Texas. The purpose of the exercise was to assess the level of preparedness of state and local responders to a simulated emergency at CPNPP. In conjunction with the exercise, a Medical Services Drill was conducted at the Lake Granbury Medical Center and Texas Emergency Medical Services. This exercise was conducted in accordance with U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) policy and guidance concerning implementation of state and local emergency preparedness plans and procedures. The previous exercise was conducted on November 6, 2019.

The qualifying exercise to satisfy FEMA rule 44 Code of Federal Regulations (CFR) 350 requirements for Nuclear Regulatory Commission (NRC) licensing to operate the facility was conducted in July 1989.

FEMA Region 6 wishes to acknowledge the dedicated participation of many individuals in the State of Texas and Somervell and Hood Counties. Some of these participants are paid civil servants whose full-time job is to protect the health and safety of the public within the jurisdictions they serve. Many more are volunteers who make themselves available to perform a service to the community in which they live. Their participation is particularly noteworthy.

This report contains the final written evaluation of the biennial exercise. The state and local organizations except where noted in this report demonstrated knowledge of the emergency plans and procedures and properly implemented them. There were no Level 1 Findings, two Level 2 Findings, and no Plan Issues identified during this exercise.

There were no Level 1 Findings and no Plan Issues during the Medical Services Drill. There were three Level 2 Findings that were corrected during the demonstration for the Medical Services Drill.

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Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name
2022 Comanche Peak Plume Exercise

Type of Exercise
Plume

Exercise Date
09/21/2022

Locations
See the extent-of-play agreement in Appendix D for exercise locations.

Program
United States Department of Homeland Security, Federal Emergency Management Agency, Radiological Emergency Preparedness Program

Mission
National Preparedness

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

State

- Texas Department of Emergency Management
- Texas Emergency GIS Response Team
- Texas Emergency Medical Services, Granbury
- Texas Department of Public Safety
- Texas Department of State Health Services
- Texas Department of State Health Services/Radiation Control Program

Risk Jurisdictions

Hood County

- Commissioner Precinct 1
- Department of Public Safety
- Granbury City Manager
- Granbury Police Department
- Granbury Public Works
- Hood County Animal Issues, Animal Issues Committee
- Hood County Fire Marshall
- Hood County Office of Emergency Management
- Hood County Judge
- Hood County Facilities and Maintenance
- Hood County Sherriff's Office
- Lake Granbury Medical Center
- Mayor of Granbury
- Mayor of Tolar

Somervell County

- City of Glen Rose
- Glen Rose Independent School District
- Somervell County
- Somervell County Judge's Office
- Somervell County Sheriff's Office
- Somervell County Fire Chief

Private Organizations

- American Red Cross
- Comanche Peak Nuclear Power Plant (Luminant)
- Radio Station WBAP
- Lake Granbury Medical Center
- Texas Emergency Medical Services

Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

The DHS/FEMA Region 6 Office evaluated the exercise on September 21,2022 to assess the capabilities of the local emergency preparedness organizations in implementing their Radiological Emergency Response Plans and Procedures to protect the public health and safety during a radiological emergency involving Comanche Peak Nuclear Power Plant (CPNPP). The purpose of this report is to represent the results of the findings on the performance of the offsite response organizations during a simulated radiological emergency.

2.2 Exercise Core Capabilities and Objectives

Core capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items. Using the Homeland Security Exercise and Evaluation Program methodology, the exercise objectives meet the Radiological Emergency Preparedness Program requirements and encompass the emergency preparedness evaluation areas.

2.3 Exercise Scenario

The exercise scenario was developed to evaluate the response of the exercise participants to an incident requiring response to a simulated emergency at the Comanche Peak Nuclear Power Plant (CPNPP). The scenario provided for the evaluation of the Texas Division of Emergency Management (TDEM), Texas Department of State Health Services-Radiation Control Program (DSHS-RCP), and Hood and Somervell Counties to the emergency at CPNPP.

Section 3: Analysis of Capabilities

3.1 Exercise Evaluation and Results

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the 09/21/2022 Comanche Peak Plume Exercise.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities, capability targets, critical tasks, and the underlying Radiological Emergency Preparedness criteria as delineated in the Federal Emergency Management Agency Radiological Emergency Preparedness Program Manual dated January 2016. Exercise criteria are listed by number, and the demonstration status of those criteria are indicated by the use of the following terms:

- Met (M): No Findings assessed and no unresolved Findings from prior exercises.
- Level 1 (L1) Finding: An observed or identified inadequacy of organizational performance in an exercise that could cause a determination that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a Nuclear Power Plant (NPP).
- Level 2 (L2) Finding: An observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety.
- Plan (P) Issue: An observed or identified inadequacy in the offsite response organizations' (ORO's) emergency plan/implementing procedures, rather than that of the ORO's performance.
- N: Not demonstrated

3.2 Summary Results of Exercise Evaluation

DATE: 09/21/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Mobilizatroin	Facilities	Direction and Control	Communications Equipment	Equipment and Supplies to Support Operations
Emergency Operations Management	1a1	1b1	1c1	1d1	1e1
DSHS EOF	M		M	M	M
DSHS Field Monitoring Team 2				M	M
DSHS Field Monitoring Team 1				M	M
Hurst DDC	M		M	M	M
Somervell County EOC	M		M	M	L2
Hood County EOC	M		M	M	M
JIC	M			M	M

DATE: 09/21/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Emergency Worker Exposure Control	Dose Assessment & PARs & PADs for the Emergency Event		PADs for the Protection of persons with disabilities and access/functional needs	Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return
Protective Action Decision-Making	2a1	2b1	2b2	2c1	2d1	2e1
DSHS EOF	M	M				
Somervell County EOC	M		M	M		
Hood County EOC	M		M	M		

DATE: 09/21/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Implementation of Emergency Worker Exposure Control	Implementation of KI Decision for Institutionalized Individuals and the Public	Implementation of Protective Actions for persons with disabilities and access/functional needs		Implementation of Traffic and Access Control		Implementation of Ingestion Exposure Pathway Decisions		Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions
Protective Action Implementation	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1
DSHS EOF	M								
DSHS Field Monitoring Team 2	M								
DSHS Field Monitoring Team 1	M								

Somervell County EOC	L2	M			M	M			
Hood County EOC	M	M			M	M			

DATE: 09/21/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated		Plume Phase Field Measurement and Analyses		Post Plume Phase Field Measurements and Sampling	Laboratory Operations
Field Measurements and Analyses		4a2	4a3	4b1	4c1
DSHS EOF		M			
DSHS Field Monitoring Team 2			M		
DSHS Field Monitoring Team 1			M		

DATE: 09/21/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Activation of the Prompt Alert and Notification System				. Emergency Information and Instructions for the Public and the Media
Emergency Notification and Public Information	5a1	5a2	5a3	5a4	5b1
WBAP Radio	M				
Somervell County EOC	M				M
Hood County EOC	M				M
JIC					M

DATE: 09/22/2022 SITE: Comanche Peak Nuclear Power Plant - TX M: Met, L1: Level 1 Issue, L2: Level 2 Issue, P: Plan Issue, N: Not Demonstrated	Equipment and Supplies to Support Operations	Implementation of Emergency Worker Exposure Control	Transportation and Treatment of Contaminated Injured Individuals
Support Operations/ Facilities	1e1	3a1	6d1
Lake Granbury Medical Center	M*	M*	M*
Texas Emergency Medical Services	M	M	M

*Corrected On the Spot

3.3 Criteria Evaluation Summaries

3.3.1 DSHS EOF

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 3.a.1, 4.a.2.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.3.2 DSHS Field Monitoring Team 2

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.d.1, 1.e.1, 3.a.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.3.3 DSHS Field Monitoring Team 1

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.d.1, 1.e.1, 3.a.1, 4.a.3.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.4.1 Hurst DDC

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.5.1 Somervell County EOC

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 2.a.1, 2.b.2, 2.c.1, 3.b.1, 3.d.1, 3.d.2, 5.a.1, 5.b.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** 1e1, 3a1

c. **Plan Issues:** None

Issue Number: 14-22-1e1-L2-01

CONDITION:
The Somervell County Radiological Officer (RO) did not perform a complete operational check on the Rapiscan System Transportable Portal Monitor model TPM903B in accordance with the plans, procedures, and manufacture guidelines. The operational check was conducted with one pass-through with the check source and not the required four pass-throughs at various levels.

The Somervell County supply of Thermo Fisher Scientific Dosimeters with a calibration date November 6, 2021, were inoperable. Five dosimeters were pulled from the inventory and two had dead batteries and the other three were alarming and unable to reset. The five dosimeters were not taken out of service for the exercise and no additional dosimeters were checked for operability. The special tool required for replacing batteries was not available.

POSSIBLE CAUSE:
The Somervell County Radiological Officer did not refer to and use plans and procedures to take actions for the inoperable equipment replacement.

The Somervell County Radiological Officer did not refer to and use plans and procedures to perform a complete operational check on the portal monitor.

REFERENCE:
NUREG-0654/FEMA-REP-1: H 7, 10b, K.5.a
FEMA-REP-21, Contamination Monitoring Standard for a Portal Monitor Used for

Radiological Emergency Response, March 1995
Somervell County Emergency Management Basic Plan Annex W – Manual for Emergency Procedures, March 2022
Somervell County Emergency Management Basic Plan Annex D – Radiological Procedures, June 2022

EFFECT:
There was a potential for contamination from contaminated individuals arriving at the EOC.

Emergency Workers would be unaware of exposure and how to limit their exposure.

RECOMMENDATION:
Provide checklists of step-by-step instructions on how to assemble the portal monitor and perform an operational check in accordance with revised Somervell County Radiological Emergency Response Plan Annex D and Annex W to be maintained within the portal monitor case.

Maintain a copy of the manufacturer's operating guidelines in the storage case of the portal monitor for troubleshooting and operational reference.

Inventory and replace all inoperable dosimeters and document the corrective action taken. Provide the required tool to change batteries and include in the dosimetry kit. Provide documented corrective action to FEMA R6.

Provide additional training for multiple members that will be performing the duties and responsibilities of the Somervell County Radiological Officer.

Issue Number: 14-22-3a1-L2-01

CONDITION:
The Somervell County Radiological Officer (RO) did not perform a complete operational check on the Rapiscan System Transportable Portal Monitor model TPM903B portal monitor in accordance with the plans, procedures, and manufacture guidelines. The operational check was conducted with one pass-through with the check source and not the required four pass-throughs at various levels. The RO stated the portal monitor was operational and placed into service for the exercise. A copy of the manufacturer's guidelines was not in the storage bag along with the portal monitor.

The Somervell County Radiological Officer (RO) did not issue personal electronic dosimeters that were operational. A sample of 5 dosimeters were pulled for use and 3 were alarming and two had dead batteries. The three alarming dosimeters were taken out of use and set aside. The two with dead batteries were used for demonstration during the

Emergency Worker radiological briefing and issuance. The specialized key to open the battery compartment on the dosimeters was not available at the Emergency Operations Center.

The Somervell County Radiological Officer (RO) provided an incomplete radiological briefing to the Emergency Workers that were simulated to be deploying. The briefing was read from the plans and procedures and parts were skipped over and not all of the information was provided.

The Somervell County Radiological Officer (RO) did not establish Area Dosimetry within the Emergency Operations Center to monitor for possible exposure due to the Emergency Operations Center being located within the 10-mile Emergency Planning Zone. In addition, permanent record dosimeters were not issued to each individual in the Emergency Operations Center.

The radiological briefing provided by the Radiological Operations Support Specialist to the Emergency Operations Center staff provided guides based on the Environmental Protection Agency Protective Action Guidelines and not the turnback and reporting administrative values preidentified in the Somervell County plans and procedures to include Potassium Iodide.

Emergency workers did not periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record form. The Emergency Worker Exposure Record Form and the Potassium Iodide form were not issued or used during the exercise.

POSSIBLE CAUSE:
The Somervell County RO position was staffed with one person and possibly had too many responsibilities to manage.

Plans and procedures were not fully utilized and implemented.

Training received possibly was not adequate for the responsibilities and functions of the position.

REFERENCE:
NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4
Somervell County Emergency Management Basic Plan Annex W – Manual for Emergency Procedures, March 2022
Somervell County Emergency Management Basic Plan Annex D – Radiological Procedures, June 2022

EFFECT:
Emergency Workers located in the Emergency Operations Center and being deployed could receive exposure to radiation due to inoperable protective equipment.

Emergency Workers located in the Emergency Operations Center and being deployed are not aware of the actions and precautions to take to limit their exposure.

A permanent record or legal record of any potential exposure would not be verified due to record keeping forms and permanent record dosimeters not being issued and utilized.

RECOMMENDATION:
Training is required to provide the responsible parties that implement the plans and procedures that they have the necessary skillset. FEMA is requesting to attend the training and observe the contents of the training and ensure they are meeting the required elements. The RAC Chair has requested this to be completed by the end of January 2023.

A re-demonstration of the implementation of Emergency Worker Exposure Control to include a complete radiological briefing, issuing of operational dosimetry and permanent record dosimetry, a complete operational check on the portal monitor, establishing Area Dosimetry, and utilization of record keeping forms is required. The RAC Chair has requested this to be completed by the end of January 2023. FEMA R6 Radiological Emergency Preparedness Program staff will be present to evaluate the redemonstration.

A copy of the manufacturer's guidelines for the portal monitor needs to be included in the storage bag along with the portal monitor. This allows for troubleshooting and assistance with the operation of the portal monitor in support of the plans and procedures.

The "Just in Time" radiological briefing and training concept should be implemented and the plans and procedures need to be updated to provide a more time efficient method for delivery.

3.6.1 Hood County EOC

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.d.1, 3.d.2, 5.a.1, 5.b.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.7.1 JIC

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.a.1, 1.d.1, 1.e.1, 5.b.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.8.1 WBAP Radio

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 5.a.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

3.9.1 Lake Granbury Medical Center

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.e.1, 3.a.1, 6.d.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** 1e1, 3a1, 6d1 (All corrected during demonstration)

c. **Plan Issues:** None

Issue Number: 14-22-1e1-L2-01

CONDITION:
The Radiation Emergency Area monitor did not correctly perform an operational source check on the survey meters. Also, the source and range of readings card was locked in a metal lock box and the key was not readily available.

POSSIBLE CAUSE:
Unfamiliarity with procedures or lack of training.

REFERENCE:
NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b

Lake Granbury Medical Center Handling of Radiation Accident Patients at Support Hospitals (July 2012)

EFFECT:
The survey meters used would not correctly be identified as operating properly. This could lead to contamination going undetected and spread by personnel to other areas of the hospital.

CORRECTED DEMONSTRATION:
The Controller called a timeout and retraining was performed by the Comanche Peak Technician. It was also stated by hospital staff that the lock box key would be placed in a proper location for access.

Issue Number: 14-22-3a1-L2-001

CONDITION:
The Buffer Zone (BZ) Nurse was responsible for briefing and issuing dosimetry to the hospital staff. During the radiological briefing, the BZ Nurse advised the staff to read their dosimeters "occasionally".

POSSIBLE CAUSE:
Unfamiliarity with procedures or lack of training.

REFERENCE:
NUREG-0654/FEMA-REP-1, K.3.b
Lake Granbury Medical Center Handling of Radiation Accident Patients at Support Hospitals (July 2012)

EFFECT:
The hospital staff could have overlooked reading and reporting dosimetry readings or may have gone beyond 30 minutes, potentially being exposed to radiation.

CORRECTED DEMONSTRATION:
The Controller called a timeout and asked about the radiological briefing and how often dosimeters were to be read. The Buffer Zone Nurse (BZ) stated every 10 minutes. The drill resumed, and the BZ Nurse actively called out for dosimetry readings every 10 minutes during the drill.

Issue Number: 14-22-6d1-L2-001

CONDITION:
The Radiation Emergency Area (REA) monitor did not survey the patient's right shoulder following decontamination.

POSSIBLE CAUSE:
The REA monitor did not follow procedure to survey the patient following each decontamination step conducted.

REFERENCE:
NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b
Lake Granbury Medical Center Handling of Radiation Accident Patients at Support Hospitals (July 2012)

EFFECT:
Decontamination would not be determined to be successful if the patient was not properly surveyed following each decontamination step. Also, contamination could be spread to other areas of the hospital.

CORRECTED DEMONSTRATION:
The Controller called a timeout and requested that the REA monitor perform the survey of the patient's shoulder to determine if decontamination was successful. The REA monitor then surveyed the patient's shoulder, in accordance with procedures, and it was determined that decontamination was successful.

3.10.1 Texas Emergency Medical Services

Summary
For this venue the following Radiological Emergency Preparedness criteria were MET: 1.e.1, 3.a.1, 6.d.1.

a. **Level 1 Finding:** None

b. **Level 2 Finding:** None

c. **Plan Issues:** None

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Section 4: Conclusion

Based on the results of the exercise and medical services drill, the offsite radiological emergency response plans and preparedness for the State of Texas and the affected local jurisdictions are deemed adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency. Therefore, 44 CFR Part 350 approval of the offsite radiological emergency response plans and preparedness for the State of Texas site-specific to Comanche Peak Nuclear Power Plant will remain in effect.

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Appendix A: Exercise Key Leaders and Evaluators

Regional Assistance Committee (RAC) Chair: Oscar Martinez

Site Specialist: Brad Dekorte

Location / Venue	Evaluation Team
DSHS EOF	Bart Ray (ICF) Denny Wilford (ICF)
DSHS Field Monitoring Team 2	George Brozowski
DSHS Field Monitoring Team 1	Tim Pfleiger
Hurst DDC	Clayton Spangenberg (ICF)
Somervell County EOC	Bonnie Sheffield (ICF) Lenora Borchardt (ICF) Linda Gee (TL) Melisa Ogrodnik
Hood County EOC	Rosemary Samsel (ICF) Bill Webb (ICF) Elsa Lopez (TL) Syndi Buice
JIC	Brenda Rembert (ICF) PJ Nied (ICF) (TL)
WBAP Radio	Darren Bates
Lake Granbury Medical Center Texas Emergency Medical Services	Elsa Lopez TL Tim Pflieger Misty Chance Melisa Ogrodnik Linda Gee Synthia Buice

Appendix B: Improvement Plan

ISSUE NUMBER: **14-22-1e1-L2-01** Criterion 1e1	
CONDITION: The Somervell County Radiological Officer (RO) did not perform a complete operational check on the Rapiscan System Transportable Portal Monitor model TPM903B in accordance with the plans, procedures, and manufacture guidelines. The operational check was conducted with one pass-through with the check source and not the required four pass-throughs at various levels. The Somervell County supply of Thermo Fisher Scientific Dosimeters with a calibration date November 6, 2021, were inoperable. Five dosimeters were pulled from the inventory and two had dead batteries and the other three were alarming and unable to reset. The five dosimeters were not taken out of service for the exercise and no additional dosimeters were checked for operability. The special tool required for replacing batteries was not available **REFERENCE**: NUREG-0654/FEMA-REP-1: H 7, 10b, K.5.a FEMA-REP-21, Contamination Monitoring Standard for a Portal Monitor Used for Radiological Emergency Response, March 1995 Somervell County Emergency Management Basic Plan Annex W – Manual for Emergency Procedures, March 2022 Somervell County Emergency Management Basic Plan Annex D – Radiological Procedures, June 2022	
RECOMMENDATION: Provide checklists of step-by-step instructions on how to assemble the portal monitor and perform an operational check in accordance with revised Somervell County Radiological Emergency Response Plan Annex D and Annex W to be maintained within the portal monitor case. Maintain a copy of the manufacturer operating guidelines in the storage case of the portal monitor for troubleshooting and operational reference. Inventory and replace all inoperable dosimeters and document the corrective action taken. Provide the required tool to change batteries and include in the dosimetry kit. Provide documented corrective action to FEMA R6. Provide additional training for multiple members that will be performing the duties and responsibilities of the Somervell County Radiological Officer.	
CORRECTIVE ACTION DESCRIPTION:	
	PRIMARY RESPONSIBLE AGENCY: DSHS
Venue Assessed: Somervell County EOC	START DATE: 01/11/2023
AGENCY POC: Robin Phillips	ESTIMATED COMPLETION DATE:

ISSUE NUMBER: **14-22-3a1-L2-02** Criterion 3a1	
CONDITION: The Somervell County Radiological Officer did not provide a complete radiological briefing and did not implement adequate exposure control measures for emergency workers and staff at the Somervell County Emergency Operations Center. **REFERENCE**: NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4 Somervell County Emergency Management Basic Plan Annex W – Manual for Emergency Procedures, March 2022 Somervell County Emergency Management Basic Plan Annex D – Radiological Procedures, June 2022	
RECOMMENDATION: Training is required to provide the responsible parties that implement the plans and procedures that they have the necessary skillset. FEMA is requesting to attend the training and observe the contents of the training and ensure they are meeting the required elements. The RAC Chair has requested this to be completed by the end of January 2023. A re-demonstration of the implementation of Emergency Worker Exposure Control to include a complete radiological briefing, issuing of operational dosimetry and permanent record dosimetry, a complete operational check on the portal monitor, establishing Area Dosimetry, and utilization of record keeping forms is required. The RAC Chair has requested this to be completed by the end of January 2023. FEMA R6 Radiological Emergency Preparedness Program staff will be present to evaluate the redemonstration.	
CORRECTIVE ACTION DESCRIPTION:	
	PRIMARY RESPONSIBLE AGENCY: DSHS
Venue Assessed: Somervell County	START DATE: 01/11/2023
AGENCY POC: Robin Phillips	ESTIMATED COMPLETION DATE:

Appendix C: Acronym List

CPNPP	Comanche Peak Nuclear Power Plant
DDCC	Disaster District Committee Chairperson
EAS	Emergency Alert System
ECL	Emergency Classification Level
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	Environmental Protection Agency
EPD	Electronic Personal Dosimeters
EPZ	Emergency Planning Zone
EW	Emergency Worker
FMTL	Field Monitoring Team Leader
GE	General Emergency
HAB	Hostile Action Based
ICP	Incident Command Post
JIC	Joint Information Center
LWP	Local Warning Point
NPP	Nuclear Power Plant
NRC	Nuclear Regulatory Commission
OSL	Optically Stimulated Luminescent
PAD	Protective Action Decision
PIO	Public Information Officers
RACES	Radio Amateur Civil Emergency Services
REP	Radiological Emergency Preparedness
RO	Radiological Officer
SAE	Site Area Emergency
TEDE	Total Effective Dose Equivalent

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Appendix D: Extent of Play Agreements

FEMA REP EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT

FEMA REP Sub-element 1.a – Mobilization
Criterion 1.a.1: Off-site Response Organizations (OROs) use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG-0654/FEMA-REP-1, A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; H.3, 4)

Locations:
- Department of Public Safety (DPS) Disaster District Sub-2C Emergency Operations Center (DDC), Joint EOC – Fort Worth, TX
- DSHS RCP at Comanche Peak Emergency Operations Facility (EOF), Glen Rose, TX
- Joint Information Center (JIC), Granbury, TX
- Hood and Somervell County Emergency Operations Center (EOC), Somervell – Glen Rose, TX; Hood – Granbury, TX *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COORDINATION (COORDINATION AND CONTROL)
Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity 1: Activate EOC/MACC/IOF**
  Definition: ***In response to activation, perform incident notifications, recall of essential personnel, and stand-up of EOC/MACC/IOF systems to provide a fully staffed and operational EOC.*** **(HSEEP Res.B1c 4, 4.3, 4.4)**

- **Activity 2: Gather and Provide Information**
  Definition: ***Upon establishing EOC/MACC/IOF operations, gather, organize, and document incident situation and resource information from all sources to maintain situational awareness within the EOC/MACC.*** **(Res.B1C 5.1.1, 5.1, 5.2.2, 5.2.3, 5.1.2, 5.2, 5.2.4)**

Extent of Play:
- DSHS RCP personnel will pre-stage at the alternate RCP staging area located at 6322 FM 56, Glen Rose, TX.
- Regardless of the scenario, no facilities/activities will relocate during this exercise.
- Four (4) Field Monitoring Teams will be deployed for training purposes. Only (2) teams will be evaluated. DOE RAP IV Team Members will not be evaluated. Drill evaluators may be required to travel in separate vehicles due to space restrictions in DPS vehicles.
- Disaster District Committee personnel not stationed at DD Sub-2C EOC may be pre-staged.
- To allow for maximum amount of play, DSHS-RCP and DSHS-JIC staff will pre-stage in the area.
- An extra dispatcher will be placed on duty at the to handle the regular workload.Non-local TDEM personnel will be pre-staged in the area.

FEMA REP Sub-element 1.c - Direction and Control

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible. (NUREG-0654/FEMA-REP-1, A.1.d; A. 2.a, b; A.3; C.4, 6)

Locations:

- DDC
- DSHS RCP at CP EOF
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COORDINATION (COORDINATION AND CONTROL)

Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity 1: Direct Emergency Operation Center's Tactical Operations**
  Definition: ***In response to notification of incident, activate, staff, and organize the EOC/MACC/IOF in accordance with emergency plans and standard operating procedures; plan, direct, and coordinate information and activities internally within EOC/MACC/IOF functions, and externally with other multi-agency coordination entities and the public information system; coordinate logistical support to maintain an operationally functioning EOC/MACC/IOF until deactivation.*** **(HSEEP Res.B1c 3.1, 3.1.1, 3.3.1, 3.3.3)**

Extent of Play: None

FEMA REP Sub-element 1.d – Communications Equipment

Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (NUREG-0654/FEMA-REP-1, F.1, 2)

Locations:

- DDC
- DSHS RCP at EOF
- DSHS RCP Field Monitoring Teams (FMTs)
- JIC
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COMMUNICATIONS

Description: ***Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.***

- **Activity 1: Alert and Dispatch**

Definition: ***In response to an alert, make notification and provide communications management until the Incident Command (IC), Emergency Operations Center (EOC), and Emergency Management Agency (EMA) are stood-up*** **(HSEEP ComC 4.2, 4.2.1, 4.2.1.1, 3.5, 4.2.3, 4.1.1)**

- **Activity 2: Provide Emergency Operations Center Communications Support**

Definition: ***Upon notification, initiate interoperable system operations, in addition to maintaining, managing, and assuring protection of the interoperable communications systems until the EOC is ordered deactivated.*** **(HSEEP ComC 5.3, 5.3.3, 4.1.1, 5.3.1.3)**

Extent of Play:

- A controller phone cell will be established to ensure appropriate communications are accomplished and to ensure fluid exercise play.
- Correction on the spot requested, for local agencies. *

FEMA REP Sub-element 1.e – Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations. (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J. 10.a, b, e; J.11, 12; K.3.a; K.5.b)

Locations:

- DDC
- DSHS RCP at EOF
- DSHS RCP Field Monitoring Team (FMTs)
- JIC
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: ENVIRONMENTAL RESPONSE/HEALTH AND SAFETY

Description: ***Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.***

- **Activity 1: Identify Safety/PPE Needs and Distribute PPE**

Definition: ***Upon appointment as Safety Officer, assess safety and health hazards, inform IC of needs, and develop site-specific safety and health plan.*** **(HSEEP Res.B1b 5.4.1, 5.2)**

Extent of Play:

- Donning and doffing of PPE will be demonstrated out of sequence by one player, and will not be worn during the exercise.
- Activated charcoal filters will be used in lieu of silver zeolite filters for exercise purposes but FMTs will demonstrate availability of silver zeolite filters.
- Field Monitoring Team Equipment not required to demonstrate exercise objectives may be left at the DSHS Staging Area to allow for additional space within the vehicles.

- Correction on the spot requested, for purposes of dressing out and for local agencies.*

Corrective Actions to Planning Issues or Findings:
14-1e1-P-001 1e1 Comanche Peak Hood County EOC: The Hood County Radiological Officer did not perform an operational check on the PPM-2000 portal monitor before putting it into operation.

14-1e1-P-003 1e1 Comanche Peak Somervell County EOC: The Somervell County Radiological Officer did not adequately perform an operability check on the SAIC Canberra Model Number PPM-2000A Portal Monitor before putting it into operation.

FEMA REP EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING

FEMA REP Sub-element 2.a – Emergency Worker Exposure Control
Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG-0654/FEMA-REP-1, C.6; J. 10.e, f; K.4)

Locations:
- DSHS RCP at EOF
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: (1) ENVIRONMENTAL RESPONSE/HEALTH AND SAFETY
Description: ***Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.***

- **Activity 1: Ongoing Monitoring of Responder Safety and Health**

Definition: ***Upon assignment of responders to the incident, maintain continuous monitoring of responder safety and health, proper functioning of PPE and equipment, and awareness of on-site hazards; oversee decontamination; document all actions and injuries/illnesses; and provide for emergency and psychological medical care*** **(HSEEP Res.B1b 7.1.1, 7.4.3, 7.4.4, 7.5.2, 7.5)**

Extent of Play:
- Ingestion of KI will be simulated during the exercise.
- If the scenario does not warrant a discussion on either the authorization to administer KI or Emergency Worker (EW) exposure exceeding administrative limits, then the criterion will be accomplished through an inject at the EOF. Decision making for KI and EW exposure level above administrative limits is done at the EOF and the local EOC.

FEMA REP Sub-element 2.b. – Radiological Assessment and Protective Action Recommendations and Decisions for the plume Phase of the Emergency
Criterion 2.b.1: Appropriate protective action recommendations (PARs) are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions. (NUREG-0654/FEMA-REP-1,

I.10; Supp.3)

Locations:
- DSHS RCP at EOF

Extent of Play:
- If EOF has been staffed by DSHS RCP at this time, it will be the only facility evaluated for this criterion.

FEMA REP Sub-element 2.b. – Radiological Assessment and Protective Action Recommendations and Decisions for the plume Phase of the Emergency
Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public. (NUREG-0654/FEMA-REP-1, A.3; C.4, 6; D.4; J.9; J.10.f, m)

Locations:
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: MASS CARE SERVICES
Description: ***Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.***

- **Activity 1: Direct Evacuation and/or In-Place Protection Tactical Operations**

Definition: ***In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident.*** **(HSEEP Res.B3a 3.1.2, 3.2.1, 3.2, 3.4.4, 3.3, 3.3.2, 3.4.2)**

- **Activity 2: Activate Evacuation and/or In-Place Protection**

Definition: ***In response to activation, identify and ensure notification of at-risk populations, and identify populations requiring assistance in evacuation and/or in-place protection.*** **(HSEEP Res.B3a 4.2.1, 4.2.3, 4.2.4)**

Extent of Play:
- The protective actions that result from this decision-making process will not be implemented. No members of the public will be relocated.
- If the scenario is not sufficient to drive the decision to recommend KI for EW, the criteria will be demonstrated in both counties by interview and injects at the end of the exercise.

FEMA REP Sub-element 2.c – Protective Action Decisions Consideration for the Protection of Special Populations
Criterion 2.c.1: Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs. (NUREG-0654/FEMA-REP-1, D.4; J.9; J.10.d, e)

Locations:

- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COORDINATION (COORDINATION AND CONTROL)
Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity 1: Provide EOC/MACC/IOF Connectivity**

Definition: ***Upon identification of issues, establish priorities between Incident and/or Area Commands; provide strategic direction; coordinate and resolve multi-agency policy issues, including the issuance of protective action recommendations and protective action decisions.*** **(HSEEP Res.B1c 7.3.4, 7.3.1, 7.3.2, 7.3.3, 7.4)**

FEMA HSEEP CORE CAPABILITY: MASS CARE SERVICES
Description: ***Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.***

- **Activity 1: Direct Evacuation and/or In-Place Protection Tactical Operations**

Definition: ***In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident.*** **(HSEEP Res.B3a 3.5.3, 3.5.4)**

- **Activity 2: Activate Evacuation and/or In-Place Protection**

Definition: ***In response to activation, identify and ensure notification of at-risk populations, and identify populations requiring assistance in evacuation and/or in-place protection.*** **(HSEEP Res.B3a 4.4.1, 4.4.2, 4.4.3)**

Extent of Play:

- Protective actions for access/functional needs individuals will be considered at the EOC; however, actual demonstration of protective actions will not be performed.
- EOC staff will demonstrate this criterion through discussion and showing the evaluator a roster of access/functional needs individuals in the 10-mile emergency planning zone.
-

FEMA REP EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

FEMA REP Sub-element 3.a – Implementation of Emergency Worker Exposure Control
Criterion 3.a.1: The OROs issue appropriate dosimetry, 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 record-keeping of the administration of KI to emergency workers. (NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4)

Locations:
- DSHS RCP at EOF
- DSHS RCP Field Monitoring Teams
- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: ENVIRONMENTAL RESPONSE/HEALTH AND SAFETY

Description: ***Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.***

- **Activity 1: Site/Incident Specific Safety and Health Training**

Definition: ***Site/Incident specific training provides necessary understanding of the hazards identified and assessed in the incident, and the necessary precautions. Site/Incident specific training builds upon pre-incident training, but tailors curriculum to the tasks/hazards of the incident. Site/Incident specific training should reflect policies and procedures specified in the incident specific health and safety plan. Site/Incident specific training needs to have a flexible approach (training may need to be conducted outside of a classroom setting) and should be conducted prior to commencing response activities.*** **(HSEEP Res.B1b 6.1, 6.2, 6.3)**

Extent of Play:
- Exercise TLDs will be used for the exercise. TLDs for real events are packaged in the Emergency Planner box at the staging area. DSHS Emergency Planners can show evaluator real TLDs at staging area.
- If the decision is made to have emergency workers ingest KI, actual ingestion of KI will not be done.
- Distribution and actual ingestion of KI to emergency workers will be simulated by using copies of the Patient Packet insert or copies of the packet to represent actual KI supplies.
- A group radiological safety briefing will be done morning of exercise, prior to deployment to operational areas. County radiological officers may provide this briefing to County EWs separately at the EOC.
- A Law Enforcement Officer (from the Sheriff's Department) assigned to T/ACP will discuss the knowledge of their role and responsibilities by interview with the evaluator. This interview can occur out of sequence of the exercise scenario, but during the exercise, at a time agreed up on by the EOC controller and FEMA evaluator.
- Correction on the spot requested. *

FEMA REP Sub-element 3.b - Implementation of KI Decision

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. (NUREG-0654/FEMA-REP-1, J.10.e, f.)

Locations:

- Hood and Somervell County EOC *(See EMPG evaluation requirement below)*

FEMA HSEEP CORE CAPABILITY: ENVIRONMENTAL RESPONSE/HEALTH AND SAFETY

Description: ***Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.***

- **Activity 1: Ongoing Monitoring of Responder Safety and Health**

Definition: ***Upon assignment of responders to the incident, maintain continuous monitoring of responder safety and health, proper functioning of PPE and equipment, and awareness of on-site hazards; oversee decontamination; document all actions and injuries/illnesses; and provide for emergency and psychological medical care.*** **(HSEEP Res.B1b 7.1.1, 7.4.4, 7.5, 7.5.5, 7.4.1)**

Extent of Play:

- The State of Texas does not provide KI to the general public.
- The local County EOC Command and Control Team will discuss issuance of KI.
- Should a County PAD include ingestion of KI for persons with disabilities and access/functional needs, this will be accomplished via message inject or, if dose projections do not reach 5R for those populations, it will be accomplished via interview.
- Correction on the spot requested.*

Corrective Actions to Planning Issues or Findings:

14-3b1-P-002 3b1 Comanche Peak Hood County EOC: There are no provisions to provide KI to the Care Givers for Institutionalized Individuals for Hood County.

FEMA REP Sub-element 3.d. – Implementation of Traffic and Access Control

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.10.g, j)

Locations:

- Hood and Somervell County EOC (See EMPG evaluation requirements below)

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COORDINATION (COORDINATION AND CONTROL)
Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity: Direct Evacuation and/or In-Place Protection Tactical Operations**

Definition: ***In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident.*** **(HSEEP Res.B3a 3.3.1, Res.B3a 5.2, 5.2.1)**

Extent of Play
- Decision-making process will be demonstrated in real-time sequence; however, travel to the T/ACP will be simulated.
- Correction on the spot requested.*

FEMA REP Sub-element 3.d. – Implementation of Traffic and Access Control
Criterion 3.d.2: Impediments to evacuation are identified and resolved. (NUREG-0654/FEMA-REP-1, J.10.k)

Locations:
- **Hood and Somervell County EOC (See EMPG evaluation requirements below)**

FEMA HSEEP CORE CAPABILITY: OPERATIONAL COORDINATION (COORDINATION AND CONTROL)
Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity: Identify and Address Issues**

Definition: ***Upon receiving information, assess and identify current and anticipated resource shortages, technical support issues, and key policy decisions needed across all capabilities, and provide to the applicable agency, function, jurisdiction or multi-agency coordination entity for resolution.*** **(HSEEP Res.B1c 6.1.4, 6.1.5, 6.3)**

FEMA HSEEP CORE CAPABILITY: MASS CARE SERVICES (Evacuation)
Description: ***Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.***

- **Activity: Direct Evacuation and/or In-Place Protection Tactical Operations**

Definition: ***In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident*** **(HSEEP Res.B3a 3.3.1)**

Extent of Play:
- **This criterion will be demonstrated by inject.**
- No impediment will actually occur, however, the situation and solution will be discussed in the EOC.
- A controller inject may be used to initiate the demonstration for this Criterion. The inject will occur during an evacuation requiring re-routing of traffic and coordination with the Joint Information Center for dissemination to the evacuating public.

FEMA REP EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS

FEMA REP Sub-element 4.a – Plume Phase Field Measurement and Analyses
Criterion 4.a.2: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.7, 8, 11; J.10.a)

Locations:
- DSHS RCP at EOF

Extent of Play: None

FEMA REP Sub-element 4.a – Plume Phase Field Measurement and Analyses
Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams should move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sample media. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.8, 9; J.10.a)

Locations:
- DSHS RCP FMTs

Extent of Play:
- Activated charcoal filters will be used in lieu of Silver Zeolite filters for exercise purposes.
- If the scenario is not sufficient to drive demonstration of the air sampling criteria an inject will be provided by the field team controller at the end of the exercise allowing the field teams to take an air sample. In addition, the controller will inject the need for a Field Analysis for I-131 with 5,000 net cpm on the filter and 600,000 net cpm on the cartridge as the result of the measurement.
- Each graded field team will at least once demonstrate proficiency in the use of PPE (gloves & booties) as required by procedure. Due to heat considerations, suits will not be worn in the field.
- The ability to don and remove PPE will be demonstrated by 1 field team member at an agreed upon time and location prior to or following the exercise.
- Correction on the spot requested.*

FEMA REP EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

FEMA REP Sub-element 5.a - Activation of the Prompt Alert and Notification System
Criterion 5.a.1: Activities associated with primary alerting and notification of the public are

completed in a timely manner following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current REP guidance. (NUREG-0654/FEMA-REP-1, E.5, 6, 7)

Locations:
- WBAP Radio Station
- **Hood and Somervell County EOC (See EMPG evaluation requirements below)**

FEMA HSEEP CORE CAPABILITY: PUBLIC INFORMATION AND WARNING
Description: ***Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.***

- **Activity: Issue Public Information, Alerts/Warnings, and Notifications**

Definition: ***Issue public information, alerts, warnings, and notifications through established systems to the public, coordinating officials, and incident managers and responders.***
(HSEEP Res.B1f 5.1, 5.2, 5.2.5, 4.3, 5.3, 5.2.1, 5.2.4)

Extent of Play:
- Siren activation will be simulated by the County Sheriff's Office Dispatcher; and alert radio activation will be simulated by the WBAP Radio Station.
- Simulation of the siren and alert radio activation will be in real time sequence with the transmission of the EAS message. The sirens will be sounded at the appropriate time in the exercise in accordance with the decision and the EAS message will follow the siren sounding.
- Emergency Alert System (EAS) message content will be determined by the Emergency Management Director and communicated to the EAS source by the EOC Administrative Assistant; however, broadcasts will be simulated.

FEMA REP Sub-element 5.b – Emergency Information and Instructions for the Public and the Media

Criterion 5.b.1: OROs provide accurate subsequent emergency information and instructions to the public and the news media in a timely manner. (NUREG-0654/FEMA-REP-1, E.5, 7; G.3.a; G.4.a, c)

Locations:
- JIC
- Hood and Somervell County EOC (See EMPG evaluation requirements below)

FEMA HSEEP CORE CAPABILITY: PUBLIC INFORMATION AND WARNING
Description: ***Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.***

- **Activity: Establish Joint Information Center**

Definition: ***Activate and implement a Joint Information Center (JIC) and disseminate information to public.*** **(HSEEP Res.B1f 5.1.1, 6.1, 3.2.2, 6.2, 6.2.2, 6.2.1)**

- **Activity: Conduct Joint Information Center Operations**

Definition: U*pon activation of the JIC, monitor media and conduct press briefings*. (HSEEP Res.B1f 7.1.4, 7.1.2, 7.2.6.1, 7.2.8)

- **Activity: Issue Public Information, Alerts/Warnings, and Notifications**

Definition: ***Issue public information, alerts, warnings, and notifications through established systems to the public, coordinating officials, and incident managers and responders.*** **(HSEEP Res.B1f 5.1, 5.2.5, 5.5.2)**

Extent of Play:

- Information will not be provided to the public and/or the media not participating in the exercise.

GENERAL Extent of Play:

1. With regard to last minute additions or changes to any previously approved Extent-of-Play, all suggested changes, including decisions due to inclement weather, must be forwarded to the RAC Chair for approval.
2. As a statement of fact, no ORO will deliberately deviate from its plans and procedures with the intent of avoiding responsibility.
3. The exercise may be suspended or terminated due to a real emergency situation.
4. *Correction-on-the-spot is defined in the 2016 FEMA REP Program Manual on page 171.

Lake Grandbury Medical Center Medical Services Drill

EVALUATION AREA 1.e.1 – EQUIPMENT, MAPS, DISPLAYS, MONITORING INSTRUMENTS, DOSIMETRY, POTASSIUM IODIDE (KI), AND OTHER SUPPLIES ARE SUFFICIENT TO SUPPORT EMERGENCY OPERATIONS. (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b)

CORE CAPABILITY: Environmental Response/Health and Safety

OBJECTIVE: LGMC REA and Texas EMS demonstrate that supplies, equipment, displays, and personal protective equipment are available for ensuring responder health and safety.

OBJECTIVE: Verify that instruments are operationally checked before use.

OBJECTIVE: Verify that instruments are calibrated in accordance with manufacturers recommendations, and that there is a label indicating calibration on each instrument.

OBJECTIVE: Sufficient quantities of appropriate electronic personal dosimeters (EPDs) and permanent record dosimetry (PRDs) are available for

issuance to all categories of emergency workers deployed by each facility.

EXTENT OF PLAY

EMS personnel will demonstrate the KI portion of this evaluation criterion by interview (i.e. storage, use, precautions). KI **will not** be carried on the ambulance and **is not required** at the hospital. The KI for ambulances is **stored** at the Hood and Somervell County EOCs and would be distributed at that point in the event of the recommendation to do so by the Texas Department of State Health Services (DSHS).

Demonstration of this evaluation area will be in accordance to plans and procedures.

Correction on the spot is requested.

Demonstration Criterion will be met during an in-person assessment.

No KI will be issued during demonstration.

EVALUATION AREA 3.a.1 – IMPLEMEMTATION OF EMERGENCY WORKER EXPOSURE CONTROL – OROS ISSUE APPROPRIATE DOSIMETRY, KI, AND PROCEDURES, AND MANAGE RADIOLOGICAL EXPOSURE TO EMERGENCY WORKERS IN ACCORDANCE WITH THE PLANS/PROCEDURES. (NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4)

CORE CAPABILITY: Operational Coordination

OBJECTIVE: LGMC REA and Texas EMS will issue appropriate dosimetry and procedures and manage radiological exposure.

CORE CAPABILITY: Environmental Response/Health and Safety

OBJECTIVE: Emergency workers will periodically and at the end of each mission read their dosimetry and record the readings on the appropriate exposure record or chart.

EXTENT OF PLAY

The OROs issue appropriate dosimetry and procedures and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically (approximately every 30 minutes) and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.)

If Potassium Iodide (KI) is not recommended, administration and record-keeping of KI can be

demonstrated by interview. An interview will be conducted on the knowledge of KI, expiration dates, who authorizes it, and record keeping. The quantity and location will be verified during the exercise. Ingestion of KI will not occur.

Demonstration Criterion will be met during an in-person assessment.

Correction on the spot is permitted with issues related to dosimetry use, reading dosimetry, alarm set points and record keeping.

EVALUATION AREA 6.d.1 – TRANSPORTATION AND TREATMENT OF CONTAMINATED INJURED INDIVIDUALS (NUREG-0654/FEMA-REP-1, F.2; H.10; K.5.a, b; L.1, 4)

CORE CAPABILITY: Public Health, Health Care, and Emergency Medical Services

OBJECTIVE: LGMC REA and Texas EMS demonstrate that they have adequate space, resources, and trained personnel to provide transport and medical services to contaminated, injured individuals.

CORE CAPABILITY: Screening, Search and Detection

OBJECTIVE: LGMC REA and Texas EMS demonstrate that they can provide monitoring and decontamination to contaminated, injured individuals.

EXTENT OF PLAY

The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654, F.2, H.10., K.5.a.b., L.1., 4.)

The Texas EMS ambulance with driver and EMT or paramedic and the "contaminated" patient will pre-stage at the Texas EMS Headquarters Building located at 2200 Commercial Ln, Granbury, TX 76048.

All decontamination will be demonstrated to the extent necessary to satisfy evaluator concerns.

All medical procedures will be simulated except for decontamination of wounds and or abrasions. The Controller will use the decontamination chart and written guidance to guide the decontamination processes.

All injury and contamination levels will be via controller verbal inject from the "Injury Map for Medical Controllers" (Attachment 4a – Anatomical Charts).

Demonstration Criterion will be met during an in-person assessment.

Correction on the spot is permitted with issues related to the adequacy of vehicles, equipment, and procedures, decontamination techniques, cross contamination issues for personnel transporting as allowed in accordance with the REP Program Manual and R6 RAC Chair approval and treating contaminated injured or exposed individuals. Correction on the spot is requested.

5.0 Participants

This drill will require the participation of the following agencies:

- Lake Granbury Medical Center Emergency Room Staff and support staff as needed
- Texas EMS Ambulance Personnel
- Texas Department of State Health Services – Radiation Control Program (DSHS-RCP), Medical Facility Liaison

6.0 Controller and Role Players

A minimum of four (4) controllers will be required for this drill.

One (1) role player victim will be required for this drill

7.0 Initial Conditions

During preparations for a shipment offsite of radioactive/contaminated waste in Warehouse C, a container falls off the flatbed truck and lands on a worker. The CPNPP medical response personnel are unavailable, and the Somervell County EMS personnel are already responding to calls and are not available. Texas EMS has been dispatched to pick up and transport the injured person. The injured party's supervisor will meet the arriving ambulance at Warehouse C. The victim is conscious and complaining of pain in their right shoulder as well as bleeding from cuts on their right forearm and hand.

8.0 Narrative Summary

Upon arrival at Warehouse C the Texas EMS crew assesses the patient. The patient is then transported to Lake Granbury Medical Center (LGMC). The ambulance communicates patient data and the fact that the patient is radiologically contaminated, while enroute.

LGMC is contacted and activates their Radiation Emergency Area (REA). CPNPP is unable to support Radiation Protection functions currently. Texas EMS will provide radiological data as well as patient vitals and condition.