DOE-EM/GJ1520

Office of Environmental Management – Grand Junction

UMTRA Project

Moab UMTRA Project
Emergency/Incident Response Plan

Revision 17

October 2019

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0005014
and the Remedial Action Contractor under contract number DE-DT0011049
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

DOE-EM/GJ1520

Moab UMTRA Project Emergency/Incident Response Plan

Revision 17

Review and Approval

10/31/2019

X Shawn Goodspeed

Shawn Goodspeed
RAC Health and Safety Manager
Signed by: Shawn Goodspeed

10/31/2019

X Scott E. Williams

Scott E. Williams
TAC Health, Safety, and Training Manager
Signed by: SCOTT WILLIAMS (Affiliate)

10/31/2019

X Greg D. Church

Greg D. Church
RAC Project Manager
Signed by: Greg Church

10/31/2019

X Joseph D Ritchey

Joseph D. Ritchey
TAC Senior Program Manager
Signed by: Joe Ritchey

Revision History

Revision	Date	Reason for Revision
0	September 2007	Initial issue.
1	May 2008	Revision 1 includes modifications that align the Plan with the 2008 *Moab UMTRA Project Flood Mitigation Plan* (DOE-EM/GJ1640). Revisio 1 of the Emergency Response Plan supersedes the initial issue in its entirety.
2	November 2008	Revision 2 includes modifications to address transportation emergencies and updates organizational and contact changes.
3	March 2009	Revision 3 includes modifications to address comments received by external stakeholders.
4	November 2009	Revision 4 identifies site safety kit components at the work locations and special requirements at the Crescent Junction site. Deletes Deputy Project Manager from RAC organizational responsibilities.
5	September 2011	Revision 5 includes modifications to align Plan with NIMS and identifies additional areas for emergency response.
6	August 2012	Revision 6 includes new RAC contract number and new titles in Sections 2.0, 3.0, and 4.0. Clarifications and updates were also made in Purpose (Section 1.1), Roles and Responsibilities (Sections 2.1.7, 2.1.17, 2.2.5, and 2.2.6), Training (Section 3.3), Emergency Actions (Sections 4.0, 4.2, and 4.2.3), Millsite Riverside Trail Emergencies (Section 4.2.14), Operational Emergencies (Sections 4.3 and 4.3.1), Event Notification and Reporting (Section 5.0), Corrective Actions and Causal Analysis (Section 6.2), and Lessons Learned (Section 6.3).
7	September 2012	Revision 7 updates include deletion of Table 1 and replacement with expanded copy in Section 4.1.
8	July 2013	Revision includes insertion of contractor transition bluesheet comments, training matrix, and streamlining information.
9	September 2014	Revision 9 includes changes to Section 2.1.10 providing clarification relative to security guard duty hours and schedule.
10	January 2015	Revisions include update to Table 1 in Section 3.3 and addition of Appendix B, Emergency Public Information Plan.
11	March 2015	Revision includes new text hillside slippage in Section 4.2.12 and in Attachment 1.
12	May 2015	Revision includes update to Evacuation Assembly Area location in Appendix A.
13	April 2016	Revision includes new text to cover requirements in the Health Insurance Portability and Accountability Act of 1996
14	June 2016	Revision includes clarification of use of railbench egress road near the uphill road curve in the event of a critical alarm or actual rockfall.
15	October 2016	Revision includes full implementation of 29 CFR 1910.120 HAZWOPER language and requirements, update to Project Emergency/Incident Response Training Matrix, and new EMCBC notification requirements.
16	September 2018	Addition of Appendix A, an Incident Command System Procedure with position-specific emergency response organization checklists and Appendix E on Spill Response Protocols. Revision also includes update to the RAC Emergency Manager's roles and responsibilities to align with DOE O 151.1D.
17	October 2019	Addition of active shooter scenario to document body and appropriate active shooter response to Appendix B; revisions to rockfall/landslide response; revision and clarification of assembly areas and addition of figures showing assembly areas; editorial changes.

Contents

Section *Page*
Acronyms and Abbreviations vi
1.0 Introduction 1
1.1 Purpose 1
1.2 Project Background 1
1.3 Project Description 2
1.4 Scope 3
2.0 Roles and Responsibilities 4
2.1 Key Project Personnel 4
2.1.1 Federal Cleanup Director (*Public Information Officer*) 4
2.1.2 Acting Deputy Federal Project Director 4
2.1.3 DOE Environmental, Safety, Health, and Quality Assurance Manager (DOE *Incident Command Liaison*) 4
2.1.4 DOE Site Engineer (DOE *Incident Command Liaison*) 5
2.1.5 RAC Project Manager 5
2.1.6 RAC Emergency Response Director (*Incident Commander*) 5
2.1.7 RAC Emergency Response Coordinator (*Safety Officer*) 6
2.1.8 RAC Liaison Officer 6
2.1.9 RAC Emergency Manager 6
2.1.10 RAC Radiological Control Manager 7
2.1.11 RAC Environmental Compliance Manager 7
2.1.12 RAC Security Guard 7
2.1.13 TAC Senior Program Manager 8
2.1.14 TAC Public Affairs Manager 8
2.1.15 TAC HS&T Manager 8
2.1.16 TAC Security Officer 8
2.1.17 TAC QA and Environmental Compliance Manager 8
2.1.18 Categorization and Notification Coordinator 8
2.1.19 RAC or TAC Building Warden 8
2.2 Off-site Response Organizations 8
2.2.1 Moab Fire Department 9
2.2.2 Grand County and Emery County EMS 9
2.2.3 Grand County and Emery County Sheriff's Office 9
2.2.4 Moab Regional Hospital 9
2.2.5 St. Mary's Hospital 10
2.2.6 Respective Gas Pipeline Representatives 10
2.2.7 Moab UMTRA Project Radiological Emergency Response Assets 10
3.0 Contingency Planning 10
3.1 Coordination with Off-site EROs 11
3.2 Guidance for Emergency Actions 11
3.3 Training 11
3.4 Drills and Exercises 12
3.5 Emergency Recognition and Prevention 13

Contents (*continued*)

Section *Page*

4.0 Emergency Actions ... 13
4.1 Actions Common to All Emergencies ... 13
4.1.1 Site Safety Equipment ... 14
4.2 Additional Information for Specific Emergencies ... 15
4.2.1 Personnel Accountability ... 15
4.2.2 Active Shooter ... 15
4.2.3 Bomb Threats ... 15
4.2.4 Evacuations ... 15
4.2.5 Fire Actions ... 17
4.2.6 High Winds ... 17
4.2.7 Lightning ... 17
4.2.8 Flood Actions ... 17
4.2.9 Material Spills ... 22
4.2.10 Medical Emergencies ... 22
4.2.11 Public Disturbance Actions ... 22
4.2.12 Transportation Incident ... 24
4.2.13 Rockfall or Landslide Incident on Moab Rail Bench ... 24
4.2.14 Moab Utility Corridor Incident ... 25
4.2.15 Special Actions at the Crescent Junction Site ... 25
4.3 Operational Emergencies ... 26
4.3.1 Re-entry ... 28
4.3.2 Formal Termination ... 28
4.3.3 Recovery ... 28
5.0 Event Notifications and Communication ... 29
5.1 Operational Emergencies ... 29
5.2 Emergency Status Update Report ... 30
6.0 Post-emergency Response Incident Investigation ... 31
6.1 HAZWOPER Post-emergency Response Operations ... 31
6.2 Post-emergency Critique ... 31
6.3 Corrective Action and Causal Analysis ... 31
6.4 Lessons Learned ... 31
7.0 Records ... 32
8.0 References ... 32

Figures

Figure *Page*

Figure 1. Moab Site Administration Area, Safety Item Locations and Designated Assembly Area ... 18
Figure 2. Moab Site Queue Area, Safety Item Locations and Designated Assembly Area ... 19
Figure 3. Moab Site Well Field, Designated Assembly Area ... 20
Figure 4. Crescent Junction Site Administration Area, Safety Item Locations and Designated Assembly Area ... 21
Figure 5. Travel Routes from Moab and Crescent Junction Sites to Moab Regional Hospital . 23

Contents (*continued*)

Table *Page*

Tables

Table 1. Meteorological Data Summary for the Moab Site for 2015 3
Table 2. Project Emergency/Incident Response Training Matrix..... 12

Appendices

Appendix A. Incident Command System Procedure..... A-1
Appendix B. Emergency/Incident Action Instructions B-1
Appendix C. Emergency/Incident Response Plan for the Grand Junction Office C-1
Appendix D. Emergency Public Information Plan..... D-1
Appendix E. Spill Response Protocols.....E-1

Acronyms and Abbreviations

AED	automated external defibrillator
CA	Contamination Area
CFR	Code of Federal Regulations
CPR	cardiopulmonary resuscitation
DOE O	DOE Order
DOE	U.S. Department of Energy
EIRP	Emergency/Incident Response Plan
EMS	emergency medical services
EOC	Emergency Operations Center
ERO	Emergency Response Organization
ERT	Emergency Response Team
ESH&Q	Environmental, Safety, Health, and Quality
ESH&QA	Environmental, Safety, Health, and Quality Assurance
FCD	Federal Cleanup Director
H&S	Health and Safety
HAZMAT	hazardous materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HIPPA	Health Insurance Portability and Accountability Act
HS&T	Health, Safety, and Training
IAP	Incident Action Plan
ICS	Incident Command System
LEPC	Local Emergency Planning Committee
NIMS	National Incident Management System
PIO	*Public Information Officer*
PPE	personal protective equipment
RAC	Remedial Action Contract or Contractor
RCM	Radiological Control Manager
RCT	Radiological Control Technician
RRM	residual radioactive material
SR-279	State Route 279
TAC	Technical Assistance Contract or Contractor
UMTRA	Uranium Mill Tailings Remedial Action
UP	Union Pacific Railroad Company
US-191	U.S. Highway 191
USC	U.S. Code

1.0 Introduction

1.1 Purpose

This Emergency/Incident Response Plan (EIRP) is intended to minimize adverse impacts on the safety and health of the public and U.S. Department of Energy (DOE), Technical Assistance Contractor (TAC), Remedial Action Contractor (RAC), and subcontractor personnel from an emergency, incident, or unusual occurrence during performance of work on the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. This EIRP outlines the roles and responsibilities of key personnel and the actions to be taken in the event of an emergency. The TAC and RAC are jointly referred to herein as the contractors.

This EIRP implements Occupational Safety and Health Administration medical services and first aid requirements of Title 29 Code of Federal Regulations Section 1910, Subpart K, (29 CFR 1910K), "Occupational Safety and Health Standards, Medical and First Aid;" 29 CFR 1910.120, "Hazardous Materials, Hazardous waste operations and emergency response" (HAZWOPER); and the requirements of DOE Order (O) 151.1D, "Comprehensive Emergency Management System," which establishes policy and assigns roles and responsibilities for the DOE Emergency Management System.

The Project identified personnel (see Section 2.1) who would be utilized in the event of a major emergency response. Selected individuals have been trained to the National Incident Management System (NIMS) program requirements in an effort to better coordinate Project emergency response resources with local response agencies.

The Moab Valley Fire Department, managed by the Grand County Emergency Operation Center Director, who is also the designated Department of Homeland Security point-of-contact and head of the Local Emergency Planning Committee (LEPC), is actively involved in drills and emergency response events at the Moab and Crescent Junction sites. Additionally, Project personnel regularly meet with the LEPC and members of the Grand County Emergency Management System and Moab Regional Hospital to exchange information and ideas to better prepare for a significant emergency response event.

Appendix A of this Plan contains the Incident Command System Procedure, and Appendix B contains Emergency/Incident Action Instructions. Appendix C contains emergency procedures related to the Grand Junction office. Appendix D contains the Emergency Public Information Plan, and Appendix E contains Spill Response Protocols.

1.2 Project Background

The Moab site is a former uranium ore-processing facility located about 3 miles northwest of the city of Moab in Grand County, Utah. The site encompasses 480 acres, of which approximately 130 acres are covered by a mill tailings pile. The selected cleanup remedy involves relocating the tailings and other contaminated materials, known as residual radioactive material (RRM), from the Moab site to a permanent repository located 30 miles north in Crescent Junction, Utah.

The Moab site is bordered on the north and southwest by steep sandstone cliffs. The Colorado River forms the southeastern boundary of the site. U.S. Highway 191 (US-191) parallels the northern site boundary, and State Route 279 (SR-279) crosses the western portion of the site. Arches National Park is located north of the site across US-191.

The Union Pacific Railroad Company (UP) traverses a small section of the site, just west of SR-279, before entering a tunnel that emerges several miles to the southeast. The Moab Wash runs in a southeasterly direction through the center of the site and joins the Colorado River. The wash is an ephemeral stream that only flows when there is a precipitation or runoff event.

The Crescent Junction site is located northeast of the junction of Interstate 70 and US-191 between Crescent Junction and Thompson Springs, Utah. Five hundred acres at the Crescent Junction site were permanently transferred to DOE from the U.S. Department of Interior for the disposal cell. An additional 1,800 acres are in temporary withdrawal to support construction.

1.3 Project Description

The Project involves relocating the uranium mill tailings and other contaminated material from the Moab site to a permanent disposal cell at the Crescent Junction site. The materials are primarily transported by rail. Project scope also includes active remediation of groundwater at the Moab site. Project work locations may include: the Moab site; the Crescent Junction disposal site; vicinity properties (off-site properties in the vicinity of the Moab site that may contain process-related materials from the former millsite); the Grand Junction, Colorado, office; and off-site operations.

Activities conducted at the Moab site include:

- Excavation and preparation of mill tailings and other contaminated materials for transport to the Crescent Junction site.
- Operation of the groundwater interim action system, including groundwater extraction and freshwater injection. Implementation of surface water diversion is performed, as needed.
- Monitoring radioactive and non-radioactive materials in air, soil, groundwater, and surface water.
- Site maintenance, including revegetation.
- Site security and access control.

Activities conducted at the Crescent Junction site include:

- Excavation of the disposal cell.
- Placement and compaction of uranium mill tailings and other contaminated materials from the Moab site and vicinity properties in the disposal cell.
- Placement of interim and final cover layers.
- Monitoring radioactive and non-radioactive materials in air, the presence of fluids in standpipes, and the presence of groundwater in monitoring wells.
- Site maintenance, including revegetation.
- Site security and access control.

Activities conducted on vicinity properties include:

- Radiological assessments of properties to determine the presence of process-related wastes.
- Removal of radiologically contaminated materials and their transport to the Moab site or directly to the Crescent Junction disposal cell.

Administrative activities are performed at the Grand Junction office by DOE, RAC, and TAC personnel in support of the Project (see Appendix C).

Off-site activities include transportation of the contaminated materials between the Moab and Crescent Junction sites and operation and maintenance of the construction water and potable water systems supporting the Crescent Junction site.

Table 1 summarizes 2014 meteorological data for temperature, wind speed, and precipitation for the Moab site; these data are similar to the Crescent Junction site and demonstrate prevailing weather conditions for both sites.

Table 1. Meteorological Data Summary for the Moab Site for 2015

Month	Temperature (ºF)		Wind Speed (mph)		Precipitation (inches)
	Max Temp	Min Temp	Avg	Peak Gust	
January	58.9	14.8	2.3	19.4	1.04
February	72.1	24.7	2.9	34.7	0.17
March	83.9	25.4	3.2	34.8	0.33
April	84.9	30.4	4.7	47.6	1.53
May	97.3	41.4	4.5	42.0	1.09
June	107.3	53.5	3.9	30.3	1.41
July	103.5	59.4	4.5	39.3	1.24
August	104.9	57.2	3.7	45.3	0.38
September	98.5	48.6	3.3	39.2	1.27
October	94.6	37.8	3.0	42.1	2.03
November	75.7	20.7	3.4	39.9	1.29
December	52.5	11.5	2.8	27.9	0.53
Total Adjusted with Manual Gauge					**12.31**
10-Year Average Precipitation					**8.34**

1.4 Scope

This EIRP is applicable to emergencies that may occur at or near the Moab or Crescent Junction sites or while transporting RRM between these sites or from vicinity properties to the disposal cell. This EIRP is intended for use by all site workers and complements the *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038), which addresses the safety and health hazards of each phase of site operation and includes the requirements and procedures for employee protection.

This Plan includes several appendices that provide supplementary information and support implementation of the Emergency Response Program. Critical to successful implementation, Appendix A, Incident Command System (ICS) Procedure, provides tactical guidelines and checklists for Emergency Response Organization (ERO) personnel who implement the ICS, defines management roles and responsibilities, and provides direction of emergency incident operations.

2.0 Roles and Responsibilities

This section identifies the roles and responsibilities of Project personnel and off-site response organizations that are crucial to handling an emergency. Contact information for key personnel is listed in the *Moab UMTRA Project Emergency/Incident Response Key Personnel/Agencies and Contact Information* (*Emergency Contact List*) (DOE-EM/GJ1757). The latest revision of the *Emergency Contact List* is located on the Moab UMTRA Project SharePoint website's Emergency Response information; it is also posted in key locations at all Moab UMTRA Project sites.

2.1 Key Project Personnel

Project personnel key to planning for, responding to, and reporting an emergency include DOE, RAC, and TAC staff who are identified along with a list of responsibilities in an emergency. If a key person is unavailable, his or her responsibilities will transfer to someone with equivalent training and authority.

The titles, "*Incident Commander*," "*Safety Officer*," and "*Liaison Officer,*" are used in this document to be consistent with NIMS titles. These titles are shown in italics throughout the document.

2.1.1 Federal Cleanup Director (*Public Information Officer*)

Roles of the Federal Cleanup Director (FCD) and *Public Information Officer* (PIO) include:

- Serving as the primary DOE spokesperson for the Project.
- Providing interface between DOE and the media.
- Notifying DOE Headquarters, the Watch Office, Environmental Management Consolidated Business Center, and other agency contacts listed in the Emergency Contact List, of the emergency conditions, classifications, and status, as required.

2.1.2 Acting Deputy Federal Project Director

Roles of the Acting Deputy Project Director (FPD) include:

- Performing roles assigned or delegated by the FCD.
- Serving as the PIO and performing emergency management responsibilities of the FCD during his absence.

2.1.3 DOE Environmental, Safety, Health, and Quality Assurance Manager (DOE *Incident Command Liaison*)

Roles of the DOE Environmental, Safety, Health, and Quality Assurance (ESH&QA) Manager include:

- Acting as the primary DOE *Incident Command Liaison* for the Moab site and secondary liaison for the Crescent Junction site.

- Providing program management, technical oversight, and expertise in the fields of health, safety, and quality assurance.
- Reviewing contractor plans, incident reports, and lessons learned.
- Providing oversight of contractor emergency planning.
- Assisting the FCD as requested with making notifications.
- Keeping the FCD apprised of status of emergency.

2.1.4 DOE Site Engineer (DOE *Incident Command Liaison*)

Roles of the DOE Site Engineer include:

- Acting as the primary DOE *Incident Command Liaison* for the Crescent Junction site and secondary liaison for the Moab site.
- Reviewing contractor plans, incident reports, and lessons learned.
- Providing oversight of contractor emergency planning.
- Assisting the FCD as requested with making notifications.
- Keeping the FCD apprised of status of emergency.

2.1.5 RAC Project Manager

Roles of the RAC Project Manager include:

- Managing the RAC scope of work.
- Interfacing with Moab and Crescent Junction site organizations, contractor management, and DOE personnel.
- Obtaining required RAC resources through coordination with the RAC Emergency Response Director (*Incident Commander*).
- Coordinating with the TAC Senior Program Manager.

2.1.6 RAC Emergency Response Director (*Incident Commander*)

The Moab Operations/Site Manager and the Crescent Junction Operations/Site Manager act as the RAC Emergency Response Directors (*Incident Commanders*) during emergencies at their respective sites. Roles of the RAC Emergency Response Director (*Incident Commander*) include:

- Maintaining executive control of on-site emergency situations.
- Identifying, to the extent possible, all hazardous substances or conditions present during an emergency.
- Addressing, as appropriate, site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies during an emergency.
- Implementing appropriate emergency operations and ensuring the personal protective equipment (PPE) worn is appropriate for the hazards to be encountered.
- Directing emergency response actions using personnel and resources to mitigate the consequences of the emergency.
- Limiting the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations. However, operations in hazardous areas shall be performed using the buddy system in groups of two or more.
- Ensuring employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard wear positive pressure self-contained breathing apparatus while engaged in emergency response.
    - Using the results of air monitoring, determining that a decreased level of respiratory protection will not result in hazardous exposures to employees.

- Authorizing site-wide evacuations of personnel.
- Verifying personnel accountability.
- Maintaining RAC succession of authority.
- Notifying DOE *Incident Command Liaison* for the respective site of emergencies.
- Protecting the health and safety of the public and site personnel.
- Designating a *Safety Officer*, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and provide direction with respect to the safety of operations for the emergency at hand.
- Implementing appropriate decontamination procedures as needed after emergency operations have terminated.
- Conducting a post-emergency critique as soon as practicable following stabilization of the emergency condition.
- Acting as the Recovery Manager and coordinating recovery actions following termination of an emergency.

2.1.7 RAC Emergency Response Coordinator (*Safety Officer*)

The respective Health and Safety (H&S) representatives assigned to the Moab and/or Crescent Junction sites serve as the RAC Emergency Response Coordinators. Roles of the RAC Emergency Response Coordinator (*Safety Officer*) include:

- Serving as the on-scene coordinator during the emergency and advising the RAC Emergency Response Director (*Incident Commander*) on the emergency condition or event.
- Assisting the RAC Emergency Response Director (*Incident Commander*) with on-scene emergency response actions.
- Identifying and evaluating hazards and providing direction with respect to the safety of operations for the emergency at hand.
- Altering, suspending, or terminating activities judged to be immediately dangerous to life and health and/or to involve an imminent danger condition and immediately informing the Emergency Response Director (*Incident Commander*) of any actions needed to be taken to correct these hazards at the emergency scene.
- Maintaining a current inventory of chemicals and hazardous substances, materials, or wastes on site, identifying storage locations, and communicating this information to off-site response organizations.
- Ensuring emergency response communication systems are available and operational and conducting annual tests of these systems.
- Assisting with the preparation of records for the emergency response events, including incident investigation, emergency response improvements, and other noteworthy practices.

2.1.8 RAC Liaison Officer

Roles of the *Liaison Officer* include:

- Acts as a point of contact for representatives from other assisting and cooperating departments and agencies.

2.1.9 RAC Emergency Manager

Roles of the RAC Emergency Manager include:

- Planning and coordinating training, drills, and other emergency preparedness activities.
- Coordinating and assisting with training off-site response organizations and considering off-site ERO concerns.

- Coordinating emergency response planning and training with TAC Health, Safety, and Training (HS&T) Manager
- Administering the annual Emergency Readiness Assurance Plan and the Emergency Management Program.
- Developing and maintaining this EIRP.
- Ensuring this EIRP is reviewed periodically and, as necessary, amended to keep it current with new or changing site conditions or information.
- Developing the Emergency Readiness Assurance Plan and annual updates.
- Developing and conducting emergency training and exercise programs.
- Coordinating assessment activities.
- Developing related documentation and coordinating emergency resources.
- Ensuring this plan is compatible and integrated with the disaster, fire, and/or emergency response plans of local, state, and federal agencies.
- Being responsible and having authority for day-to-day-operation and maintenance of the Emergency Management Program.
- Having access to management personnel who have authority for Project resources and operations.
- Briefing senior leadership on the Emergency Management Program and their expected roles and responsibilities during an emergency. This briefing must be conducted initially and when changes modify roles and responsibilities.
- Ensuring emergency management planning is integrated with other applicable Project programs and associated documents.
- Overseeing implementation of this Plan in accordance with the requirements of DOE O 151.1D.

2.1.10 RAC Radiological Control Manager

Roles of the RAC Radiological Control Manager (RCM) include:

- Managing and coordinating Radiological Control Technicians (RCTs) and supporting activities within the Contamination Area (CA) or involving suspected radiological contamination during an emergency.
- Providing support for radiological assessment and decontamination of affected property or of injured personnel.

2.1.11 RAC Environmental Compliance Manager

The role of the RAC Environmental Compliance Manager is to coordinate notifications regarding environmental aspects of emergencies associated with RAC work activities.

2.1.12 RAC Security Guard

Roles of the RAC security guard include:

- Serving as the primary access control at the Moab and Crescent Junction site entrances.
- Assisting with traffic control during an incident and directing emergency personnel to the incident scene.
- During scheduled duty hours, notifying the appropriate RAC Assigned On-call Manager of emergency conditions that occur during non-working hours.

Security guards do not provide 24-hour coverage. Their schedule is based on site operations as determined by senior Project management personnel and as identified in the *Moab UMTRA Project Site Security Plan* (DOE-EM/GJ1532).

2.1.13 TAC Senior Program Manager

Roles of the TAC Senior Program Manager include:

- Serving as the primary interface with DOE.
- Managing the TAC scope of work.
- Obtaining required TAC resources through coordination with the RAC Emergency Response Director (*Incident Commander*).
- Coordinating with the RAC Project Manager.

2.1.14 TAC Public Affairs Manager

Roles of the TAC Public Affairs Manager include:

- Serving as the primary spokesperson for the contractors for the Project during an emergency.
- Issuing news releases and contacting local, state, and federal agencies with FCD approval.

2.1.15 TAC HS&T Manager

Roles of the TAC HS&T Manager include:

- Coordinating emergency response training and planning with the RAC Emergency Manager.

2.1.16 TAC Security Officer

The role of the TAC Security Officer is to act as primary contractor point-of-contact for security-related matters concerning sites/facilities managed and activities conducted within the scope of the Moab UMTRA Project.

2.1.17 TAC QA and Environmental Compliance Manager

The role of the TAC Environmental Compliance Manager is to coordinate notifications regarding environmental aspects of emergencies associated with TAC work activities.

2.1.18 Categorization and Notification Coordinator

Roles of the Categorization and Notification Coordinator include:

- Categorizing emergency events in accordance with DOE O 232.2A, Occurrence Reporting and Processing of Operations Information and DOE O 151.1D, Comprehensive Emergency Management System.
- Notifying the DOE Watch Office of an Operational Emergency and providing status updates until the emergency is terminated.
- Coordinating records recovery as defined in the *Moab UMTRA Project Records Disaster Prevention, Mitigation, and Recovery Plan* (DOE-EM/GJ1524).

2.1.19 RAC or TAC Building Warden

The role of the Building Warden is to coordinate personnel evacuation during emergencies that require evacuation.

2.2 Off-site Response Organizations

Outside agencies are utilized for emergency responses because of the specialized training and resources they provide. This section identifies the emergency services that each of the off-site EROs will provide at the Moab Project sites or during an RRM transportation incident. The Emergency Contact List includes contact information for off-site agencies.

Memoranda of understanding have been executed with Grand County and Emery County emergency medical services (EMS) and Moab Regional Hospital to establish responsibilities for coordination of personnel and operations should an unplanned event occur.

DOE and its contractors will provide all reasonably available resources, including information and technical assistance, to these off-site response organizations as necessary to mitigate the effects of any emergency that may arise in association with the Project. DOE will also allow access to its property for all personnel and equipment required for emergency response, such as fire department equipment, police vehicles, ambulances, and flight-for-life helicopters.

Depending on the scope and severity of the emergency, any of these organizations could provide an *Incident Commander* who is responsible for managing the emergency (excluding hospitals). All emergency responders and their communications shall be coordinated and controlled through the Emergency Response Director (*Incident Commander*) assisted by the senior official present for each employer. The senior emergency response official responding to an emergency shall become the Emergency Response Director (*Incident Commander*).

The senior official at an emergency response is the most senior official on site who has the responsibility for controlling the operations at the site. Initially, it is the senior officer on the first-due piece of responding emergency apparatus to arrive on the incident scene. As more senior officers arrive (e.g., battalion chief, fire chief, state law enforcement official, site coordinator), the position is passed up the line of authority established in 29 CFR 1910.120.

2.2.1 Moab Fire Department

Roles of the Moab Fire Department include:

- Providing fire protection, hazardous materials (HAZMAT) emergency response, and all other emergency services consistent with reasonable and prudent industrial emergency management practices.
- Coordinating emergency services required by DOE and its contractors.

2.2.2 Grand County and Emery County EMS

Roles of the Grand County and Emery County EMS include:

- Providing first response medical services for all injured or ill DOE, contractor, subcontractor, vendor employees, and site visitors.
- Transporting injured or ill personnel by ambulance to medical facilities from DOE-owned or -managed property.

2.2.3 Grand County and Emery County Sheriff's Office

Roles of the Grand County and Emery County Sheriff's Office include:

- Providing law enforcement protection, traffic control and coordination, and other law enforcement services consistent with reasonable and prudent practices.
- Coordinating emergency law enforcement services.
- Providing a suitable area or other accommodations for use as an emergency operations center.

2.2.4 Moab Regional Hospital

The role of Moab Regional Hospital is to provide medical treatment of personnel who are ill or have non-life-threatening injuries associated with a Project emergency.

2.2.5 St. Mary's Hospital

The role of St. Mary's Hospital is to provide CareFlight air ambulance medical services from Grand Junction for life-threatening situations.

2.2.6 Respective Gas Pipeline Representatives

The role of the respective gas line representative is to provide assistance with any disruption or event that could affect the integrity of the gas lines that run along the northern end of the property line in Moab.

2.2.7 Moab UMTRA Project Radiological Emergency Response Assets

The RAC maintains a medical support agreement with the Radiation Emergency Assistance Center and Training Site operated by the Oak Ridge Institute of Science and Education for the DOE. They maintain a 24-hour emergency contact list for assistance with the medical management of radiation accidents. They can be reached by telephone at 865-576-1005; ask for the Radiation Emergency Assistance Center and Training Site.

The Radiological Assistance Program is not currently set to respond to a radiological event dealing with RRM during either an on-site or off-site transportation event due to the low-level activity associated with the mill tailings materials.

3.0 Contingency Planning

The objective of contingency planning is to be prepared to respond to emergencies. Contingency planning includes coordinating with EROs, preparing guidance describing actions to be taken during emergencies, conducting training, and performing drills.

The RAC Emergency Manager will plan for emergencies and coordinate with off-site EROs.

Preparation to meet the challenge of an emergency requires Project personnel to:

- Notify the RAC Emergency Response Director (*Incident Commander*) that an emergency is in progress.
- Know the hazards in the area that may be affected by the emergency.
- Understand warning sounds and alarms and know where to assemble.

The Project will make first aid, cardiopulmonary resuscitation (CPR), and automated external defibrillator (AED) training available to Project personnel on a voluntary basis.

Project-designated First Aid personnel are trained to 29 CFR 1910.151, "Medical services and first aid," and in procedures and protocols related to supporting Grand County and Emery County EMS response and CareFlight response.

3.1 Coordination with Off-site EROs

The Project does not have any authorized and fully qualified Emergency Responders certified per OSHA 1910.120 relative to response level a. Operational, b. Technician, c. Specialist on site, therefore; the Project relies on mutual aid agreements with off-site response organizations for specialized skills not available at the Project level.

Good coordination with off-site organizations will result in effective responses to any emergency situation. Training and drills as described in Sections 3.3 and 3.4, respectively, are periodically made available to off-site EROs. Memorandum of understanding have been established with Grand County and Emery County EMS, the Moab Regional Hospital, Rocky Mountain Power Company, and the State of Utah Fire, Forestry, and State Lands.

Under the direction of the RAC Emergency Manager, Project representatives will participate in LEPC meetings as practical. Coordination with response organizations will enable continuous improvement of performance in an emergency through feedback and lessons learned. Additionally, the RAC Project Manager or designee is responsible for meeting with response organizations to discuss potential issues at the Project sites when conditions warrant.

The goal of these meetings is to provide awareness and understanding about CareFlight's response capabilities and requirements, including Project locations, information related to potential mechanisms of injury, landing zone designations, communication requirements, and mutual aid procedures with Grand County and Emery County EMS.

3.2 Guidance for Emergency Actions

Guidance for use during specific types of emergencies is provided in Appendix B of this EIRP and is meant to be used by any staff member in the event of an emergency. The purpose of this guidance is to provide instructions or checklists that, when followed, will increase the likelihood of a proper response to the event.

3.3 Training

The Project maintains an established Training Program (see Table 2 for Emergency/Incident Response Training Matrix) to help ensure personnel are adequately trained for the work they perform and for emergency preparedness. Training at some level is required for everyone entering the site. Personnel who regularly work on a Project site receive the Moab Project site Pre-entry Briefing and are trained on this EIRP. The site briefing includes information on site hazards, basic emergency notification, and response activities.

Specific training is provided to workers who have special duties during emergencies, such as security personnel who direct responders to the incident scene. Training shall be provided when an employee's expected actions change or when this EIRP changes. The specific training is described in Table 2.

Site visitors and vendors receive abbreviated training on emergency alarms and evacuation procedures commensurate with their time on site and the purpose of their visit.

Off-site response organization personnel are offered training on pertinent information regarding hazards present at the sites; the types of injuries and illnesses that could result from contamination by contact, ingestion, or inhalation of radioactive or hazardous substances; and risks associated with fires, explosions, or hazardous material releases.

Table 2. Project Emergency/Incident Response Training Matrix

Functional Area	Type of Personnel	Training Required
General Emergency Response	All Project Personnel	ER100 (Grand Junction) ER101 (Moab/Crescent Junction) SB100
Radiological Materials Incident Response	Radiological Control Technicians	RT003
ERO	*Incident Commander* *Safety Officer* *Liaison Officer* *PIO*	ER106, ER107, or ER108
Emergency Public Information	*PIO* Public Affairs Manager	EOTA EPI100DW EOTA EPI110DW EOTA EPI210DW EOTA EPI220DW
Categorization and Notification	Categorization and Notification Coordinator	OR003

EOTA = DOE Emergency Operations Training Academy

3.4 Drills and Exercises

At a minimum, drills are conducted at least annually, by site location and by shift, to practice response to possible emergencies with Project personnel and to evaluate response to possible emergencies.

Drills are performed to simulate or practice a variety of emergencies and may involve a single field crew, the entire site, or off-site EROs. Drills may be desktop or may involve detailed coordination and physical role-playing.

In accordance with DOE O 151.1D, building evacuations must be conducted annually at each of the three Project sites.

Annually, the Project plans and participates in a multi-agency exercise to demonstrate proficiency and preparedness against credible scenarios. Exercises are conducted in accordance with DOE O 151.1D and Headquarters guidance.

3.5 Emergency Recognition and Prevention

Information on emergency recognition and prevention is provided in the *Health and Safety Plan*, the *Moab UMTRA Project Health and Safety Suspected Hazardous Residual Radioactive Material Response Procedure* (DOE-EM/GJRAC2160), general and task-specific Integrated Work Plans/Job Safety Analyses, and Project training.

4.0 Emergency Actions

Protective actions must be promptly and effectively implemented or recommended for implementation, as needed, to minimize the consequences of emergencies and to protect the health and safety of workers and the public.

Protective actions must be implemented individually or in combination to reduce exposures to a wide range of hazards. Protective actions must be re-assessed throughout an emergency and modified as conditions change. At a minimum, qualified basic life support personnel shall also stand by with medical equipment and transportation capability.

4.1 Actions Common to All Emergencies

The highest priority in an emergency is protecting the life and health of Project personnel and the public, followed by protecting the environment, and then property. In an emergency, site workers should immediately:

- Warn others in the area using whatever means are available (e.g., voice, telephone, radio, car horn).
- Notify their supervisors of the nature and location of the emergency/incident.
- Survey the scene to ensure their safety first, obtain basic information regarding controlling the emergency, and obtain the proper resources needed by emergency personnel.
- Stop or secure the operation causing the emergency if it can be done safely.
- Minimize exposure to hazardous conditions that may exist as part of the emergency.
- Identify any other hazards that may be present (e.g., the potential for fire or explosion).
- Isolate the area and establish control boundaries, if possible.
- Relinquish control and brief more senior trained personnel when they arrive at the location.

At no time should an emergency response action be performed if the RAC Emergency Response Director (*Incident Commander*) determines it would be dangerous to persons in the area. Good communication is essential for effective response to an emergency.

During emergency and off-normal events, several methods are used to notify workers of the situation, and the most common and effective methods are by two-way radios and cell phones. At both Moab and Crescent Junction sites, a radio channel has been designated for emergency use during an event. When an emergency is declared, the designated channel is cleared and used only for emergency communications and directions to be taken during the event[1].

[1] Channel 2 at the Moab site is configured with a radio repeater and will not function when power is lost; under this scenario, another channel must therefore be designated as the emergency channel.

The channel used by each site is posted and reviewed with the workers at pre-shift safety meetings throughout the year. In accordance with 29 CFR 1910.165, "Occupational Safety and Health Standards, Employee alarm systems," the Project shall test of the reliability and adequacy of notification methods (i.e., base station radios) each month, preferably on the first of the month in conjunction with safety equipment inspections.

A different actuation device (i.e., radio) shall be used in each test of a multi-actuation device system, such as the system at the Moab site, so that no individual device is used for two consecutive tests. A personnel lanyard card that identifies designated site radio channels, including the emergency channel to be used, was created and distributed to employees; cell phones are used when communication is needed where radio coverage is not available and to summon off-site emergency responders.

Cell phones are also very effective when a lengthy conversation is needed, as this method does not tie up the radio channel by supervision and management. Cell phones are also effective for communications that are not appropriate to transmit over the radio (e.g., condition of any victims, trying to locate a worker that is unaccounted for, contacting personnel out of radio range).

On notification of an emergency, the RAC Emergency Response Director (*Incident Commander*) or designee will notify the TAC Senior Program Manager or RAC Project Manager, the DOE *Incident Command Liaison*, and the FCD. Notifications to agencies and organizations other than the contractors and DOE are determined by the FCD. Supplemental actions are determined by the RAC Emergency Response Director (*Incident Commander*) and should be carried out as quickly as is reasonable after immediate actions are completed.

The main responsibility for communication with the public during emergencies falls on the FCD and TAC Public Affairs Manager. Appendix D, Emergency Public Information Plan, addresses the requirements of DOE O 151.1D for an Emergency Public Information Plan and addresses public affairs activities in emergency situations to ensure necessary actions will be planned and coordinated.

4.1.1 Site Safety Equipment

Each site maintains site safety equipment that is available for transport to an emergency location. This equipment includes but is not limited to:

- Emergency medical response bags/first-aid kits located in the Crescent Junction and Moab main administrative offices and the Moab Support Area (Queue).
- AED available for trained personnel in the Crescent Junction and Moab main administrative offices and the Moab Support Area (Queue).
- Spotlight/flashlights.
- Eye-wash kit (portable bottles and designated permanent locations in various areas at all sites).
- Spill response materials available for trained personnel located in Moab or Crescent Junction. Spill response protocols are included as Appendix E.
- Minimum 10-pound, dry-chemical, ABC portable fire extinguishers (located in office trailers and work areas at all sites).
- PPE.

Chemical protective clothing and equipment for use by organized and designated HAZMAT team members or by HAZMAT specialists shall meet the requirements of the *Health and Safety Plan*.

4.2 Additional Information for Specific Emergencies

4.2.1 Personnel Accountability

The supervisor or designated person at each assembly area shall determine all personnel are accounted for and are either safe or being attended to by using the accountability list, which is a combination of the daily sign-in sheet from the morning safety meeting and the visitor's log.

The supervisor or designated person at each assembly area will notify the RAC Emergency Response Director (*Incident Commander*) by radio of the personnel present at that area. In the event that there are unaccounted for personnel, the supervisor or most senior person at the assembly area will contact the unaccounted employee's supervisor and, together with the RAC Emergency Response Director (*Incident Commander*), they will direct further actions.

4.2.2 Active Shooter

An "active shooter" is an individual who is engaged in killing or attempting to kill people in a confined and populated area. In most cases, active shooters use firearms and there is no pattern or method to their selection of victims. Active shooter events are typically unpredictable and evolve quickly.

Workers should be mentally and physically prepared to deal with an active shooter situation, as knowing what to do can greatly increase the chances of survival for both the individual and others in the area. Active shooter events require a unique response that is often specific to the how the situation evolves. Detailed guidance to aid employees in navigating such a situation is provided in Appendix B, Emergency/Incident Action Instructions.

4.2.3 Bomb Threats

If a bomb threat is received, keep as calm as possible. Keeping the telephone caller on the telephone line is important so that as much information as possible can be obtained. The Bomb Threat Checklist Form 1520 and Emergency Response Checklist Form 1521 are provided in Appendix A, Incident Command System Procedure.

The receiver of the call should try to have someone else notify the RAC Emergency Response Director (*Incident Commander*) of the bomb threat while he or she remains on the line. A bomb threat may be followed by a site evacuation depending on information obtained from the caller.

4.2.4 Evacuations

An evacuation may be called due to a radar system critical alarm, rail bench rockfall, fire, bomb threat, flood event, hazardous materials spill, public disturbance, or other situation. A call for an evacuation may be confined to a work area or may be for the entire site. An evacuation should be orderly and should include a sweep of the area (if safe to do so) by exiting personnel to ensure all workers received the order to evacuate.

A work area evacuation can be called by the area supervisor. For work area or CA evacuations, personnel should not leave the site, but should report to the designated assembly area or point of safe refuge for accountability. A site-wide evacuation is authorized by the RAC Emergency Response Director (*Incident Commander*).

Evacuation instructions are provided in Appendix B. The Emergency Response Checklist in Appendix A should be completed at the direction of the RAC Emergency Response Director (*Incident Commander*).

Evacuation Routes

The RAC Emergency Response Director (*Incident Commander*) shall establish evacuation routes to be used in the event that an emergency evacuation of a site is ordered. The evacuation routes are clearly communicated to Project employees by postings or radio directives as mandated by changing conditions.

The following guidelines shall be considered when establishing emergency evacuation routes.

- Locate evacuation routes upwind of the CA or exclusion zone whenever possible and strategically locate wind indicators to determine wind direction.
- Establish an evacuation route through the access control point adjacent to the CA.
- Ensure primary and alternate routes are adequately separated from each other.
- Ensure evacuation routes are kept free of obstructions.
- If primary evacuation routes are unusable, workers shall be directed to an alternate route via radio.

Assembly Areas

Assembly areas are designated safe refuge zones during a site emergency. The following assembly areas have been established for the Moab site.

- Personnel outside the CA shall assemble in the nearest of either the main administrative area conference room or the Support Area (Queue) conference room.
- Personnel inside the CA shall exit at the nearest access control trailer and await further instruction from their supervisor or the RAC Emergency Response Director (*Incident Commander*); if conditions are deemed safe and appropriate, direction will be given to assemble at the nearest conference room with other personnel.
- Personnel in the well field shall assemble at site access gate #13, located two-tenths of a mile south of the tailings pile on SR-279 at mile marker 14.
- If prevailing winds put the primary assembly areas downwind of the incident site, in a relevant emergency (e.g., potentially airborne chemicals) workers shall be directed to an alternate assembly point via radio by the RAC Emergency Response Director *(Incident Commander)* or designee.

Figure 1, Figure 2, and Figure 3 depict assembly areas for the main administrative area, the Support Area (Queue), and the well field area of the Moab site, respectively.

The following assembly areas have been established for the Crescent Junction site.

- Personnel outside the CA shall assemble in the southwestern corner of the administrative area parking lot (along the fence line), or as directed by the RAC Emergency Response Director (*Incident Commander*) or designee via radio.

- Personnel inside the CA shall exit at the access control point and await further instruction from their supervisor or the RAC Emergency Response Director (*Incident Commander*); if conditions are deemed safe and appropriate, direction will be given to assemble at the assigned area of the administrative parking lot.

Figure 4 depicts the designated assembly area for Crescent Junction site.

4.2.5 Fire Actions

The objective of fire actions is to reduce the consequences of a fire. The actions taken in the event of a fire will depend on the amount of warning received. Fire lanes may be established to reduce the risk of a fire, the spread of a fire, or for access for fire-fighting activities. Fire action instructions are provided in Appendix B.

4.2.6 High Winds

The Project sites are in areas that are susceptible to high winds. When wind speeds equal or exceed 27 mph, work shall cease until the wind speed decreases.

4.2.7 Lightning

When lightning is visible, and thunder is audible and appears to be within (approximately) 3 miles, all Moab Project employees working outdoors shall leave high points (e.g., roofs, ladders). Operators in tracked equipment are picked up by an enclosed vehicle with rubber tires (e.g., crew van). Personnel in exposed areas (e.g., open areas, top of the tailings pile or the disposal cell) shall go inside a building or an enclosed vehicle with rubber tires.

When a lightning shutdown is ordered, it will remain in effect for 20 minutes after the last strike within the 3-mile limit; at that time, the lightning shutdown will be lifted for work to resume. Employees will refrain from moving from one building to another while a shutdown is in effect unless they are authorized to move elsewhere by the Operations/Site Manager or in emergency situations. If an approaching storm exhibiting electrical activity is likely to affect the site, a lightning shutdown may be put into effect before detection of lightning within 3 miles. Weather radar and the lightning detector will be monitored when adverse weather and lightning are present. When severe weather results in an immediate threat to personnel safety, the RAC Emergency Response Director (*Incident Commander*) shall be notified. The RAC Emergency Response Director (*Incident Commander*) will direct additional emergency response actions as appropriate.

4.2.8 Flood Actions

Flood conditions at the Moab and Crescent Junction sites are most likely to occur as a result of runoff associated with thunderstorms. Additionally, at the Moab site, spring runoff in the Colorado River could overtop the riverbanks for several days. Colorado River flooding is almost always predictable several days in advance of the event. The actions taken in the event of a flood will depend on the amount of warning received before a flood actually occurs.

Flooding associated with storm events can result in the onset and/or rapid increase of flow in the Moab Wash and other drainages. In the event of such conditions, notify the RAC Emergency Response Director (*Incident Commander*). The objective of flood instructions provided in Appendix B is to take actions that might reduce the consequences of a flood. Actions are directed first to protect personnel safety and then to protect DOE property, including materials, buildings, and equipment.

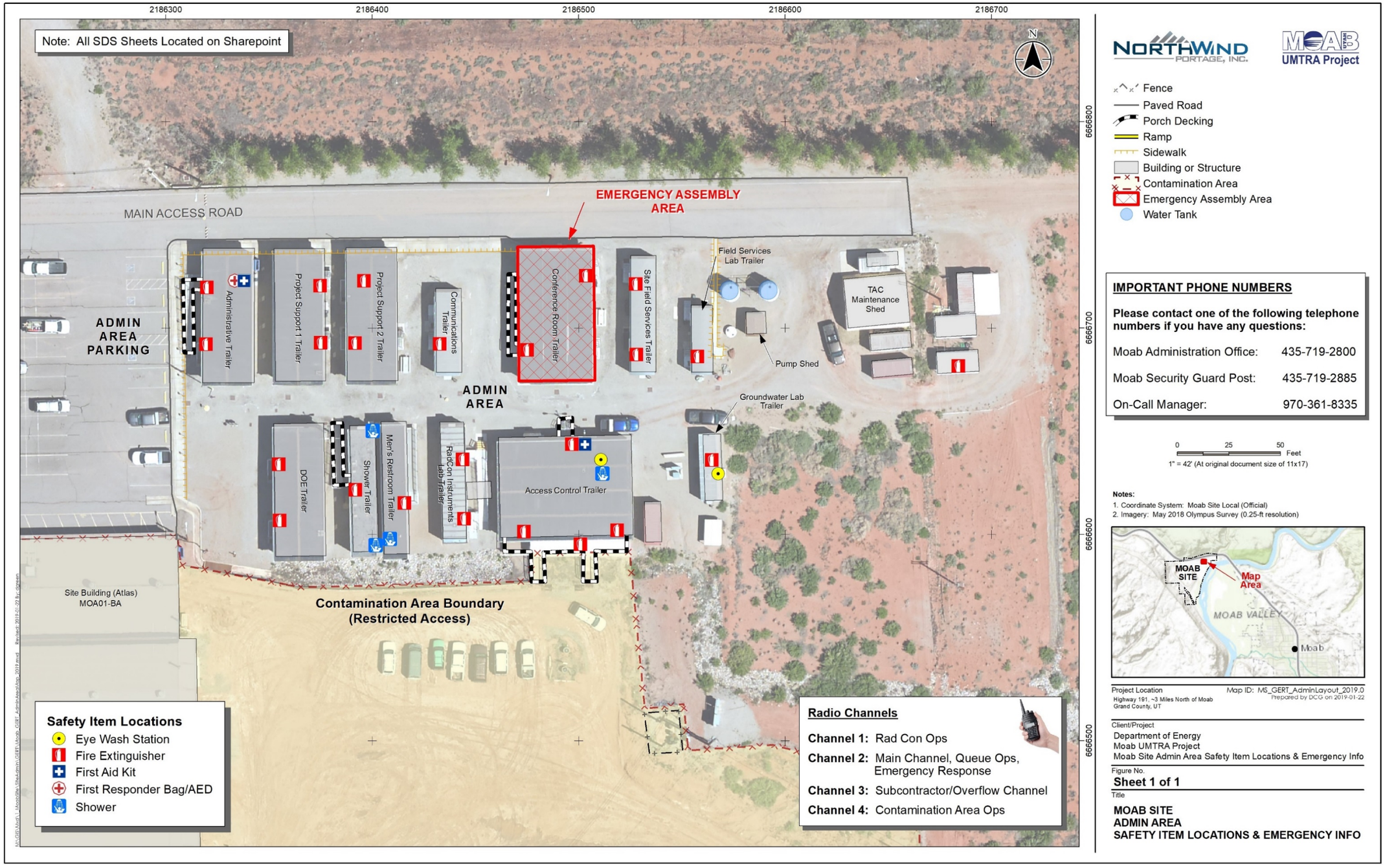

Figure 1. Moab Site Administration Area, Safety Item Locations and Designated Assembly Area

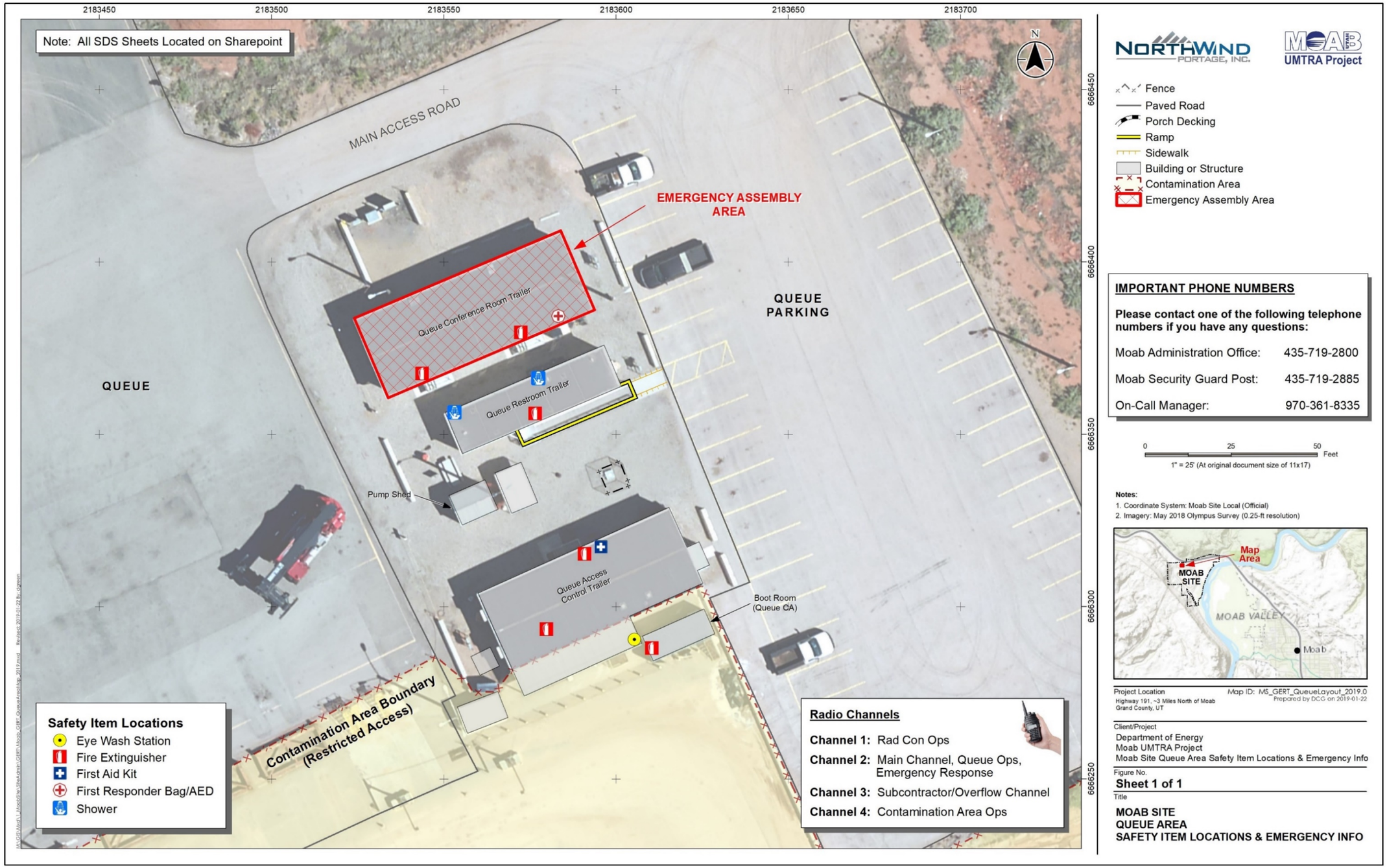

Figure 2. Moab Site Queue Area, Safety Item Locations and Designated Assembly Area

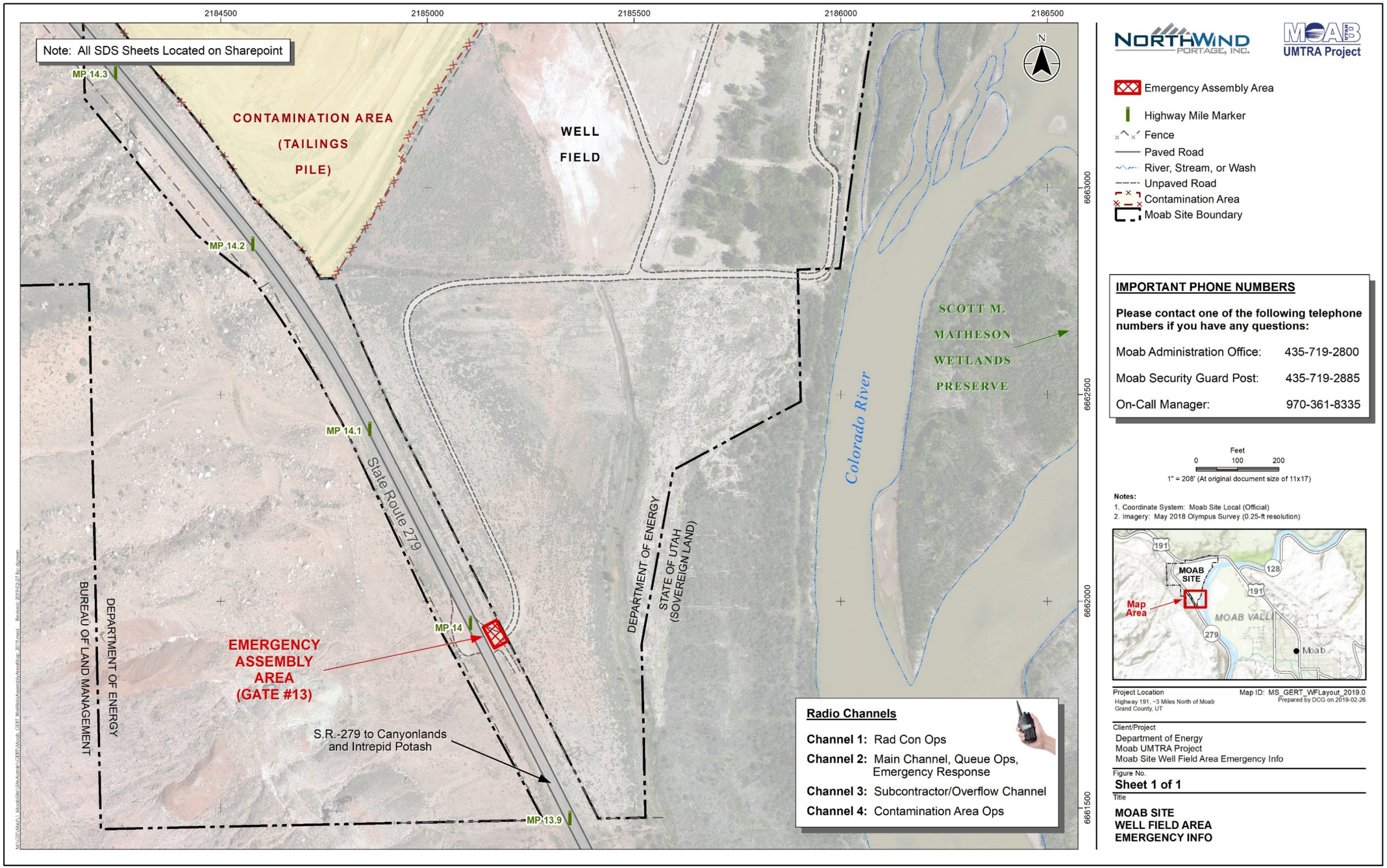

Figure 3. Moab Site Well Field, Designated Assembly Area

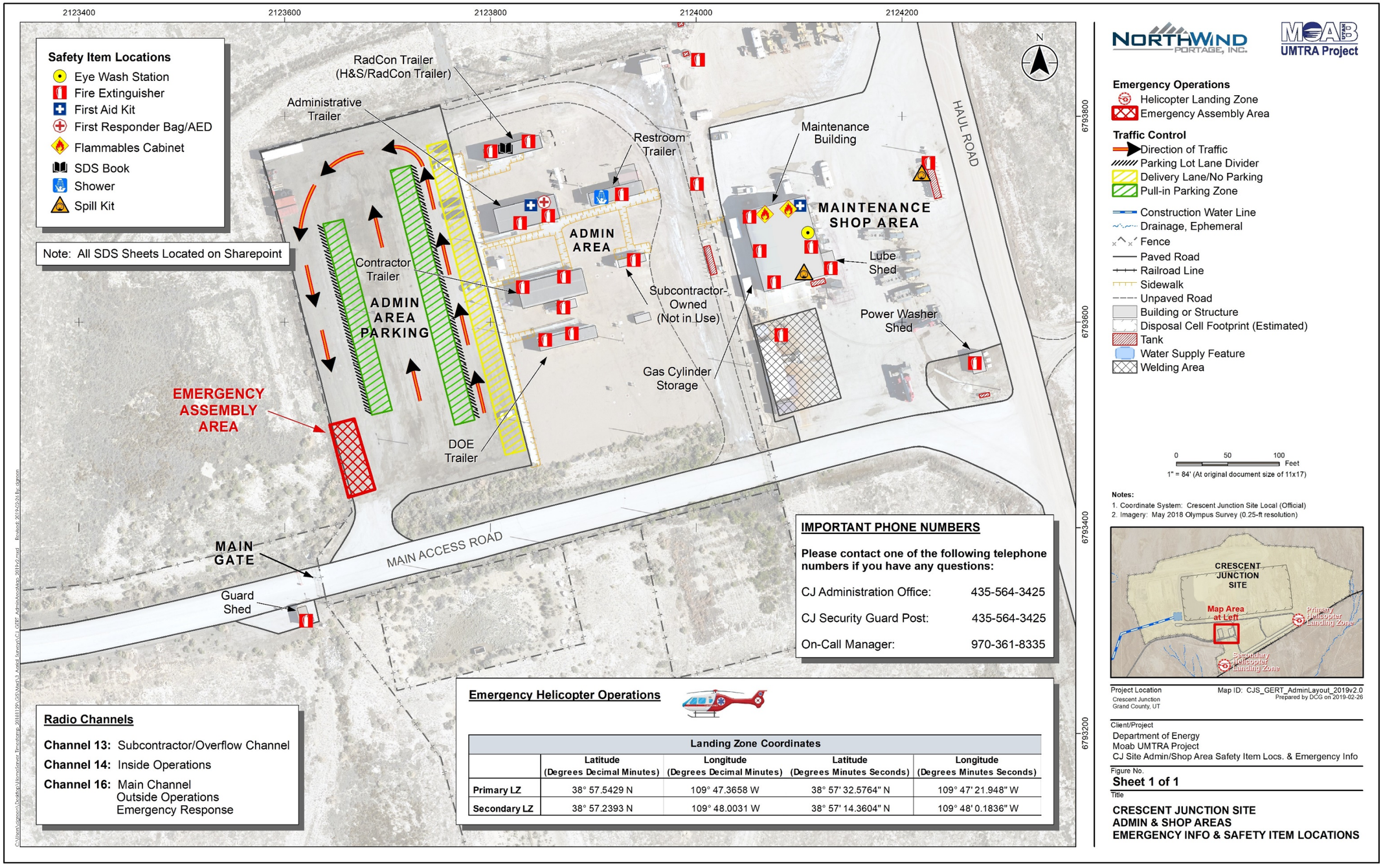

Figure 4. Crescent Junction Site Administration Area, Safety Item Locations and Designated Assembly Area

4.2.9 Material Spills

Actions in the event of a spill of petroleum products, hazardous substances, and RRM at Project sites are provided in Appendix C of this EIRP and the *Moab UMTRA Project Spill Prevention, Control, and Countermeasure Plan* (DOE-EM/GJRAC1477).

4.2.10 Medical Emergencies

While all employees are responsible for immediate actions identified in the medical emergency instructions (see Appendix B) and are expected to carry them out, no employee is required to provide first aid for which he or she has not been trained or is uneasy about providing. Never move a victim in need of medical assistance unless:

- Directed by a competent medical authority.
- The injury will not be aggravated or complicated by a move.
- The victim is in a location where greater physical harm would be likely if not moved.
- Wound severity is such that a life-threatening situation arises.

Never delay EMS personnel access to the scene while applying administrative controls or prescribing PPE. Decontamination of victims, EMS personnel, and any associated equipment and materials will be in proportion to the nature and severity of the medical emergency. Radiological Control will determine if any decontamination is needed in the emergency room and/or on any equipment and will lead the decontamination efforts. Figure 5 identifies travel routes to Moab Regional Hospital from the Moab and Crescent Junction sites.

Health Insurance Portability and Accountability Act (HIPAA)

In accordance with DOE O 440.1B Chg 2, "Worker Protection Management for DOE (including the National Nuclear Administration) Federal Employees," provision of medical treatment and planning for mass casualty situations. Sharing patient information between on-site and off-site health care providers during emergencies must be coordinated in advance and be consistent with HIPAA requirements.

Every effort shall be taken to restrict access to individual medical information of injured workers during a medical emergency. Do not use names, birthdates, or other identifying information over open source communications or in reports. For example, refer to injured workers as "patient 1" or "patient 2." Redact names, social security numbers, addresses, and other personal identifying information from medical paperwork used in incident reports.

When placed in records, notify the Records Manager that the report contains medical records so they may be handled in accordance with HIPAA laws. Additionally, refrain from discussing medical information with anyone who does not have a need to know.

4.2.11 Public Disturbance Actions

A public disturbance is defined as a demonstration by activists or a threat to DOE or contractor operations conducted as a part of the Project and that:

- Disrupts DOE, contractor, or subcontractor operations.
- Adversely affects DOE or contractor property.
- Jeopardizes the safety and health of DOE, contractor, or subcontractor employees.
- Adversely affects the reputation or public image of DOE or the contractors.
- Threatens or causes bodily injury or radiological exposure to the general public.

If there is no immediate threat to personnel safety, the RAC Emergency Response Director (*Incident Commander*) will work with the FCD to determine the appropriate response actions needed to safeguard personnel and property. Public disturbances often occur with little or no warning.

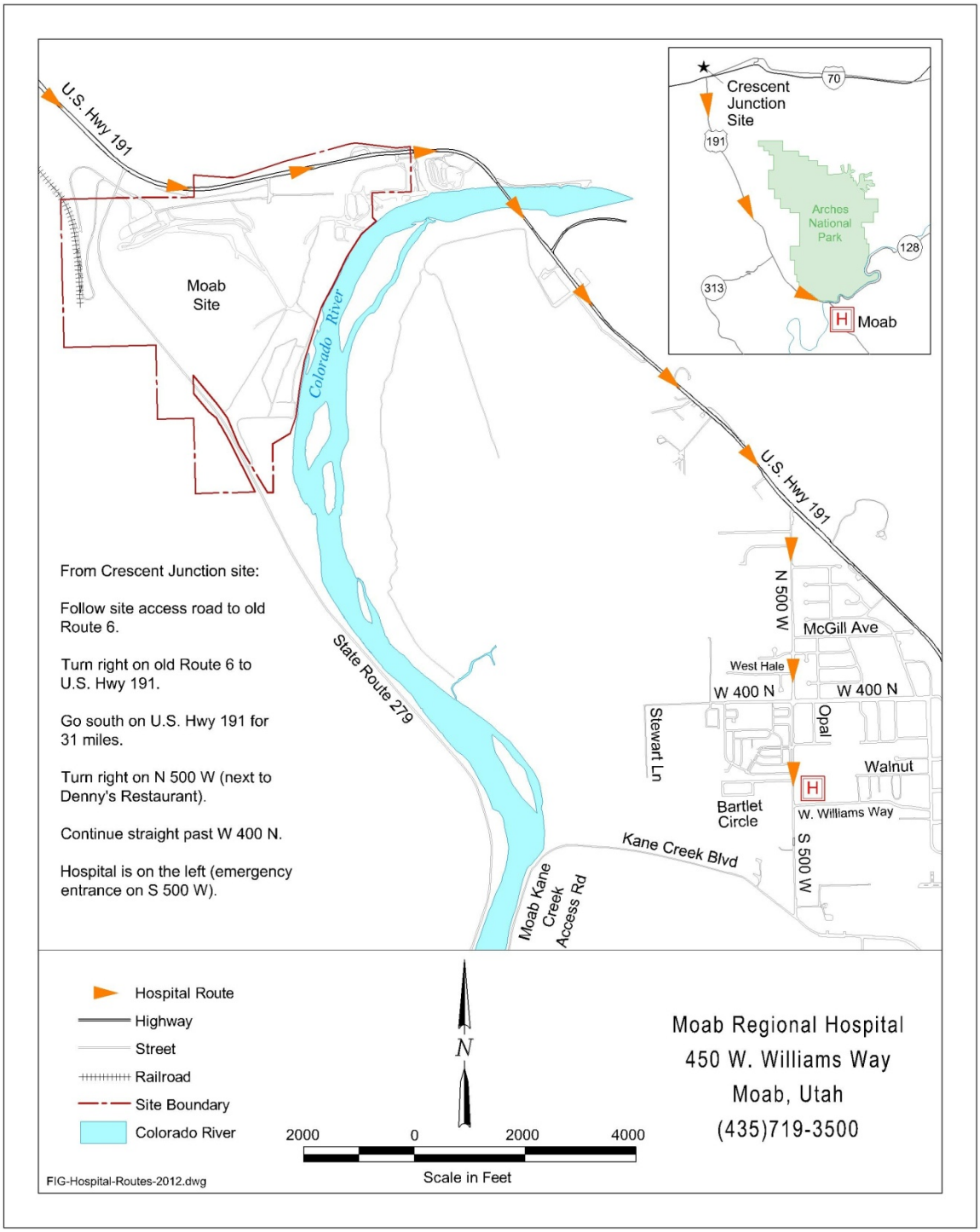

Figure 5. Travel Routes from Moab and Crescent Junction Sites to Moab Regional Hospital

4.2.12 Transportation Incident

This section addresses emergency events involving rail or truck transport of RRM and outlines coordination among responders. The *Moab UMTRA Project Transportation Plan* (DOE-EM/GJ1639) describes transportation and disposal of RRM, including on-site staging, logistics, and packaging.

Transportation incidents are handled by off-site response organizations if they involve an injury requiring immediate medical attention. Primary transport of RRM is accomplished by rail using UP as the carrier. Emergency actions and response are performed by the carrier for transportation incidents.

The carrier is responsible for RRM cleanup activities from any transportation incident. The Project will coordinate with the carrier, provide assistance and guidance as requested, and ensure timely communication and notification to DOE.

If able, on-train personnel will immediately notify the off-site EROs followed by the RAC Emergency Response Director (*Incident Commander*). The RAC Emergency Response Director will coordinate contractor emergency response support as requested by UP. Immediately following the incident, rail-loading activities will cease until UP develops a recovery plan (with RAC input as requested) and Project materials, including RRM, containers, and railcars, are recovered and placed in a safe area.

Transportation of RRM may also occur by truck. In the event of a truck incident, the truck carrier is responsible for RRM cleanup activities. If able, the driver will contact off-site EROs followed by contacting his or her supervisor or the RAC Emergency Response Director (*Incident Commander*).

If off-site emergency responders are not present on scene, the RAC Emergency Response Director (*Incident Commander*) will coordinate response actions, including directing RAC personnel to the site to isolate the affected area, decontaminate it, and remove any vehicles and equipment from the scene. RRM handling activities will cease until the RAC develops a restart plan, including an incident investigation with root cause analysis and corrective actions.

4.2.13 Rockfall or Landslide Incident on Moab Rail Bench

There is potential for rock and soil to slough off and slide or fall onto the rail bench; accordingly, measures are taken to protect the workers from this hazard. The hillside above the rail bench is monitored continuously by radar for movement, and a visual inspection of the area is performed daily, after major rain events, during freeze/thaw cycles in the winter and spring months, and after other activities that are likely to affect the stability of the hillside.

If a rockfall or other form of slope movement is detected before daily operations begin, the hillside is evaluated to determine if it is safe to work on all or only a portion of the rail bench area. When an event occurs during operations, work in the area is stopped immediately and personnel evacuate to a safe area. Safe evacuation areas may include behind the rockfall barrier wall, inside heavy equipment or vehicles, inside the concrete rockfall shelter, along the roadways exiting the rail bench, or other locations as the situation warrants. Workers identifying any hillslope movement event shall inform their supervisor as soon as safely possible, who in turn will notify the Operations/Site Manager.

The management team will then perform an accountability check of personnel working in the area of the event. Should rescue of injured or trapped workers be necessary, specialized rescue techniques appropriate for the hillside and scenario should be employed, and only after deeming the area safe for rescue activities. Responding off-site ERO's shall be made aware of the full conditions of the scene prior to initiation of any rescue attempts.

Following any event and the assurance that all personnel are accounted for and safe, the area where the slope movement occurred shall be evaluated to determine if it is safe to resume operations and what corrective actions are needed before work resumes.

4.2.14 Moab Utility Corridor Incident

A utility corridor runs along the northern boundary of the Moab site that contains underground high-pressure gas lines and overhead high-voltage electrical lines. Notification to the respective utility company shall be made when working in these areas (e.g., Blue Stakes of Utah).

Work in these areas must follow specific guidelines to avoid damaging or hitting these lines and creating a catastrophic event. If damage or contact has occurred with these lines, immediately STOP WORK, clear the area, and notify the respective utility company.

If an incident occurs in this area, an evacuation of the site may be necessary by means of alternative evacuation routes. An alternative evacuation route shall be established and site personnel notified of such route.

4.2.15 Special Actions at the Crescent Junction Site

Due to the remote location of the Crescent Junction site, special actions are required to optimize emergency response at this location. Aid to employees on the site is based on the nature of the injury; however, when in doubt, Project personnel will always contact emergency responders via 9-911 by site phone (or 911 by cell phones).

When calling 911, the caller may not reach the Moab dispatch call center, so the specific location of the site may need to be transmitted. If several calls or a follow-up call is necessary, the caller may reach a different call center.

The following information must be considered when additional information is transmitted concerning the incident.

- For a non-emergency, the Project team may transport an injured employee to the hospital via a site vehicle.
- For any emergency, contact 911. Provide the 911 call center with specific directions to the location, including distance to Thompson Springs (approximately 5 miles) and Moab (approximately 30 miles). Follow the medical emergency instructions in Appendix B, as appropriate.
- If the 911 call center determines that air transport is the best option, inform the center that the site has a marked helicopter pad as well as signaling devices to help the pilot identify other potential landing areas.

The Project will mark and maintain a designated area to land a helicopter at the eastern end of the loading area adjacent to the rail spur. The Project will not store any immobile equipment or materials, including material handling containers, in this area. In the event this is not the best location to land, the VS-17 signaling panel or lights may be used to direct the helicopter to a more suitable alternative.

4.3 Operational Emergencies

DOE sites/facilities must declare an Operational Emergency when incidents occur that represent a significant degradation in the level of safety at a site/facility and result in potential health and safety hazards to workers or the public.

Operational emergencies are major unplanned or abnormal events or conditions that involve or affect the DOE facilities and activities by causing or having the potential to cause serious health and safety or environmental impacts, require resources from outside the immediate/affected area or local event scene to supplement the initial response, and require time-urgent notifications to initiate response activities at locations beyond the event scene.

In general, to be considered an operational emergency, an event or condition involving the uncontrolled release of a hazardous material must:

- Immediately threaten or endanger personnel who are in close proximity of the event.
- Have the potential for dispersal beyond the immediate vicinity of the release in quantities that threaten the health and safety of on-site personnel or the public in collocated facilities, activities, and/or off site.
- Have a potential dispersal rate sufficient to require a time-urgent response to implement protective actions for workers and the public. Such emergencies represent, cause, or have the potential to cause the events or conditions described below.

Incidents that can be controlled by employees or maintenance personnel in the immediate/affected facility or area are not operational emergencies. Incidents that do not pose a significant hazard to safety, health, and/or the environment and that do not require a time-urgent response are not operational emergencies.

An operational emergency must be declared when events occur that represent a significant degradation in the level of safety at the site/facility and that require time-urgent response efforts from outside the site/facility. These events do not require classification such as alert, site area emergency, or general emergency. Based on the Project's Hazards Survey, site facilities do not have a radiological or non-radiological inventory that exceeds any screening criteria and do not have the potential for events or conditions that would be categorized as an alert, site area emergency, or general emergency.

Operational Emergencies must be categorized as promptly as possible, but no later than 15 minutes after identification by the predetermined decision-maker for the categorization and no more than 30 minutes from initial discovery.

Such events include the following categories.

1. **Health and Safety**. The following events or conditions represent, cause, or have the potential to cause serious health and safety impacts to workers or members of the public.
   a. The discovery of radioactive or other hazardous material contamination from past DOE operations that may have caused, is causing, or may reasonably be expected to cause uncontrolled personnel exposures exceeding protective action criteria.
   b. An off-site hazardous material event not associated with DOE operations that is observed to have or is predicted to have an impact on the site, such that protective actions are required for on-site workers.
   c. An occurrence (e.g., earthquake, tornado, aircraft crash, fire, explosion) that causes or can reasonably be expected to cause significant structural damage to DOE facilities, with confirmed or suspected personnel injury or death.
   d. Any facility evacuation in response to an actual occurrence that requires time-urgent response by specialist personnel, such as hazardous material responders or mutual aid groups not normally assigned to the affected facility.
   e. Any mass casualty event.
2. **Environment**. The following events or conditions represent, cause, or have the potential to cause serious detrimental effects on the environment.
   a. Any actual or potential release of hazardous material or regulated pollutant to the environment, in a quantity greater than five times the reportable quantity specified for such material in 40 CFR 302, "Designation, Reportable Quantities, and Notification," that could result in significant off-site consequences such as major wildlife kills, wetland degradation, aquifer contamination, or the need to secure downstream water supply intakes.
   b. Any release of more than 1,000 gallons (24 barrels) of oil into inland waters, more than 10,000 gallons (238 barrels) of oil to coastal waters, or a quantity of oil that could result in significant off-site consequences (e.g., need to relocate people, major wildlife kills, wetland degradation, aquifer contamination, need to secure downstream water supply intakes). Oil, as defined by Title 33 United States Code Chapter 1251 (33 USC 1251), Clean Water Act of 1977, means any kind of oil and includes petroleum.
3. **Security and Safeguards**. Security incidents are also subject to reporting in accordance with DOE O 470.4B Chg 2, "Safeguards and Security Program." In accordance with DOE O 470.4B Chg 2, foreign involvement in security incidents must be reported to the Office of Counterintelligence. The following events or conditions represent, cause, or have the potential to cause degradation of security or safeguard conditions with actual or potential direct harm to people or the environment.
   a. Actual unplanned detonation of an explosive device or a credible threat of detonation resulting from the location of a confirmed or suspicious explosive device.
   b. An actual terrorist attack or sabotage event involving a DOE site/facility or operation.
   c. Kidnapping or taking hostage(s) involving a DOE site/facility or operation.
4. **Off-site DOE Transportation Activities**. The following event or condition represents an actual or potential release of HAZMAT from a DOE shipment.
   a. Any accident/incident involving an off-site DOE shipment containing HAZMAT that causes the initial responders to initiate protective actions at locations beyond the immediate/affected area.

4.3.1 Re-entry

Re-entry is a planned activity to accomplish specific objectives set by the ERO conducted before the termination of emergency response, which involves re-entering a facility or affected area that has been evacuated or closed to personnel access during the course of the emergency. Re-entry activities are time-urgent actions performed during emergency response, such as search and rescue, mitigation, damage control, and accident assessment.

Planning and actual conduct of re-entry activities must consider that each emergency event is unique; therefore, the response structure for conducting re-entry activities must be flexible and capable of responding to a wide range of conditions. Once the decision has been made to perform a re-entry activity, planning for the re-entry activity should be performed by personnel responsible for managing the on-scene response.
These personnel should have direct access to the most current information, be familiar with the facility or event area, and have knowledge of the personnel and resource requirements of the task. The RAC Emergency Response Director (*Incident Commander*) must approve all re-entry activities.

4.3.2 Formal Termination

Formal termination of an operational emergency should be considered when local response authorities, such as the *Incident Commander* in charge of firefighting, rescue, or spill cleanup, determines that the response effort can be suspended or substantially scaled down.

The RAC Emergency Response Director (*Incident Commander*) is responsible for terminating the emergency phase, completing appropriate notifications, and entering the recovery phase when the following general criteria are met.

- The affected facility, site, or incident scene is in a stable condition, and there is a high probability that it can be maintained in that condition.
- Fire, flood, earthquake, or similar emergency conditions and/or security considerations no longer constitute an emergency hazard to critical systems/equipment or to personnel.
- Existing conditions no longer meet the established emergency categorization criteria, and it appears unlikely that conditions will deteriorate.
- All contaminated and/or injured personnel have been treated and/or transported to medical facilities.
- All initial emergency notifications have been completed.
- Accountability of personnel is completed.

4.3.3 Recovery

The purpose of the recovery effort is to return the affected facilities and areas to normal operations following the termination of an emergency response. Recovery is the period just before termination of the emergency until the facility is returned to operational status. Termination of the emergency initiates transitioning from the emergency phase to the recovery phase.

Once the decision has been made to enter the recovery phase, response personnel are informed of this transition. The RAC Emergency Response Director (*Incident Commander*) will assign an individual to serve as recovery manager with full authority to direct the recovery effort. Once the emergency has been terminated, responsibility for recovery and cleanup is transferred from the Emergency Response Manager to the recovery manager.

5.0 Event Notifications and Communication

The Emergency Response Coordinator (*Safety Officer*), RAC Emergency Response Director (*Incident Commander*), or their designees will report all emergencies to contractor management and DOE as described in the *Moab UMTRA Project Incident Reporting Procedure* (DOE-EM/GJ2136) and the *Moab UMTRA Project Occurrence Reporting Procedure* (DOE-EM/GJ2135).

5.1 Operational Emergencies

Initial notifications must be made promptly, accurately, and effectively to all appropriate stakeholders. Follow-up notifications must be made when conditions change and when the Operational Emergency is terminated.

The Project must perform the following actions.

Notifications

- Provide prompt emergency notifications to emergency response personnel and response organizations.
- Provide immediate notification and protective actions to affected employees no later than 10 minutes after the protective actions have been identified.
- Notify the Field Element or appropriate Federal Manager, Headquarters Watch Office, and state, local, and tribal organizations within 30 minutes of declaration or termination of an Operational Emergency. The Notification and Categorization Checklist in Appendix A helps make Watch Office notifications. The Categorization and Notification Coordinator or designee performs the Watch Office notification.
- Notify DOE Headquarters and EMCBC in accordance with the most current DOE Notification and Oversight Procedure. The DOE FCD Response Checklist in Appendix A helps make Headquarters and EMCBC notifications. The DOE FCD or designee performs HQ and EMCBC notifications.
- Report incidents involving transportation of RRM in compliance with the reporting requirements of DOE Manual 460.2-1A, “Radioactive Material Transportation Practices.”

Emergency notification to the Headquarters Watch Office must consist of a phone call providing as much information as is known at the time and be provided electronically with receipt confirmation. If information is unknown at the time of the report, specify so in reporting.

The initial notification must include:

- Description of the emergency.
- Date and time emergency was discovered or terminated.
- Damage and casualties.
- Protective actions implemented.
- Potential and actual impacts.
- Agencies involved.
- Level of public/media attention.
- Contact information.

Communications

- Provide continuing effective communications among response organizations throughout an emergency.
- Provide for communication methods among on-scene responders, emergency managers, and response facilities.
- Provide updates to Headquarters based upon the emergency conditions and/or as directed by Headquarters.
- Establish provisions to provide updates to workers during an emergency.
- Initiate communications checks on communications systems used for initial notification of the Headquarters Watch Office annually or more frequently as necessary for the communications system (e.g., communication system upgrades).
- Ensure communications among response facilities, field response elements, and off-site command centers by providing a common operating picture of the emergency response and shared situational awareness among all teams. This must be accomplished by enabling access to unclassified emergency response information, such as notification forms, emergency status updates, plume projections, significant events data, and field monitoring data.

5.2 Emergency Status Update Report

In accordance with Appendix D of DOE Guide 151.1-4, "Emergency Status Updates," an emergency status update report (also known as a situation report) shall be used to keep Headquarters and EMCBC updated on the progress of an operational emergency (see Appendix A).

These reports are completed by the RAC and submitted to Project DOE for concurrence. The emergency status updates should be used to supplement the initial notification as information becomes available. The following information should be considered. With the exception of item #8, all items should be included in the initial notification message.

1. Location (site/facility/building) of the event, name, organization, location, and telephone number of the caller.
2. Indication of whether event is still in progress.
3. Categorization and classification of emergency and time of declaration.
4. Brief description, date, time of the event, and time zone.
5. Injuries or casualties involved.
6. Status of the affected facility/site/activity.
7. Status of other facilities/operations/activities on the site.
8. Type of actual/projected release and duration (source term or release characterization.)
    a. Release in progress (Yes/No).
    b. Actual or projected doses or dose rates that exceed protective action criteria at a critical location (e.g., site boundary, municipal jurisdiction, school, hospital, reservoir) relative to the organization receiving the notification.
9. Recommended protective actions with timing considerations, where applicable.
10. Notifications made.
11. Meteorological conditions, including wind speed, wind direction, stability class, and precipitation.
12. Level of any media interest at the scene of the emergency or at the facility/site.
13. Contact information of the DOE or National Nuclear Security Administration point-of-contact.

To document reports, the reporting organization should record the organizations notified and the names and positions of the persons contacted.

6.0 Post-emergency Response Incident Investigation

6.1 HAZWOPER Post-emergency Response Operations

Upon completion of the emergency response, if it is determined that it is necessary to remove hazardous substances, health hazards, and materials contaminated with them (such as contaminated soil or other elements of the natural environment) from the site of the incident, the Project shall ensure personnel conducting the cleanup comply with the *Health and Safety Plan*.

6.2 Post-emergency Critique

A post-emergency critique is conducted by the RAC Emergency Response Director (*Incident Commander*) as soon as practicable following stabilization of the emergency condition.

If classification of the emergency or results of the critique indicate more extensive investigation is required, the Project Manager, Senior Program Manager, or the Acting Deputy FPD will initiate the investigation.

6.3 Corrective Action and Causal Analysis

The post-emergency investigation should include an evaluation to determine the need for causal analysis and development of corrective actions to prevent recurrence. Determination of the cause(s) of events, issues, and conditions adverse to quality and corrective actions that, if implemented, will prevent or minimize the likelihood of recurrence of the event, issue, or condition shall be determined in accordance with the *Moab UMTRA Project Cause Analysis Procedure* (DOE-EM/GJ1663) and RAC and TAC corrective action procedures: the *Moab UMTRA Project Condition Reports Procedure* (DOE-EM/GJRAC1671) and the *Moab UMTRA Project Corrective Action Procedure* (DOE-EM/GJTAC1562).

6.4 Lessons Learned

Lessons learned from the emergency are documented and distributed to appropriate Project personnel, incorporated into Project personnel training, and used to amend this Plan and institute corrective measures and procedures in an effort to prevent a similar emergency condition in the future. In addition, the lessons learned are incorporated in the Project Operating Experience/Lessons Learned Program. The *Moab UMTRA Project Operating Experience/Lessons Learned Procedure* (DOE-EM/GJ1568) describes the process for implementing and managing the Operating Experience/Lessons Learned Program in accordance with the requirements of DOE O 210.2A, "DOE Corporate Operating Experience Program."

Records

All documentation created as a result of compliance with this Plan is considered a Project record and will be managed in accordance with the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545), which follows DOE orders, policies, and regulations for retention and maintenance of records.

This Plan shall be available in writing for inspection and copying by employees, their representatives, Occupational Safety and Health Administration personnel, and other governmental agencies with relevant responsibilities (in accordance with 29 CFR 1910.120).

7.0 References

29 CFR 1910 (Code of Federal Regulations), Subpart K, "Occupational Safety and Health Standards, Medical and First Aid."

29 CFR 1910.120 (Code of Federal Regulations), Subpart H, "Occupational Safety and Health Standards, Hazardous Materials, Hazardous waste operations and emergency response."

29 CFR 1910.151 (Code of Federal Regulations), "Occupational Safety and Health Standards, Employee alarm systems."

29 CFR 1910.165 (Code of Federal Regulations), "Occupational Safety and Health Standards, Employee alarm systems."

40 CFR 302 (Code of Federal Regulations), "Designation, Reportable Quantities, and Notification."

5 USC 552 (United States Code), The Freedom of Information Act.

5 USC 552a (United States Code), The Privacy Act.

33 USC 1251 (United States Code), The Clean Water Act.

44 USC 31 (United States Code), The Federal Records Act of 1950.

DOE (U.S. Department of Energy) Guide 151.1-4, "Response Elements, Emergency Management Guide."

DOE (U.S. Department of Energy) Manual 460.2-1A, "Radioactive Material Transportation Practices."

DOE (U.S. Department of Energy), *Moab UMTRA Project Cause Analysis Procedure* (DOE-EM/GJ1663).

DOE (U.S. Department of Energy), *Moab UMTRA Project Condition Reports Procedure* (DOE-EM/GJRAC1671).

DOE (U.S. Department of Energy), *Moab UMTRA Project Corrective Action Procedure* (DOE-EM/GJTAC1562).

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency/Incident Response Key Personnel/Agencies and Contact Information* (DOE-EM/GJ1757).

DOE (U.S. Department of Energy), *Moab UMTRA Project Flood Mitigation Plan* (DOE-EM/GJ1640).

DOE (U.S. Department of Energy), *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038).

DOE (U.S. Department of Energy), *Moab UMTRA Project H&S Suspected Hazardous Residual Radioactive Material Response Procedure* (DOE-EM/GJRAC2160).

DOE (U.S. Department of Energy), *Moab UMTRA Project Operating Experience/Lessons Learned Procedure* (DOE-EM/GJ1568).

DOE (U.S. Department of Energy), *Moab UMTRA Project Radar Alarm Notification List* (DOE-EM/GJ2166).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Disaster Prevention, Mitigation, and Recovery Plan* (DOE-EM/GJ1524).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

DOE (U.S. Department of Energy), *Moab UMTRA Project Site Security Plan* (DOE EM/GJ1532).

DOE (U.S. Department of Energy), *Moab UMTRA Project Spill Prevention, Control, and Countermeasure Plan* (DOE-EM/GJRAC1477).

DOE (U.S. Department of Energy), *Moab UMTRA Project Transportation Plan* (DOE EM/GJ1639).

DOE (U.S. Department of Energy) Order 151.D, "Comprehensive Emergency Management System."

DOE (U.S. Department of Energy) Order 210.2A, "DOE Corporate Operating Experience Program."

DOE (U.S. Department of Energy) Order 440.1B Chg 2, "Worker Protection Management for DOE (Including the National Nuclear Administration) Federal Employees."

DOE (U.S. Department of Energy) Order 470.4B Chg 2,"Safeguards and Security Program."

Appendix A.
Incident Command System Procedure

Appendix A. Incident Command System Procedure

1.0 Introduction

1.1 Purpose

This procedure provides tactical guidelines for ERO personnel who implement the Incident command System (ICS) on the Project sites. This procedure also defines management roles and responsibilities and direction of emergency incident operations, and ensuring the safety and health of personnel and other persons involved in those activities.

1.2 Scope

The ERT fulfills the designated responsibilities for the ERT in the *Health and Safety Plan*.

Guidelines in this procedure should be used for determining an ICS on the scene, which is designed to offer a practical framework for field operations, effectively integrating the efforts of all members, officers, companies, and other assisting groups, to mitigate emergencies at the Moab and Crescent Junction sites that fall under the mutual aid agreements.

The positions discussed in this procedure will be established based upon the needs of the incident or event. Generally, small events require small incident management systems; large or complex events require a more robust incident management system. The system used should be the size necessary to protect life, stabilize the incident or event, and protect property.

The following groups/positions are part of the ICS structure and are responsible for activities identified in this procedure.

- First-arriving Fire Department Officer or Security Police Officer
- *Incident Commander*
- *Safety Officer*
- *Liaison Officer*
- Categorization and Notification Coordinator

2.0 Performance

2.1 Establish Command

2.1.1 First Arriving Responder

The First Arriving Responder performs the following actions.

- Evaluates personal safety.
- Reports the condition.
- Serves as the *Incident Commander*.

2.1.2 *Incident Commander*

The *Incident Commander* performs the following actions:

- Names and announces establishment of command.
- Establishes an effective operating position (i.e., establish an uphill, upwind, command post).
- Conducts size-up (evaluate the situation).
- Identifies the overall strategy, select tactics, develops an Incident Action Plan (IAP), and assigns resources consistent with the IAP.
- Considers documenting the IAP on status boards and ICS forms.
- Develops an effective incident management organization according to requirements of the incident.
- Maintains an orderly transfer of command to subsequent arriving officers.

2.2 Command Role

2.2.1 *Incident Commander*

The *Incident Commander* performs the following actions to establish command:

- Ensures a strong, direct, and visible command is established from the onset by the first on-scene unit.
- Establishes an effective management organization among individuals operating within the ICS.
- Ensures a system is in place to process information, support incident management, planning, and decision making.
- Serves as the focal point for all on-scene determinations at a strategic level.
- Determines if the event requires additional resources and/or mutual aid agencies.
- Establishes priorities and assigns resources to meet the demands of the incident by:
- Determining strategy.
- Establishing objectives.
- Setting priorities.
- Developing an IAP
- Supervising personnel and maintaining span of control.
- Obtaining and/or assigning resources.
- Predicting the outcome and planning for future events.
- Assigning objectives to tactical level units.
- Determines if operations will be offensive or defensive.
    - Develops an IAP using the strategic priorities of life safety, incident stabilization, and property conservation for incident management.
    - Directs scene mitigation efforts accordingly.
- As they are established, communicates with on-scene responders, managers, or sections.
- Establishes an Incident Command post.
- If urgent life-saving re-entry is required, and responders/emergency workers could potentially receive dose limits greater than 25 rem to the whole body, then the *Incident Commander* approves the re-entry after consultation from Radiological Control or the EOC Safety/Health Physics (radiological/criticality incidents) if the EOC is operational and with concurrence from the EOC Crisis Manager, if available.

  - For life-saving re-entry, the EOC will be briefed before or after entry/re-entry is made, based on time urgency for life safety.
  - For non-life-saving re-entry, the EOC Crisis Manager will be briefed on the re-entry plan prior to entering the hazard area.
- As the incident is controlled, releases units, downgrades operations, and/or terminates the incident.

The *Incident Commander* makes use of the following items to improve or facilitate the Incident Command function.
- Command vests
- ICS forms and checklists to record and track on-scene resources

The *Incident Commander* attaches any ICS forms and/or checklists being used to the incident report for record-keeping purposes.

2.3 Transfer and Termination of Command

Transfer of command includes:
- Situation status.
- Resources committed and/or responding to the incident.
- Explanation of current ICS structure and assignments.
- Assessment of the current effect of tactical operations.
- Review of the IAP, including strategic and tactical goals and objectives.
- Notification to responders and the EOC regarding change in command.

2.3.1 *Incident Commander*

The *Incident Commander* performs the following actions.
- Transfers command (passed or assumed) to an officer arriving later.
  - Transfers command should occur face-to-face, if possible, to ensure effective communication and feedback.
  - Command transfers may occur by radio, if a face-to-face encounter is not possible.
- Terminates command when the incident is controlled, and no further action is being taken.

2.4 Command Section, Functions, and Roles

NOTE: The following are NIMS guidelines for common terminology and functions. Each incident is different and may require the use of a small portion of the NIMS or the entire concept. This procedure provides an array of major functions that may be selectively implemented according to the needs of the situation.

2.4.1 *Incident Commander*

The *Incident Commander* performs the following actions.
- Builds a command structure matching the organizational needs of the incident, achieving the strategic goals and tactical objectives.

- Assesses incident priorities in the following order:
  - Life safety issues for firefighters, other emergency workers, occupants, and bystanders.
  - Incident stabilization strategy minimizing impact to the Project and the surrounding area.
  - Property conservation to achieve the above-stated goals and objectives at an incident while minimizing property damage or loss.

2.4.2 *Safety Officer*

The *Safety Officer* performs the following actions.

- Reports to all incidents involving any risk to personnel
- Is established at all incidents involving high risk to personnel, such as:
  - Working structure fires.
  - HAZMAT operations.
  - Technical rescue, including confined spaces.
  - Extrication events (vehicle and/or machinery).
- Reports to the Incident Commander.
- Uses the Safety Officer Checklist for guidance to address safety hazards at the incident. At the end of the event, provides the completed checklist to the Incident Commander.
- Monitors and assesses hazardous and/or unsafe situations or practices and develops responder safety measures.
- Exercises emergency authority to stop or prevent unsafe operations when immediate action is necessary.
- Notifies the Incident Commander when emergency authority is used to stop or prevent unsafe operations.
- Ensures adequate rehabilitation provisions are available, and the Rehabilitation Manager provides appropriate medical screenings before returning personnel to incident operations.
- Is responsible for functions related to personnel and on-scene safety.

2.4.3 *Liaison Officer*

The *Liaison Officer* performs the following actions.

- Acts as a point of contact for representatives from other assisting and cooperating departments and agencies.
- Uses the *Liaison Officer* Checklist to identity liaison actions for the incident.
- Provides the completed checklist to the *Incident Commander* at the end of the event.

2.4.4 Categorization and Notification Coordinator

Categorization and External Notification Personnel perform the following actions.

- Coordinate with the ERO and gather information regarding the emergency.
- Promptly determining whether the event is an Operational Emergency.
- If determined to be an Operational Emergency, make prompt notifications to the DOE Watch Office via telephone and email or fax.
- Coordinates with the *Incident Commander* and DOE *Incident Command Liaison* regarding categorization and notification.
- Further categorizes the event in accordance with DOE O 232.2A, “Occurrence Reporting and Processing of Operations Information.”

NOTE: Complex emergency situations may exceed the capability of one officer to effectively manage the entire operation. In these cases, it may be necessary to divide the responsibilities of an incident among additional operational or functional areas. Delegating these responsibilities through the use of branches, divisions, and groups reduces the span of control of the *Incident Commander* into more manageable units, allowing him or her to communicate with assigned principal individuals rather than individual crews. Supplemental positions in these complex situations will be provided by off-site response organizations.

3.0 Department of Energy and Support Staff Responsibilities

3.1 Emergency Public Information Responsibilities

If the news media or public make inquiries regarding the incident, the *Incident Commander* requests support from the TAC Public Affairs Manager.

The Public Affairs Manager performs the following actions.

- Coordinates with the ERO and gathers information regarding the emergency.
- Collaborates with any external agency PIOs that have been assigned to the ICP.
- Shares information with the DOE PIO and determines the need for a press release.
- When applicable, drafts a press release and seeks approval from DOE Headquarters and the EMCBC.
- Contacts local, state and federal agencies as needed.
- Works with the *Incident Commander* to determine a media staging area, when required.
- Develops anticipated questions and responses for the public.
- Assists the DOE PIO.
- Monitors the local media and social media to correct erroneous information.

3.2 DOE FCD (*Public Information Officer*)

The DOE FCD/PIO performs the following actions.

- Coordinates with the DOE *Incident Command Liaison* regarding the emergency.
- Provides notification of the event to EMCBC and Headquarters per the DOE Notification and Oversight Procedure.
- Coordinates with the Public Affairs Manager regarding media inquiries or press releases.
- Reviews and approves all press releases prepared by the TAC Public Affairs Manager.
- Coordinates all press releases with DOE Headquarters and EMCBC prior to issuance.

3.3 DOE *Incident Command Liaison* Responsibilities

The DOE *Incident Command Liaison* performs the following actions.

- Coordinates with the ERO and gathers information regarding the emergency.
- Updates the DOE FCD on the status of the emergency and provides details to assist the FCD in the notification and reporting process.
- Reviews contractor occurrence reporting criteria and categorization of Operational Emergencies.

4.0 Records

All documentation created as a result of compliance with this procedure is considered a Project record and will be managed in accordance with the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545), which follows DOE orders, policies, and regulations for retention and maintenance of records.

Documentation includes, but is not limited to, the checklists and forms identified in Section 5.0, Position Specific Checklist and Forms.

5.0 Sources and References

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency Management Plan* (DOE-EM/GJ1520).

DOE (U.S. Department of Energy), *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

DOE (U.S. Department of Energy) Order 151.1D, "Comprehensive Emergency Management System."

DOE (U.S. Department of Energy) Order 232.2A, "Occurrence Reporting and Processing of Operations Information."

EPA (U.S. Environmental Protection Agency), Hazardous Waste Facility Permit NM4890139088-TSDF.

Homeland Security Presidential Directive, Directive 5.

NFPA (National Fire Protection Agency) Standard 1500, "Standard on Fire Department Occupational Safety and Health Program."

NFPA (National Fire Protection Agency) Standard 1561, "Standard on Emergency Services Incident Management System and Command Safety."

NIMS (National Incident Management System), "Five-Year Training Plan."

6.0 Position-specific Checklists and Forms

Position specific checklists and forms, identified below and attached, have been developed to help maintain consistent and successful implementation of the ICS. Checklists include:

- *Incident Commander* Checklist
- *Liaison Officer* Checklist
- *Safety Officer* Checklist
- Public Affairs Manager Checklist
- Categorization and External Notification Checklist
- DOE Federal Cleanup Director/*Public Information Officer* Response Checklist
- DOE *Incident Command Liaison* Response Checklist
- Emergency/Incident Response Checklist
- Bomb Threat Checklist
- Radiological Incident Response Checklist

Forms include:

- DOE Emergency Notification Form
- DOE Emergency Status Update Form

ICS Forms (Not attached; available at fema.gov)

- Form 201 Incident Briefing
- Form 202 Incident Objectives
- Form 203 Org Assignment List
- Form 204 Assignment List
- Form 205 Radio Comm Plan
- Form 206 Medical Plan
- Form 207 Incident Org Chart
- Form 208 Safety/Message/Plan
- Form 209 Incident Status Summary
- Form 210 Status Change
- Form 211 Incident Check-In List
- Form 213 General Message
- Form 214 Activity Log
- Form 215 Operational Planning Worksheet
- Form 218 Support Vehicle Equipment Inventory
- Form 219 Cards
- Form 220 Air Operations Summary
- Form 221 Demobilization Check Out

Appendix A. Incident Command System Procedure – Checklists and Forms

Incident Commander Checklist

INCIDENT COMMANDER CHECKLIST

Incident Name:	Incident Date(s):

A.	INITIAL RESPONSE ACTIONS
☐	1. **ESTABLISH** or assume command.
☐	2. **ESTABLISH** a command post.
☐	3. **PERFORM** a size-up of the following. ☐ **DOCUMENT** the weather conditions: ☐ Wind direction: ☐ Wind speed: _____ ☐ Temperature: _____ ☐ **CHECK** the type(s) of emergency: ☐ Emergency Medical Services ☐ Fire ☐ Hazardous Materials ☐ Rescue
☐	4. ☐ **DESCRIBE** the following. ☐ Location of the scene: ☐ Time of incident: _____ ☐ Victim Status: ☐ Number of injured/missing persons _____ ☐ Types of injuries ☐ **OBTAIN** information from EMS Officer. ☐ Fire Status: ☐ Type of fire: _____ ☐ Size of fire: _____ ☐ Hazards associated with the fire: ☐ Electrical ☐ Radiological ☐ Other: _____ ☐ Status of response: ☐ On-scene, initial: ☐ Number of stories: ☐ Type of occupancy: ☐ **CHECK** the obvious conditions at the location: ☐ Nothing Showing ☐ Fire Showing ☐ Fully Involved ☐ Write a brief description of the action taken (e.g., laying a supply line to the north, going in with a handline for search and rescue and fire attack). ☐ Construction/structural stability

Rev. 0

May 30, 2018 Page 1 of 3

ISSUED

INCIDENT COMMANDER CHECKLIST

☐ 5. **DEVELOP** an action plan. (Strategic Goals and Tactical Objectives)

Goals: _____

_____

_____

_____

_____

Objectives: _____

_____

_____

_____

_____

☐ **DECLARE** the strategy. (Offensive or Defensive Posture)

☐ Offensive – see action plan below:

_____

_____

_____

_____

☐ Defensive – Get help, stage it, assign staging officer, implement tactics, exterior attack, account for everyone

☐ **ESTABLISH** the Rapid Intervention Team.

☐ Any obvious safety concerns (downed wires, exposures, access obstacles, etc.)

☐ Rescue

☐ Exposure

☐ Confinement (ventilation and salvage, as needed)

☐ Extinguishment

☐ Overhaul

☐ Additional resources needed:

☐ Radiological Control ☐ Industrial Hygiene ☐ Hazardous Materials ☐ Protective Force

☐ Mutual Aid ☐ Other:

B. INCIDENT MANAGEMENT

☐ 6. **ESTABLISH** scene security.

☐ Setup security perimeter (Protective Force).

☐ 7. **ESTABLISH** collapse zones.

☐ If applicable, establish a Safety Officer.

Rev. 0

May 30, 2018 Page 2 of 3

Incident Commander Checklist *(continued)*

ISSUED

INCIDENT COMMANDER CHECKLIST

☐	8.	**ENSURE** protection of firefighters and others.
☐	9.	Continual Size-up ☐ Built-in fire protection (sprinklers, standpipes, etc.) ☐ Access, arrangement, and distance of external exposures
☐	10.	**START** the delegation of position assignments (Water Supply, Ventilation, Exposures, etc.)
☐	11.	**MAINTAIN** initial personnel accountability. ☐ If a Safety Officer has been established, transfer accountability.
☐	12.	**ESTABLISH** a staging area (If necessary, establish Staging Area Manager) ☐ If applicable, establish a Staging Area Manager.
☐	13.	**ACTIVATE** the appropriate Command and General Staff positions. ☐ Confirm dispatch and arrival times of activated resources. ☐ Confirm work assignments.
☐	14.	**BRIEF** staff: ☐ Identify incident goals, objectives, and any policy directives for the management of the incident. ☐ Provide a summary of current organization. ☐ Provide a review of current incident activities. ☐ Transfer accountability to the Safety Officer (when established).
☐	15.	**ENSURE** Command and General Staff coordination: ☐ Periodically check progress on the assigned tasks of Command and General Staff personnel. ☐ Approve necessary changes to strategic goals and Incident Action Plan. ☐ Ensure that the Liaison Officer is making periodic contact with participating agencies.
☐	16.	**OBTAIN** personnel accountability reports (from the Safety Officer).
C.		**TERMINATION AND RECOVERY**
☐	17.	Cleanup activities (property conservation)
☐	18.	Debrief on the incident: ☐ Health information ☐ Equipment and apparatus return to service ☐ Critical Incident Stress Debriefing (CISD), as necessary

Sign in the below box and retain the signed, completed form.

Signature Required		
NAME (PRINT)	SIGNATURE	DATE

Rev. 0

May 30, 2018 Page 3 of 3

LIAISON OFFICER CHECKLIST

Incident Name:	Incident Date(s):

A.	**INITIAL RESPONSE ACTIONS**	
☐	1.	**OBTAIN** a briefing from the Incident Commander (IC). ☐ **OBTAIN** a summary of the incident organization. ☐ **DETERMINE** the companies/agencies/non-governmental organizations already involved in the incident, and whether they are assisting (have tactical equipment and/or personnel assigned to the organization), or cooperating (operating in a support mode "outside" the organization).
☐	2.	**OBTAIN** cooperating and assisting agency information, including: ☐ Contact person(s) ☐ Radio frequencies ☐ Phone numbers ☐ Resource type(s) ☐ Number of personnel ☐ Condition of personnel and equipment ☐ Agency constraints/limitations
B.	**INCIDENT MANAGEMENT**	
☐	3.	**CONTACT** and brief the assisting/cooperating agency representatives and mutual aid cooperators. ☐ Bring complaints pertaining to logistical problems, inadequate communications, and strategic direction to the attention of the IC.
☐	4.	**WORK** with the Public Information Officer and IC to provide accurate information for media releases associated with inter-governmental cooperation issues.
☐	5.	**MONITOR** incident operations to identify potential inter-organizational problems. ☐ Keep Command appraised of such issues including complaints pertaining to logistical problems, inadequate communications, and strategic direction to the attention of the IC.

Sign in the below box and provide the signed, completed form to the IC.

Signature Required		
NAME (PRINT)	SIGNATURE	DATE

Rev. 0

May 30, 2018 Page 1 of 1

SAFETY OFFICER CHECKLIST

Incident Name:	Incident Date(s):

A.	**INITIAL RESPONSE ACTIONS**	
☐	1.	**OBTAIN** a briefing from the Incident Commander (IC).
☐	2.	**IMPLEMENT** or **ASSUME** responsibility for the personnel accountability system.
☐	3.	**PERFORM** the following to ensure scene safety: ☐ Monitor/assess imminent hazards. ☐ Confirm/establish a Rapid Intervention Team. ☐ Establish collapse zones, if applicable. ☐ Establish a safety perimeter.
B.	**INCIDENT MANAGEMENT**	
☐	4.	**NOTIFY** the IC of any bypassed IC commands (if necessary).
☐	5.	**PROVIDE** the Site Safety Plan (and other safety) briefings for incoming resources including: ☐ Incident conditions ☐ Condition of the structure (ongoing) ☐ Established Sections, Branches, and Groups ☐ Protective clothing requirements ☐ Unsafe conditions (downed wired, leaks, weather conditions, etc.) ☐ Control of utilities ☐ Available emergency medical care and its location ☐ Rehabilitation Area (if established)
☐	6.	For **hazardous materials incidents**, **PERFORM** the following: ☐ Determine if Hot, Warm, and Cold Zones are appropriate for the hazard(s). ☐ Determine, establish, and/or confirm that appropriate personal protective equipment requirements are in place. ☐ Determine, establish, and/or confirm that appropriate decontamination processes are in place. ☐ Determine, establish, and/or confirm that atmospheric and/or radiological monitoring requirements are appropriate for the hazard(s). ☐ Arrange for habitability surveys (Rad/O2/Flammable/Toxics) of Incident Command System facilities (Incident Command Post, Rehabilitation Area, Staging Area, etc.).
☐	7.	If needed, request the establishment of a Rehabilitation Area.
☐	8.	Request Personnel Accountability Reports (PARs).
☐	9.	Ensure the proper, safe use of equipment.

Sign in the below box and provide the signed, completed form to the IC.

Signature Required		
NAME (PRINT)	SIGNATURE	DATE

Rev. 0

May 30,2018 Page 1 of 1

Public Affairs Manager Checklist

UMTRA Project

Public Affairs Manager Checklist

Incident Name:	Incident Date(s):

INITIAL RESPONSE ACTIONS

Incident command POC makes notification to Public Affairs Manager with incident command briefing

☐	Gather information relative to the emergency.
☐	Determine what other agency PIOs are on site (off-site response PIO)
☐	Coordinate with FCD
☐	Draft press release
☐	Send draft press release to FCD
☐	Send approved draft press release to EM-3 External Affairs and EMCBC
☐	Contact Grand County per protocol
☐	Craft anticipated questions and responses for public
☐	Contact state and federal agencies as needed
☐	Log media contacts and questions not on the list
☐	Determine media staging area and communicate that with media
☐	Assist FCD as necessary

Completed By: _____ _____

Print Name/Signature Date

Form 1403
Rev 0 June 2018

File Code Index No.:
Page 1 of 1

Categorization and External Notification Checklist

UMTRA Project

Categorization and External Notification Checklist

INITIAL RESPONSE ACTIONS

- ☐ **Report** to the Incident Command.
- ☐ **Obtain** a briefing from Incident Command (IC) staff.
- ☐ **Gather** event information from IC to support categorization.
- ☐ **Determine** if the event is an Operational Emergency as defined by DOE O 151.D.

INCIDENT MANAGEMENT

Operational Emergencies Only:

☐ **Notify** (phone call) the DOE Headquarters Watch Office as promptly as possible but **no more than 30 minutes** from initial discovery of an Operational Emergency. The Watch Office can be reached @

Phone: (202) 586-8100

Initial Notification must include the following

- Description of the emergency;
- Date and time the emergency was discovered or terminated;
- Damage and casualties;
- Protective actions implemented;
- Potential and actual impacts;
- Agencies involved;
- Level of public/media attention; and
- Contact information of the DOE on-scene point of contact.

☐ **Provide** the same information by email or a fax wither immediately prior to or following the phone call. The Emergency Notification Form (Attachment 4 of the EIRP) may be used for this Initial Notification as wall a Status Updates and Termination Notifications.

Fax: (202) 586-8485
Email: DOEHQEOC@oem.doe.gov

☐ **Complete** and forward Emergency Status Update Notification(s) to the Watch Office on a continuing basis until the emergency is terminated.

Form xxxx
Rev 0 June 2018

File Code Index No.:
Page 1 of 3

UMTRA Project

Categorization and External Notification Checklist

For all Emergencies

- ☐ In addition to Operational Emergency Categorization, **categorize** the event in accordance with DOEO232.2A, *Occurrence Reporting and Processing of Operations Information*, including the Environmental Management Contractor Requirements Document (Supplemented DOE O 232.2A). Follow the OPRS notification process (Note: 2 hour Notification Requirement for High and Low ORPS). Note: This step may be performed concurrently during the Operational Emergency Categorization process.

TERMINATION

- ☐ **Complete** and **forward** the Termination Notification to the Watch Office upon emergency termination.

Form xxxx
Rev 0 June 2018

File Code Index No.:
Page 2 of 3

UMTRA Project

Categorization and External Notification Checklist

Attachment
DOE O 151.1D Operational Emergencies

(Hazardous Biological Agent or Toxins and Criticality Events have been removed due to inapplicability)

(1) Health and Safety. The following incidents or conditions represent, cause, or have the potential to cause serious health and safety impacts to workers or members of the public.

(a) The discovery of radioactive or other hazardous material contamination from past DOE operations that may have caused, is causing, or may reasonably be expected to cause uncontrolled personnel exposures exceeding protective action criteria (PAC).

(b) An occurrence (e.g. earthquake, tornado, aircraft crash, fire, explosion, or incidents in table 3-1) that causes significant structural damage to DOE facilities, with confirmed or suspected personnel injury or death.

(c) Any mass casualty incident, as determined and documented by the site.

(d) An offsite hazardous material incident not associated with DOE operations that is observed to have, or is predicted to have, an impact onsite such that protective actions are required for DOE workers.

(2) Environment. The following incidents or conditions represent, cause, or have the potential to cause serious detrimental effects on the environment:
Any actual or potential release of hazardous material or regulated pollutant to the environment that could result in significant offsite consequences, such as major wildlife kills, wetland degradation, aquifer contamination, or the need to secure downstream water supply intakes.

(3) Offsite DOE Transportation Activities. The following incidents or conditions represent an actual or potential release of hazardous materials from a DOE shipment: Any accident/incident involving an offsite DOE shipment containing hazardous materials that causes the initial responders to initiate protective actions at locations beyond the immediate/affected area.

(5) Safeguards and Security. Security incidents are also subject to reporting in accordance with DOE O 470.4B, Administrative Change 1, Safeguards and Security Program or other directives as applicable. Per this Order, foreign involvement in security incidents must be reported to the Counterintelligence Directorate within the Office of Intelligence and Counterintelligence. The following incidents or conditions represent, cause, or have the potential to cause degradation of security or safeguards conditions with actual or potential direct harm to people or the environment. Security and Safeguard Operational Emergencies include:

(a) Unplanned detonation of an explosive device or a credible threat of detonation resulting from the location of a confirmed or suspected explosive device.

(b) An actual terrorist attack, active threat (e.g., armed assault), cyber security incident that impacts critical infrastructure, or sabotage incident involving a DOE site/facility/activity.

(c) Kidnapping or taking hostage(s) involving a DOE site/facility/activity.

Emergency/Incident Response Checklist

UMTRA Project

DOE FEDERAL CLEANUP DIRECTOR RESPONSE CHECKLIST

Incident Name:	Incident Date(s):

A.	INITIAL RESPONSE ACTIONS
☐	OBTAIN a briefing from Incident Command (IC) staff or Cognizant Contractor Management.
☐	When applicable, assign the DOE Primary or Alternate IC Liaison to report to the IC.
☐	Request a briefing from the DOE POC.
☐	Gather the following event Information from the IC, Contractor Management or DOE IC Liaison

- Time of Incident Command Activation: _____
- Emergency Classification ___Non-Operational Emergency ___Operational Emergency
- DOE Watch Office Notified ___Yes ___No
- Facilities/Areas Involved: _____
- Immediate Actions to safely secure the facility: _____
- On-Site Impacts: _____
- Responding Agencies: _____
- Employee Status (e.g., injuries, accountability): _____
- #Employees Affected: _____
- Employees paid for Stand-down: _____
- Off-Site Impacts (e.g., Public and Environment): _____
- Contractor Made Notifications: _____
- Mitigating Actions: _____
- Additional Resources Required: _____
- Expected duration of the stand-down: _____

B. INCIDENT MANAGEMENT

Notify DOE HQ and EMCBC in accordance with DOE Notification and Oversight Procedure

IMMEDIATE NOTIFICATION: Call within 30 minutes of occurrence of any:

- **Fatality, either work-related of not** (Please follow-up with an explanatory email to the points-of-contact listed).
- **Activation of an Emergency Operations Center at ALERT Level or higher** (Please follow-up with an explanatory email to the points-of-contact listed).
- **Security Incident** comprising actions, inactions, or events that pose the most serious threats to national security interests and/or critical DOE assets, create serious security situations, or could result in deaths in the workforce or general public (Please follow-up with an explanatory email to the points-of-contact listed).
- **Offsite transportation incident or accident** that results in, or has the potential to result in, harm to the environment or the public (Please follow-up with an explanatory email to the points-of-contact listed).

PROMPT NOTIFICATION: Call within two hours of occurrence of any:

- Situation that you believe warrants prompt EM/HQ notification.
- Serious injury or illness requiring emergency offsite medical treatment (including heat stress, stroke, or heart attack).
- Fire having the potential to affect EM operations or facilities
- Loss of control or any compromise of classified material, nuclear material or personal identification information.
- Categorization of any Significant Category (H) ORPS event.
- Work stand-down initiated by site or HQ management

Form xxxx
Rev 0 June 2018

File Code Index No.:
Page 1 of 3

UMTRA Project

DOE FEDERAL CLEANUP DIRECTOR RESPONSE CHECKLIST

ROUTINE NOTIFICATION: Send an email to the points-of-contact listed within 24 hours of the occurrence of any:

- Identification of a Potential Inadequacy in the Safety Analysis (PISA-if subsequent Unreviewed Safety Question Determination is positive, report in a separate 24 hour notification);
- Near miss;
- Violation of hazardous energy controls;
- Personnel exposure to ionizing radiation above administrative control levels without prior authorization;
- Incident which might result in a confirmed radiological skin or internal contamination of a worker;
- Release to the environment above legal limits; and
- Violation or non-compliance with a Technical Safety Requirement, Justification for Continued Operations compensatory measure, Operational Restriction initiated for a PISA, or Criticality Safety Evaluation control.

Send a follow-up email to the HQ and EMCBC POCS.

NOTE: follow-up email shall include:

- The reason for the stand-down;
- Immediate actions to safely secure the facility;
- The expected duration of the stand-down; and
- The number of contractor employees who may be affected, and if they are being paid during the stand-down

Notification Points-of-Contact:

No.	Contact	Office Number	Cell Number
1.	James Hutton	(202) 586-0975	(301) 830-3288
2.	Gregory Sosson	(202) 586-4505	(240) 474-2918
3.	Terrance Tracy	(301) 903-7964	(202) 657-7106
4.	Robert Murray	(202) 586-7267	(301) 602-0453
5.	Jimmy McMillian (Security and Emergency Preparedness)	(301) 903-5498	(301) 356-2454
6.	Joanne Lorence (Transportation)	(202) 586-2433	(202) 302-1588

Notification Points-of-Contact:

No.	Contact	Office Number	Cell Number
1.	Kash Grimes	(513) 246-1050	(513) 817-5798
2.	Ken Armstrong	(513) 246-1375	(513) 316-1078
3.	John Rampe	(513) 246-1365	(303) 994-3916
4.	John Sattler	(513) 246-0603	(513) 200-9677
5.	Bob Everson	(513) 246-0501	(513) 310-6395
6.	Mike Kopp	(513-246-0485	(513) 519-6919

Make notifications in accordance with message from Acting EM-1 Jim Owendoff -- Protocol for Preliminary Notification of Declared Emergencies/Significant Occurrences via the DOE/EM leadership distribution list:
DL-EMDOEandEMLeadershipEarlyNotification@em.doe.gov

You should follow email format and provide a Subject Line that indicates: Preliminary Notification of Declared Emergency/Occurrence at X Site; Y Facility, operation or activity. In the body of the email, please provide what information you have even if information is limited or has not been validated and provide an indication of your level of confidence in the information provided (high, medium, or low).

Form xxxx
Rev 0 June 2018

File Code Index No.:
Page 2 of 3

UMTRA Project

DOE FEDERAL CLEANUP DIRECTOR RESPONSE CHECKLIST

- ☐ Monitor information provided through notifications and updates from the DOE IC Liaison and Contractor Emergency Response Personnel.
  - ☐ Coordinate with TAC Public Affairs Manager regarding media inquiries or press releases.
  - ☐ Review and approve all press releases prepared the by the TAC Public Affairs Manager.
  - ☐ Coordinate all press releases with DOE HQ and EMCBC prior to issuance.

C. TERMINATION

- ☐ Review the decision to terminate the emergency.
  - Time of event Termination
- ☐ Upon termination of the event, confer with the DOE POC and Contractor representatives for recovery planning as necessary.
- ☐ Participate in the event debrief and critique of IC activities.

Additional Notes/Information (as necessary):

Completed By: _____ _____

Print Name/Signature Date

Form xxxx
Rev 0 June 2018

File Code Index No.:
Page 3 of 3

Emergency/Incident Response Checklist

UMTRA Project

DOE Incident Command Liaison Response Checklist

SCOPE

The DOE Incident Command Post Liaison reports the status of onsite response activities to the DOE Federal Cleanup Director during emergency incidents affecting the Moab UMTRA project.

INITIAL TASKS

- ☐ **Receive** notification of a facility incident from Incident Command staff or the Cognizant Contractor Management
- ☐ **Obtain** location of incident command post and report to that location if safe to do so
- ☐ **Check in** with the RAC Emergency Response Director (Incident Commander) and obtain an event status briefing
  - Time of discovery
  - Affected personnel/injuries
  - Facility/location affected
  - Offsite response
  - Notifications
  - Categorization

INCIDENT COMMAND POST ACTIVITIES

- ☐ **Provide** update(s) to DOE Federal Cleanup Director (FCD)
  - The DOE FCD can be reached at (859) 227-5016 (cell) or (970) 257-2115 (GJ)
  - Discuss event scene observations or concerns regarding onsite emergency response
  - Clarify information as needed for the FCD
  - Discuss EMCBC and DOE HQ reporting criteria with FCD
- ☐ **Record** activities on Log Sheet (attached)
- ☐ **Review** occurrence reporting criteria
- ☐ **Remain** at incident command post until relieved or as directed by the DOE FCD

Form xxxx
Rev 0 June 2018

File Code Index No.
Page 1 of 2

UMTRA Project

DOE Incident Command Liaison Response Checklist

LOG SHEET

Form xxxx
Rev 0 June 2018

File Code Index No.
Page 2 of 2

Emergency/Incident Response Checklist

Moab UMTRA Project
Emergency/Incident Response Checklist

Site: ☐ Moab ☐ Crescent Junction ☐ Grand Junction
Location: _____
Type of Emergency: _____
(e.g., fire, medical, spill, vehicle accident, radiological incident)
Date/time: _____

Does the emergency involve radiological contamination? ☐ Yes ☐ No ☐ Unknown
Does the emergency involve injured personnel? ☐ Yes ☐ No ☐ Unknown If Yes, how many: _____
Does the emergency require outside emergency services ☐ Yes ☐ No ☐ Unknown

Check applicable boxes when item is completed	Performed by/Method	Time
☐ Emergency services notified (911)		
☐ Emergency Response Director/Incident Commander notified Name:		
☐ Site Health and Safety Manager notified Name:		
☐ Security Guard notified Name:		
☐ Project/Program Manager notified Name:		
☐ DOE notified ☐ Federal Project Director: _____ ☐ ESH&QA Manager: _____ ☐ Facility Representative: _____	_____ _____ _____	_____ _____ _____
☐ Site Emergency Medical Responders notified Name:		
☐ On scene lead (coordinator) designated Name:		
☐ Evacuation ordered		
☐ Area sweep		
☐ Accountability taken		
☐ Shelter in place/take cover ordered		
☐ Public Affairs Manager notified		
☐ TAC Security Manager notified		
☐ Other sites notified ☐ Moab ☐ CJ ☐ GJ		
☐ Other notification:		
☐ Other notification:		
☐ Categorization of emergency completed Name:	Operational Emergency:: ☐ Yes ☐ No ORPS Reportable: ☐ Yes ☐ No ORPS categorization:	
☐ Additional reports/notification needed due to categorization ☐ Type of reports/notifications:	Assigned to:	
☐ Incident Report required	Assigned to:	

All clear/re-entry authorized by: _____ Date/time: _____

Form 1521
Rev 3 July 2013

Bomb Threat Checklist

Moab UMTRA Project

Bomb Threat Checklist

Use Emergency Contact List (DOE-EM/GJ1757 on SharePoint) for All Phone Numbers

STAY CALM

Keep the caller on the line.
Ask the caller to repeat the message.

Try to obtain the following:

1) Exact Message: **Request more data by expressing desire to save lives.*

A. TIME bomb set to go off: _____

B. Exact LOCATION of bomb: _____
(building, floor, room, etc.)

C. What bomb LOOKS LIKE: _____
(type of explosive, how it is packaged, etc.)

D. WHY bomb was placed: _____

E. WHO placed the bomb: _____

2) Information about Caller/Call:

A. Caller's NAME: _____
(may inadvertently be said)

B. Background NOISES and noise levels:
_____
(street sounds, baby crying, etc.)

C. SEX: ☐ Male ☐ Female

D. AGE: ☐ Adult ☐ Child Estimated AGE: _____

E. Pitch of VOICE: ☐ Low ☐ Moderate ☐ High

F. SPEECH: ☐ Slow ☐ Excited ☐ Broken
☐ Rapid ☐ Loud ☐ Accent: _____
☐ Normal ☐ Disguised ☐ Sincere
☐ Impediments: _____
(drunk, lisp, etc.)

3) Time of Call: Time Received: _____ Date Received: _____
Time Ended: _____ Date Ended: _____

4) Person Receiving Call:
Name: _____ Extension: _____
Room: _____ Building: _____

5) Witnesses: *(if applicable)*
_____

6) 911 Notification: ☐ Yes ☐ No _____

7) Site/Operations/Program Manager Notification: ☐ Yes ☐ No _____

8) TAC Security Officer Notification: ☐ Yes ☐ No _____

9) DOE Notifications: ☐ Yes ☐ No _____

1520
Revision 3 August 2012

File Code Index Code No.: _____
Page 1 of 1

Appendix A. Incident Command System Procedure – Checklists and Forms *(continued)*

DOE Emergency Notification Form (*continued*)

C-2 DOE G 151.1-4
7-11-07

_____
(Security Classification & Category)

EMERGENCY NOTIFICATION FORM

__ **INITIAL NOTIFICATION** __**STATUS UPDATE** __**TERMINATION**

As of: Date _____ Time (include zone): _____

Received by (to be filled upon receipt):

Name: _____ Date: _____ Time (include zone):

1. *Sent by:

Name: _____ Position: _____ Telephone: _____
Organization: _____ Site/Location: _____
Facsimile: _____ Building/Facility: _____

2. *Incident Location:

_____

3. *Emergency Category/Classification: ***Operational Emergency***

Not Classified OE: __General Health and Safety __Environmental

__Offsite DOE Transportation __Safeguards and Security __Biological

Classified OE: ___Airborne Hazardous Materials Release (Radioactive or Chemical)

O Alert
O Site Area Emergency
O General Emergency

_____
(Security Classification Level & Category)

DOE Emergency Notification Form (*continued*)

DOE G 151.1-4 C-3
7-11-07

_____
(Security Classification Level & Category)

4. *Description of Incident (include dates/times/time zones):

_____

_____

_____

5. *Casualties, if any (Identify if DOE Employee or contractor or public. Include number of personnel, nature of injuries, treatment status, and next-of-kin notifications):

_____

_____

6. *Status of affected facility/site or activity:

_____

_____

_____

7. *Status of other facilities/operations/activities on the site:

_____

_____

_____

8. Release Information (if any):

A. *Release in Progress: ___Yes ___No
B. Material: ___Radiological ___Chemical ___Biological
C. Nature of release: ___Airborne __Waterborne __Ground

Status: __Continuing __Intermittent __Terminated
Source: _____Quantity:_____Rate: _____
Material: Name _____ Concentration _____

Other release information:

_____

_____

_____
(Security Classification Level & Category)

DOE Emergency Notification Form (*continued*)

_____
(Security Classification Level & Category)

9. *Protective Action Decisions/Recommendations and Health Effects:

Onsite:

_____

_____

_____

Offsite:

_____

_____

_____

10. *Field Notifications Made – *Notifications complete*: __Yes __No

	Organization	POC	Date/Time
A.	_____	_____	_____
B.	_____	_____	_____
C.	_____	_____	_____
D.	_____	_____	_____

(If more space is needed use blank lines at the end of the form)

11. *Meteorological Conditions:

Wind Speed____ mph Wind direction from_____ to _____ Stability class _____
Temperature _____ Precipitation: __ Yes __ No

Conditions/Forecast:

_____

_____

_____

_____
(Security Classification Level & Category)

DOE Emergency Notification Form (*continued*)

DOE G 151.1-4 C-5 (and C-6)
7-11-07

_____
(Security Classification Level & Category)

12. *Media Interest: Level of media interest at the emergency scene or at the facility/site

_____

_____

13. *DOE/NNSA Point of Contact:

_____

_____

_____
(Security Classification Level & Category)

DOE Emergency Status Update Form

HQ EMT SITREP - Page 1 of 5

(Security Classification Level & Category)

HQ EMT SITREP # _____ **Date/Time:** _____

(The HQ EMT requires specific information from the affected facility/site/program/activity in order to satisfy the demands of Departmental senior management and meet the requirements associated with requests from the White House, Congress, other Federal agencies, and the media. At a minimum, the questions listed below need to be answered as soon as possible and then updated as appropriate and when changed over the course of the emergency and response.)

1.0 Description of the emergency/event

1.1	What happened?	
1.2	When did it happen or was it discovered?	
1.3	Where did it happen?	
1.4	What is the immediate impact/effect of the event on Departmental facilities, sites, programs, and/or activities? (i.e., damage to facilities, operations, etc.)	
1.5	Describe any off-site impact which has occurred, is occurring, or which may occur	
1.6	Who are the on scene senior emergency management POCs? (names, number/means for contacting site emergency manager/director, Senior Energy Official, and On Scene Commander)	
1.7	Depending on the nature of the event:	
1.7.1	What is the category of the event (e.g., OE, Energy Emergency, and Emergency Assistance)	
1.7.2	What is the classification of the event (only if event involves Hazardous Materials Program facility/site; e.g., General Emergency, Site Area Emergency, Alert)	
1.8	What hazardous materials were involved and their potential/actual impact:	
1.8.1	Types, amounts, and/or concentrations	
1.8.2	Status of leak/spill/release (e.g., ongoing or stopped)	

(Security Classification Level & Category)

DOE Emergency Status Update Form (*continued*)

DOE G 151.1-4 D-3
7-11-07

HQ EMT SITREP - Page 2 of 5

_____
(Security Classification Level & Category)

HQ EMT SITREP # _____ Date/Time: _____

(Information is included and/or updated as appropriate and when changed.)

1.0 Description of the emergency/event (continued)

1.9	Current meteorological data at event scene:	
	1.9.1 Temperature	
	1.9.2 Humidity	
	1.9.3 Wind speed and direction	
	1.9.4 Precipitation type and/or forecast	
	1.9.5 Stability condition	
1.10	Information on effects measurements (e.g., actual measurements, dose estimates, and model predictions) and/or potential for increased severity	
1.11	What decontamination requirements are there? (if any)	
1.12	What other potential hazards associated with the site or operations are affected by the event?	
1.13	If the event is security-related:	
	1.13.1 What is the type and/or nature of the security threat(s)? (e.g., bomb, arson, shooting, hostage, etc.)	
	1.13.2 What is/are the threat or other deadlines?	
	1.13.3 What response actions have taken and are planned? (and anticipated outcomes)	
	1.13.4 What is the status of any hostages involved? (number, names, location, conditions, and demands)	
	1.13.5 What internal and external law enforcement involvement is on scene? (e.g., site security, FBI, state, local)	
	1.1.3.6 What information is there on perpetrators?	

_____
(Security Classification Level & Category)

DOE Emergency Status Update Form (*continued*)

D-4 DOE G 151.1-4
7-11-07

HQ EMT SITREP - Page 3 of 5

(Security Classification Level & Category)

HQ EMT SITREP # _____ Date/Time: _____

(Information is included and/or updated as appropriate and when changed.)

2.0 Response/Protective Actions

2.1	What protective actions have taken and/or are planned onsite?	
2.2	What protective action recommendations have been made, planned, and/or provided to offsite agencies?	
2.3	What is the anticipated duration of onsite and offsite protective actions?	
2.4	Plume model (if available, provide to HQ)	
2.5	What is the recovery planning status?	

3.0 Casualties

3.1	DOE employee(s) (organization):	
	3.1.1 Number and nature of injuries	
	3.1.2 Number and cause of fatalities	
	3.1.3 Contamination status of injured and/or dead	
3.2	DOE contractor(s) (firm, DOE organization supported):	
	3.2.1 Number and nature of injuries	
	3.2.2 Number and cause of fatalities	
	3.2.3 Contamination status of injured and/or dead	
3.3	Others (e.g., if visitors, bystanders, etc.):	
	3.3.1 Number and nature of injuries	
	3.3.2 Number and cause of fatalities	
	3.3.3 Contamination status of injured and/or dead	
3.4	What is the current location(s)/ disposition(s)/status of next of kin notifications?	

(Security Classification Level & Category)

DOE Emergency Status Update Form (*continued*)

DOE G 151.1-4 D-5
7-11-07

HQ EMT SITREP - Page 4 of 5

_____
(Security Classification Level & Category)

HQ EMT SITREP # _____ **Date/Time:** _____

(Information is included and/or updated as appropriate and when changed.)

4.0 Status of radiological emergency response assets

4.1	What assets are onsite and operational?	
4.2	What assets are onsite, but not yet operational?	
4.3	What assets are in route and what is their estimated time of arrival (ETA)?	
4.4	What additional assets are needed or anticipated?	

5.0 Notifications

5.1	DOE organization(s):	
	5.1.1 What support has been requested and provided?	
	5.1.2 What issues have been raised?	
5.2	Federal Department(s)/Agency(s):	
	5.2.1 What support has been requested and provided?	
	5.2.2 What issues have been raised?	
5.3	State, Tribal, and/or Local governments and/or response organization(s):	
	5.3.1 What support has been requested and provided?	
	5.3.2 What issues have been raised?	
5.4	Congress (Senate & House members, committees, staff, offices):	
	5.4.1 What support has been requested and provided?	
	5.4.2 What issues have been raised?	

_____
(Security Classification Level & Category)

DOE Emergency Status Update Form (*continued*)

D-6 DOE G 151.1-4
7-11-07

HQ EMT SITREP - Page 5 of 5

_____
(Security Classification Level & Category)

HQ EMT SITREP # _____ **Date/Time:** _____

(Information is included and/or updated as appropriate and when changed.)

5.0 Notifications (continued)

5.5	Energy industry firms and/or organizations (oil, gas, electric, pipeline):	
	5.5.1 What support has been requested and provided?	
	5.5.2 What issues have been raised?	
5.6	Media (local/regional/national):	

6.0 Public Affairs

6.1	Assessment of media interest (e.g., high, medium, low and description)	
6.2	What additional Press Releases have been issued? (number, date, & time)	
6.3	What press briefings have been conducted and/or planned? (information provided to HQ)	
6.4	What is the location and status of JIC?	
6.5	What are the media and public information contact numbers?	

7.0 Points-of-Contact

7.1	Who are the on-scene POCs? (names, position/functions, phone numbers)	
7.2	Who are the Field Element POCs? (names, position/functions, phone numbers)	

_____
(Security Classification Level & Category)

Appendix B.
Emergency/Incident Action Instructions

Appendix B. Emergency/Incident Action Instructions

Emergency/Incident Response Actions
Remain calm
DO NOT compromise your safety during the response

On discovery of **any Emergency/Incident,** the following actions should be taken.

- Stop work safely – stop activities in the area and place them in a safe state.
- Clear the designated radio channel, and announce that there is an emergency/incident.
- Warn others – notify supervision and/or H&S.
- Communicate the location and nature of the emergency/incident – describe as best as possible the location of the emergency/incident and what has happened so that the proper response can be made.
- Isolate and protect the area (unless doing so puts the employee at risk) – keep unnecessary personnel out of the immediate area to help preserve the scene and to assist with a prompt response.
- Help wherever possible.
- Provide statement of what happened.

BLT — Breathe, Look, and Think
Our minds can process a lot of information in a short period of time. Please breathe, look, and think before and while responding. Do what is reasonable and prudent. Do not compromise your own safety. If we work together as a team, we will get through the situation successfully.

Additional actions for:

Active Shooter
Should an active shooter event occur, do not congregate at on-site emergency assembly areas. The following three options, in order of preference, are available to workers; however, the best response is dependent on the circumstances and the evolution of the event.

Option 1: Run

- Have an escape route and plan in mind
- Leave your belongings behind
- Evacuate regardless of whether others agree to follow
- Help other escape, if possible
- Do not attempt to move wounded victims
- Prevent others from entering an area where the active shooter may be
- Keep your hands visible
- Follow the instructions of any law enforcement on scene
- Call 911 when you are safe

Option 2: Hide

- Hide in an area out of the shooter's view
- Lock door or block entry to your hiding place
- Establish protection from shots are fired in your direction (e.g. office furniture)
- Silence your cell phone (including vibrate mode) or any other source of noise and remain quiet

Option 3: Fight

- Fight as a last resort and only when your life is in imminent danger
- Attempt to incapacitate the shooter
- Act with as much physical aggression as possible
- Improvise weapons or throw items at the shooter
- Commit to your actions – your life depends on it!

Under any scenario, call 911 if and when it is safe to do so. Information to note and provide to 911 dispatch includes:

- Location of the shooter
- Number of shooters
- Physical descriptions of shooters
- Number and types of weapons shooter has
- Number of potential victims on scene

When law enforcement arrives on scene:

- Remain calm and follow instructions
- Drop items in your hand (e.g. bags, jackets)
- Raise hands and spread fingers
- Keep hands visible at all times
- Avoid quick movements towards officers, such as holding on to them for safety
- Avoid pointing, yelling, screaming, or yelling

The first officers to arrive will not stop to help the injured. Expect rescue teams to follow initial officers; these rescue teams will treat and remove the injured.

Workers that remain on site should follow law enforcement instruction and evacuate or assemble as directed. Workers that evacuate off-site should gather at a designated assembly area safely away from the scene. Do not leave the assembly area until law enforcement authorities have given permission to do so. Adhering to this rule is critical in order to share information, allow incident command to conduct accountability activities, and to ensure that authorities have the opportunity to identify and question all witnesses once the situation is under control.

Off-site assembly areas are as follows for each site:

- Moab site: Lions Park, at the junction of U.S. Highway 191 and State Route 128 (northeast corner).
- Crescent Junction site: 7-11/Exxon gas station in Thompson Springs (Exit 187)
- Grand Junction NE corner Bank of Colorado parking lot.

Additional guidance and training on increasing the chances of survival in an active shooter situation can be found ion the Project's SharePoint website.

Bomb Threat

If a bomb threat is received, keep as calm as possible. Keeping the telephone caller on the telephone line is important so that as much information as possible can be obtained. Use the Bomb Threat Checklist Form 1520 and Emergency Response Checklist Form 1521 (see Appendix A) to record this information. All forms are available on the Project's SharePoint website.

The receiver of the call should try to have someone else notify the Emergency Response Director (*Incident Commander*) of the bomb threat while he or she remains on the line. A bomb threat may be followed by a site evacuation depending on information obtained from the caller.

Fire

- Make notification of the fire and direct personnel to call 911. Provide information on any other hazards that are known to be present in the fire area (e.g., radioactive or chemical hazards, presence of volatile or combustible materials).
- Stop the cause of the fire if possible (e.g., stop hot work, de-energize electrical equipment). Do NOT attempt to isolate the source of the fuel for the fire or approach a vehicle on fire.
- Attempt to put out a small (just beginning) fire with a fire extinguisher only if the evacuation route is clear, the employee has been trained, and the employee has decided it is safe to do so.
- Move personnel upwind to a safe distance away from the affected area.
- Isolate the affected area and establish control boundaries, if possible.

Floods

Refer to the *Flood Mitigation Plan* for detailed information on flood preparation and mitigation actions.

Abnormally heavy localized rains may cause flooding in areas of the site. If this occurs:

- Notify supervisor who will then notify the RAC Emergency Response Director (*Incident Commander*) of the pending flood condition and wait for his or her declaration of a flood emergency.
- Move vehicles and equipment to high ground.

Heavy rains or snow melt north of the Moab site may cause the Moab Wash to flow. In this event:

- Notify supervisor who will then notify the RAC Emergency Response Director (*Incident Commander*).
- Do not cross the flooded area unless directed to do so. If alternate routes to exit areas are needed, the supervisor will direct these efforts. If the lower crossing is affected, contact Radiological Control to survey and clear the area before traveling through the area after waters subside.

Radar System Critical Stability Alarm

A Critical Stability Alarm from the radar system indicates that there is high probability of a rockfall within a relatively short period of time. When the Critical Stability Alarm threshold has been exceeded, Project personnel shall take the following actions:

- The radar system will transmit and alarm notification to individuals listed on the Radar Alarm Notification List.
- The TAC Hillside Monitoring Coordinator will notify the Moab Operations/Site Manager of the alarm condition, either by phone, two-way radio, or the radar's internal communications system.
- The Moab Operations/Site Manager will in turn notify workers on the rail bench of the Critical Stability Alarm via two-way radio.

Readiness is paramount to efficient Critical Stability Alarm response. Workers should always possess a rail bench exit strategy, regardless of the current situation and location on the bench. Development of such strategies requires workers to continuously evaluate their surroundings to understand which egress route or action is best should a radar alarm activate or if an actual rockfall is observed by the worker.

When an alarm occurs, proper readiness facilitates the ability of workers to immediately proceed off the rail bench in accordance with the actions outlined in Table 1.

Table 1. Emergency Response Actions for a Critical Stability Alarm on the Rail Bench

Tasks	Actions
Ground Personnel (e.g., railcar inspectors, mechanics, culvert maintenance personnel, hillside inspectors)	If the vehicle is close by, promptly return to the vehicle and proceed off the rail bench using the normal downhill road. Once off the rail bench and out of the traffic pattern, immediately report to the supervisor. If the vehicle is not accessible, position yourself behind a railcar, behind the protective wall, or in the concrete shelter and radio for an immediate pickup by the next available haul truck or next vehicle moving through the rail bench.
Gantry Crane Operators	If the crane is connected to a container, lower the container on to a railcar (if possible) to ensure there is a clear path for vehicles to pass through and exit the rail bench. When out of the gantry crane and positioned behind a railcar, behind the protective wall, or in the concrete shelter, radio for an immediate pickup by the next available haul truck or next vehicle moving through the rail bench.
Drivers going up the south haul road (including haul trucks and other types of vehicles).	Continue on the normal route, but do NOT stop to offload the container (if applicable). Be on the lookout for ground personnel in need of a ride off the rail bench. Be prepared to stop, pick up workers, and deliver them back to the Support Area (Queue) area. To expedite recovery of personnel from the rail bench, it is acceptable to transport more personnel than a vehicle has seat belts for.

Rockfall, Rockslide, or Landslide Incident on Moab Rail Bench

If a rockfall or other slope movement is detected "in-progress" on the hillside above the rail bench in Moab, the following actions shall be taken:

- Rail bench and Support Area (Queue) workers shall immediately stop work and either seek shelter in a safe evacuation area (e.g., behind the protective rockslide wall) or evacuate to the Support Area.
- As soon as it is safe to do so, personnel identifying the slope movement shall make the following two-way radio transmission over channel 2:
  "Rock slide, rock slide, rock slide! Seek shelter immediately!"
- The Moab Operations Lead and/or the RAC Emergency Response Director (*Incident Commander*) shall perform accountability of rail bench and Support Area workers and make required incident notifications.

If personnel are trapped or stranded on the rail bench following the slope movement, the following conditions shall be met prior to initiating rescue operations:

- The RAC Emergency Response Director (*Incident Commander*) shall inform area EMS and rescue services of the event and circumstances as necessary.
- Rescue personnel shall determine appropriate rescue techniques and consider existing hillside conditions.
- The hillside shall be deemed safe for rescue activities.

Prior to resuming work, the region impacted by the slope movement shall be evaluated by the Radar Team and the Moab Operations/Site Manager using the methods described in section 3.0 of *The Moab UMTRA Project Moab Site Hillside Monitoring Plan* (DOE-EM/GJ2164). The intent of this evaluation is to determine if corrective actions are necessary to ensure safe working conditions prior to restarting operations.

Workers experiencing an actual rockfall event should take action in accordance with Table 2 based on their assigned job tasks on the rail bench.

Table 2. Emergency Response Actions for a Rockfall Event on the Moab Rail Bench

Tasks	Actions
Ground Personnel (e.g., railcar inspectors, mechanics, culvert maintenance personnel, hillside inspectors)	Proceed away from the rockfall and toward a safety barrier (protective wall or concrete shelter) or railcar that would provide physical protection from falling rocks. Contact the supervisor by radio and notify him or her of the current location on the rail bench. Remain within the safety barrier or behind a railcar until directed to proceed elsewhere or until emergency/rescue personnel arrive on the scene and direct workers towards safety.
Gantry Crane Operators	If the crane is connected to a container; lower the container onto a railcar (if possible) to ensure there is a clear path for vehicles to pass through and exit the rail bench. Exit the cab of the gantry crane and position yourself behind a railcar or safety barrier (such as the protective wall or concrete shelter), radio for an immediate pickup by the next available haul truck or next vehicle moving through the rail bench. Stay in place until picked up or until conditions are considered safe.
Drivers going up the south haul road (including haul trucks and other types of vehicles).	If safe to do so, stop approximately three truck and trailer lengths (~100 feet) from the start of the turn at the top of the hill. If it is safer based on the location of the rockfall, continue up the south haul road and position the truck/vehicle behind the protective wall. Contact the supervisor by radio and notify him or her of the current location on the haul road.
Drivers on the rail bench (including haul trucks and other types of vehicles).	Drivers will be required to assess the situation to determine the best course of action: (1) either pull up next to the closest safety barrier (protective wall or railcar) and stop (if the rockfall is occurring in front of the employee), or (2) proceed forward if the rockfall is behind the employee. If stopped next to a safety barrier, contact the supervisor by radio and notify him or her of your current location on the rail bench.

NOTE: Vehicles involved in the recovery and transport of rail bench personnel may travel up the downhill road (north haul road) to eliminate travel in Zone 1. Radio communication may be necessary to avoid confrontation with other vehicles traveling down the north haul road.

NOTE: To expedite recovery of personnel from the rail bench, it is acceptable to transport more personnel than a vehicle has seat belts for.

NOTE: The steep dirt road near the apex of the curve at the top of the uphill haul road may be used to avoid a rockfall event; however, it is not recommended to travel down the road with a loaded haul truck and trailer. Drivers must use their best judgment in a rockfall event and act accordingly.

Material Spills

Actions in the event of a spill of petroleum products, hazardous substances, and RRM at Project sites are provided in the *Health and Safety Plan* and the *Spill Prevention, Control, and Countermeasure Plan*.

Medical Emergencies/Incident

- Communicate number of injured, type of injury, and the severity to the supervisor.
- Supervisor will inform the Operations/Site Manager (*Incident Commander*), who will mobilize on-site First Aid trained personnel and call off-site EMS if necessary.
- If the scene is safe to enter, commence providing first aid or CPR, if trained and able, until relieved by EMS personnel.
- If the injured worker(s) are in the CA, additional supplemental actions may be necessary.

Supplemental Actions for an Injured Contaminated Worker

Always remember that the severity of the injury will dictate the effort of decontamination of the injured.

- If the injured person is radiologically contaminated and will be transported to Moab Regional Hospital, notify EMS personnel, who will then notify Moab Regional Hospital that a person with contamination will be arriving at the hospital.
- The Radiological Control Manager will assign an RCT with radiological survey instruments to travel with the injured person to the hospital.
- The RCT will monitor radiological conditions and advise hospital staff on measures to minimize further contamination.
- The RCT will perform radiological surveys of hospital staff, facilities, and equipment after treatment is complete and will assist with decontamination as necessary.

Moab Utility Corridor Incident

A utility corridor runs along the northern boundary of the Moab site that contains underground high-pressure gas lines and overhead high-voltage electrical lines. Notification to the respective utility must be made if any incident is likely to occur due to contact or suspected damage to the utility. If an incident occurs in this area, an evacuation of the site may be necessary by means of an alternative evacuation route. An alternative evacuation route shall be established and site personnel notified of such route(s).

Public Disturbance

If DOE or contractor property is being damaged or site personnel are in immediate danger, dial 9–911 to request law enforcement assistance as appropriate. Contact the Emergency Response Director (*Incident Commander*) for declaration of a shelter in place or evacuation emergency. Follow instructions above for either declaration. Notify the DOE *Incident Command Liaison* or the FCD and maintain communication with him or her.

Shelter in Place

- Shut all doors, windows, and vents
- Turn off all outside heating, air conditioning and ventilation equipment if instructed by the ERO
- Remain indoors until further direction is provided

Site Evacuation

- On notification by the Emergency Response Director (*Incident Commander*), exit the affected area of the site, using the evacuation route established from the present location. In the event the designated area is inaccessible, listen for instructions by radio (except in Grand Junction). If a full evacuation of the site is necessary, employees will be informed on the evacuation routes.
- Go to the designated assembly area as follows.
  - Personnel inside the CA shall assemble at the Access Control Trailer and await further instructions.
  - Personnel outside the CA shall assemble in the main parking lot for their area.
  - Personnel in the well field (Moab) shall assemble at the southern gate to the access road.
- In the event that prevailing winds put the primary assembly areas downwind of the accident site, workers shall be directed by radio to the assembly area.
- Do not eat, drink, smoke, or chew during the evacuation or in the assembly area.
- Help disabled or impaired persons evacuate the affected area.
- If able, the last person out should sweep the area to ensure all personnel are out before proceeding to the assembly area.
- The supervisor or most senior person at each assembly area will notify the Emergency Response Director (*Incident Commander*) by radio of the personnel present at that area.
- Await further instructions from the Emergency Response Director.

Transportation Incident

Actions in the event of an incident during the transport of RRM are provided in the *Transportation Plan (DOE-EM/GJ1639)*. Transportation incidents are handled by off-site response organizations if they involve an injury requiring immediate medical attention. Primary transport of RRM is accomplished by rail using UP as the carrier. Emergency actions and response are performed by the carrier for transportation incidents.

The carrier is responsible for RRM cleanup activities from any transportation incident. The Project will coordinate with the carrier, provide assistance and guidance as requested, and ensure timely communication and notification to DOE.

Weather

If weather conditions that affect the work area exist, notify the supervisor and pause work safely.

High winds – Shelter in a building or vehicle until winds subside, and it is safe to resume work. Check work areas when work is resumed for any wind damage.

Heavy rain/snow – During periods of heavy rains/snow, work will be paused if conditions are deemed unsafe; work will resume once conditions are deemed safe. During these periods, shelter in a building or vehicle until notified it is safe to resume work.

Lightning – When a lightning shutdown is called, move indoors or into a rubber-tired vehicle. Weather conditions will be monitored by H&S and supervision. Notification will be given once lightning has exited the area and it is safe to resume work activities.

Emergency Event Reporting during Working Hours

- Call 9-911 to report the emergency event.
- Call 222 to notify the Receptionist of the emergency event.
- Follow the response protocol identified for the type of event involved.
- If a phone is not available, announce via radio to report the event.

Emergency Event Reporting during Off Hours

- Dial 9-911 if needed
- Notify the RAC On-call Manager by phone at 970-361-8335.

Appendix C.
Emergency/Incident Response Plan for the Grand Junction Office

Appendix C. Emergency/Incident Response Plan for the Grand Junction Office

1.0 Introduction

This Appendix to the EIRP contains information intended to minimize adverse impacts on the safety and health of DOE, contractor, and subcontractor personnel during an emergency while working in support of the Moab UMTRA Project at the following location.

Bank of Colorado Building
200 Grand Avenue, Suites 500 and 319
Grand Junction, CO 81501

The DOE Grand Junction office (GJO) is a fully leased space, multi-employer workspace. GJO does not establish an incident command and relies on off-site response "career" organizations held to the NFPA 1710 standard, including response times.

1.1 Work Description

Personnel at the Grand Junction office perform administrative and technical functions in an office setting in support of the Project.

1.2 Scope

This Appendix is applicable to emergencies that may occur at or near the Grand Junction office.

2.0 Emergency Contact List

This section identifies the responsibilities of personnel and agencies that are crucial to handling an emergency. Key contacts and phone numbers are contained in the *Emergency Contact List*.

2.1 FCD *(Public Information Officer)* and TAC Public Affairs Manager

Roles of the FCD/PIO and TAC Public Affairs Manager include:

- Serving as the primary spokesperson for DOE for the Project.
- Providing interface between DOE and the media.
- Notifying DOE Headquarters, EMCBC, and other agency contacts listed in Emergency Contact List about emergency conditions, classifications, and status, as required.

2.2 TAC Senior Program Manager

Roles of the TAC Senior Program Manager include:

- Interfacing with the Grand Junction site personnel, landlord, and DOE personnel.
- Maintaining a TAC succession of authority
- Performing accountability of all Project personnel, visitors, and subcontractors working in the Grand Junction Office.
- Conducting a post-incident critique.

2.2 TAC HS&T Manager

Roles of the TAC HS&T Manager include:

- Identifying and evaluating hazards and providing direction with respect to the safety of operations for the emergency at hand.
- Altering, suspending, or terminating activities judged to be immediately dangerous to life and health and/or to involve an imminent danger condition.
- Maintaining a current inventory of chemicals and hazardous substances, materials, or wastes on site, identifying storage locations, and communicating this information to off-site response organizations.
- Ensuring emergency response communication systems are available and operational and conducting annual tests of these systems.
- Assisting with the preparation of records for the emergency response events, including incident investigation, emergency response improvements, and other noteworthy practices.
- Coordinating emergency response training and planning.
- Assisting the Senior Program Manager in conducting the post-incident critique and any additional investigation.

2.4 Receptionist

Roles of the Receptionist include:

- Answering 222 calls and other emergency notifications.
- Maintaining current list of Grand Junction office personnel, visitors, subcontractors, and others that may be in the Grand Junction office.
- Assisting the Senior Program Manager in conducting accountability.
- Completing the Emergency/Incident Response Checklist.

2.5 Building Warden

The role of the Building Warden is to coordinate personnel evacuation during emergencies that require evacuation. Fifth floor building wardens and their respective office zones have been designated and this information is posted near the fifth floor stairway exits. On the third floor, due to the limited number of staff and small office size, the last individual to evacuate is designated as the Building Warden.

3.0 Off-site, EROs and Responsibilities

Emergency services available in Grand Junction should be adequate for the emergency events likely to be associated with the Grand Junction office. This section identifies the emergency services that each of the off-site EROs will provide to the Grand Junction office. Contact information for off-site emergency response agencies is provided in the *Emergency Contact List.*

3.1 Grand Junction Police Department

Roles of the Grand Junction Police Department include:

- Providing law enforcement protection, assisting with emergency response, and all other law enforcement services consistent with reasonable and prudent law enforcement practices.
- Coordinating emergency law enforcement services.
- Providing a suitable area or other accommodations for use as an EOC if requested by DOE.

3.2 Grand Junction EMS and Fire Department

Roles of the Grand Junction EMS and Fire Department include:

- Providing emergency medical services for all injured or ill DOE, contractor, subcontractor, vendor employees, and office visitors.
- Transporting injured personnel by ambulance to medical facilities.

3.3 St. Mary's Hospital

The role of St. Mary's Hospital is to provide medical treatment of injured or ill personnel.

4.0 Contingency Planning

The objective of contingency planning is to be prepared to safely respond to emergencies before they occur. Contingency planning also ensures this Appendix is compatible with the emergency response plans and capabilities of the local emergency response service organizations.

4.1 Training

The following training shall be provided to and completed by subject personnel.

- Completion of the Grand Junction emergency response training course is required for all workers assigned to the Grand Junction office. Training will include information on basic emergency response procedures and any lessons learned from actual implementation of this EIRP or training drills conducted to test this EIRP.
- Completion of Grand Junction emergency response training for the administrative staff is required for those personnel whose job duties include Receptionist activities. This training will include information on their roles and responsibilities as a Receptionist during an emergency and event notification.

4.2 Guidance for Emergency Actions

Guidance for use during specific types of emergencies is provided in Appendix B of this EIRP and is meant to be used by any staff member in the event of an emergency. The purpose of this guidance is to provide instructions that, when followed, will increase the likelihood of a proper response to the event.

4.3 Drills

Drills are periodically performed to practice response to a variety of possible emergencies and to evaluate responses to possible emergencies. Drills may be desktop exercises or may involve detailed coordination and physical role-playing.

5.0 Emergency Actions

5.1 Evacuation Actions

If an evacuation of the Grand Junction office is required, personnel are notified via the intercom system, phone, or word of mouth (verbal communication). In the event of an evacuation:

- Obtain urgent personal items if they are nearby.
- Evacuate through the nearest and safest stairway. Do NOT use the elevator during a fire.
- Go directly to the evacuation assembly area located at the northeastern corner of the Bank of Colorado parking lot (corner of North 3rd Street and Ouray Avenue).
- Building Wardens will sweep the area and will proceed to the evacuation assembly area once their area is confirmed clear of personnel.
- The most senior supervisor will obtain the list of personnel and visitors from Reception and will take personnel accountability at the assembly area.
- ALL personnel will remain at the assembly area until directed otherwise by the Senior Program Manager or designee.

5.2 Fire Actions

In the event of a fire:

- Go to nearest fire alarm station and pull the alarm. Be sure to perform this action in an area safe to do so.
- Follow the instructions in Appendix B.

5.3 Shelter in Place Actions

A shelter in place notification is made via the intercom system. Once notified, go to the nearest work area and perform the following.

- Shut all doors, windows, and vents (as applicable).
- Turn off all outside heating, air conditioning, and ventilation equipment if directed by emergency response personnel.
- Remain indoors until further direction is provided.

5.4 Medical Emergency Actions

In the event of a medical emergency (e.g., heart attack, severe bleeding, unconsciousness), perform the following.

- Call 9-911 to report the emergency.
- Call 222 to notify the Receptionist during normal working hours.
- Provide first aid or CPR if trained and/or able.
- Assist responders as requested and able.

Figure A-1 shows the travel route from the Bank of Colorado building to St. Mary's Hospital.

5.5 Bank Robbery Actions

If a bank robbery occurs, the Bank of Colorado uses a silent alarm and locks all of its doors and the remaining building doors, if required. If they are able, Bank of Colorado personnel will notify the Appendix C. Emergency/Incident Response Plan for the Grand Junction Office Appendix C. Emergency/Incident Response Plan for the Grand Junction Office Receptionist of the event. The Receptionist will then notify the Emergency Response Director (*Incident Commander*).

Employees will be notified to shelter in place at the nearest work area and take the following actions.

- Lock the access doors to the area (e.g., stairways).
- The Receptionist should move to the main office area.
- Allow office entry only to recognizable personnel (e.g., police, coworkers, familiar building tenants).
- Await further instruction.

If Bank of Colorado personnel are unable to make notifications, and suspicious circumstances suggest a robbery is in progress (i.e., arrival of several police officers or observation of behavior suggestive of a bank robbery), notify the Emergency Response Director (*Incident Commander*) and shelter in place in the nearest work area and follow the instructions above.

5.6 Bomb Threat Actions

In the event of a bomb threat:

- Remain calm.
- Using the Bomb Threat Checklist (EIRP Appendix A), obtain as much information as possible from the caller.
- When the call ends, report the situation immediately to the Receptionist (dial 222).
- Personnel will be directed by the Emergency Response Coordinator (*Safety Officer*) regarding further response actions.
- If the employee does not feel safe remaining in the office, notify the supervisor and go directly to the evacuation assembly area.

Figure A-1. Travel Route to St. Mary's Hospital from the Bank of Colorado Building

6.0 Notifications, Communications, Evacuation Routes, Assembly Area, and Accountability

6.1 Event Notification

In the event of an emergency, perform the following.

- Call 9-911 to report the emergency.
- Call 222 to notify the Receptionist during normal working hours.

During non-working hours, personnel should dial 9-911 to report an emergency, its nature, and its location. Personnel shall then immediately report it to the Emergency Response Director (*Incident Commander*).

Grand Junction office personnel are to report emergency events and their locations to the Receptionist during normal working hours by dialing 222.

6.2 Communication

Communication can occur verbally, through the intercom system, by telephone, by cell phone, or by pulling a fire alarm.

6.3 Evacuation Routes

Evacuation of the Bank of Colorado building is to occur via the nearest and safest exit. During a fire emergency, personnel are to use the stairs, NOT the elevator.

6.4 Assembly Area and Accountability

The Grand Junction office assembly area is at the northeastern corner of the Bank of Colorado parking lot (corner of North 3rd Street and Ouray Avenue). The most senior supervisor will obtain the list of personnel and visitors from Reception and will take personnel accountability at the assembly area.

7.0 Reporting and Post-emergency Response Incident Investigation

7.1 Reporting Requirements

All emergencies must be reported using the Incident Report Form 1743 regardless of the nature of the emergency involved. The Incident Report Form is available on the Moab UMTRA Project's SharePoint website. Incident Report Forms are initiated by the person involved in the incident or by a person who has seen the incident. On completion, the Incident Report is submitted to the FCD.

The TAC Categorization and Notification Coordinator categorizes the event in accordance with DOE O 232.2A, Occurrence Reporting and Processing of Operations Information and DOE O 151.1D, Comprehensive Emergency Management System. The FCD will notify DOE Headquarters and EMCBC personnel of emergencies in accordance with DOE requirements.

7.2 Post-emergency Critique

A post-emergency critique shall be initiated by the Senior Program Manager as soon as practicable following stabilization of the emergency condition.

If classification of the emergency or results of the critique indicate that further investigation is required, the Senior Program Manager and the HS&T Manager shall initiate additional investigation.

7.3 Lessons Learned

Lessons learned from the critique and investigation shall be formally documented and distributed to appropriate personnel to prevent a similar emergency condition. In addition, lessons learned will be incorporated into Project personnel training and used to amend this Appendix and institute corrective measures and procedures to avoid similar occurrences in the future.

Appendix D.
Emergency Public Information Plan

Appendix D. Emergency Public Information Plan

Purpose

This Emergency Public Information Plan addresses the requirements in DOE O 151.1D for an Emergency Public Information Plan and addresses public affairs activities in emergency situations to ensure necessary actions will be planned and coordinated.

DOE policy requires accurate, candid, and timely information, consistent with requirements of the Freedom of Information Act (5 USC 552) and the Privacy Act (5 USC 552a), be provided to site workers and the public during all emergencies. For purposes of this Emergency Public Information Plan, "public" includes news media and local, state, and federal officials, as appropriate. DOE will coordinate joint news releases and public statements with other involved agencies, as appropriate.

Responsibilities

The main responsibility for communication with site workers falls on the RAC Emergency Response Coordinator. The main responsibility for communication with the public during emergencies falls on the FCD and TAC Public Affairs Manager. The roles and responsibilities of these individuals during emergencies are described in Section 2.1 of the *EIRP*.

Information Releases

Following preparation of a draft news release or statement by the TAC Public Affairs Manager, the FCD will review and approve the draft. The Public Affairs Manager will coordinate with the EM-3, External Affairs, and EMCBC points-of-contact for the Project to get Headquarters' and EMCBC's approval to distribute the release. The approved release will be issued to local media and other members of the public, as appropriate, by email. The Project maintains contact information for stakeholders in a database.

In accordance with the Incident Communication Protocol developed by and established with Grand County, the FCD or Public Affairs Manager will notify Grand County of any incidents that may materially affect the citizens of Grand County and/or its visitors. The Project will provide the nature of the incident and any expected impacts to Grand County citizens or visitors. Notification will be made to the Project Liaison, if possible; otherwise, notification will be made to other county personnel in the order listed in the protocol. The first person contacted by the Project will notify the others on the list.

Responding to Media Inquiries

In addition to a news release or statement, the Public Affairs Manager will prepare responses to potential questions in anticipation of media calls to the incident or news release/statement. These will follow the same review process as for news releases/statements.

Any calls received from the media will be logged. The FCD will use preapproved responses to questions as appropriate. Additional questions will be logged, and a draft response will be prepared and sent through the review process described above before responding to the media.

Press Conferences

Because of the relative lack of hazards posed by Project activities that have the potential to affect the public immediately and in a significant way, the need to hold a press conference during a site emergency is probably rare. If such an incident were to occur at the Moab site, the FCD would likely hold a press conference at the turnout off SR-279 near the Project information kiosk.

This publicly accessible location allows good visibility of many of the tailings excavation and loading activities while not interfering with the emergency response. If a significant incident occurred near the Crescent Junction site, the FCD would likely hold a press conference in the administrative parking lot to minimize interference with the emergency response, although visibility of transport and disposal activities from this location is limited.

Training and Exercises

The FCD and Public Affairs Manager will complete the annual emergency response computer-based training refresher courses and the one-time, position-specific training courses offered through the DOE Emergency Operations Training Academy as indicated in Table 2 of this Plan. These individuals will also participate in annual site-level drills to include simulating notifications to media and other members of the public.

Records

Any public affairs materials used as part of an emergency response will be managed according to the *Records Management Manual*. Materials to be kept as records can include final approved news releases, media distribution lists, briefing and background materials, and medial call logs from the event.

Appendix E.
Spill Response Protocols

Appendix E. Spill Response Protocols

1.0 Introduction

These spill response protocols have been prepared for the U.S. Department of Energy (DOE) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project in Utah. The scope of the Project involves relocating the uranium mill tailings and other contaminated material from the Moab site to a permanent disposal cell at the Crescent Junction, Utah, site. The materials are being transported primarily by rail. The scope also includes active remediation of groundwater at the Moab site.

Activities conducted at the Moab site include:

- Excavation and preparation of mill tailings and other contaminated materials for transport to the Crescent Junction site.
- Site maintenance, including revegetation.
- Site security and access control.

Activities conducted at the Crescent Junction site include:

- Excavation of the disposal cell.
- Placement and compaction of uranium mill tailings and other contaminated materials from the Moab site and vicinity properties in the disposal cell.
- Placement of interim and final cover layers.
- Monitoring radioactive and non-radioactive materials in air, the presence of fluids in standpipes, and the presence of groundwater in monitoring wells.
- Site maintenance, including revegetation.
- Site security and access control.

It is the policy of the contractor to conduct and manage activities in accordance with applicable laws and regulations and to:

- Prevent or minimize to the extent possible the spilling of petroleum products, hazardous substances, or radioactive materials during remediation.
- Prevent or minimize to the extent possible the spread of petroleum products, hazardous substances, or radioactive materials resulting from remedial activities.
- Report spills to the RAC or TAC Environmental Compliance Manager.
- Clean up of spills will be performed expeditiously and safely.

Project spill response shall be performed in accordance with the *Spill Prevention, Control, and Countermeasures Plan* to prevent, contain, and report spills of petroleum products and other hazardous substances. Spills of radioactive materials at Project sites will be handled in accordance with the *Moab UMTRA Radiation Protection Program Manual* (DOE-EM/GJRAC1885).

2.0 Prevention of Spills

2.1 Inspections

The Operations/Site Manager shall schedule routine periodic inspections of equipment used for spill containment and cleanup to ensure availability

Heavy equipment used at the site shall be routinely inspected to reduce the possibility of spills resulting from equipment defects or malfunction. Storage/containment areas for petroleum products, hazardous substances, or radioactive materials shall also be routinely inspected to reduce the possibility of spills resulting from defects or malfunction.

2.2 Training

DOE employees, contractor employees, and subcontractor field personnel shall be trained in the Project's spill response plan during the Pre-entry Site Briefing and periodically during Daily Safety Meetings and other established training events at the job site.

2.3 PPE

The H&S Manager shall determine the PPE requirements for use during emergency containment and subsequent cleanup activities associated with a spill of petroleum products or hazardous substances. The Radiological Control Manager shall determine the PPE requirements for use during emergencies associated with radioactive materials.

2.4 Spill Response Kit

The Operations/Site Manager or designee shall prepare and maintain Spill Response Kits for use during emergency response to spills. Spill Response Kits shall be assembled and staged at designated locations. The recommended inventory requirements for the Spill Response Kit are listed in Table 1.

Table 1. Spill Response Kit Inventory

Cotton coveralls	Air sample filters
Tyvek coveralls	Plastic bags
Canvas gloves	Plastic bags for radiological material
Nitrile gloves	Duct tape
Chemical gloves	Barrier rope
Cotton glove liners	CA signs
Rubber overshoes	Traffic cones or triangles
Vinyl shoe covers	Absorbent pads
Plastic shoe covers	Bulk absorbent material (cat litter)
Clip board	Hand soap with pumice
Survey maps	Liquid soap
Pens	Cornstarch
Marking pen	Scrub brush
Steno pad or substitute	Wash tub
Smears	Long-handled shovel

3.0 Spill Response Actions

Immediate actions are the responsibility of site personnel. Supplemental actions are the responsibility of various organizations and individuals (identified following each action). Supplemental actions should be carried out as quickly as is reasonable after immediate actions are complete. Before responding, assess the situation for life-threatening safety issues. Proceed with the response only if it is safe to do so.

Pathways for hazardous substance dispersion are addressed in the *Waste Management Plan,* the *Moab UMTRA Project Universal Waste Management Plan* (DOE-EM/GJ1633), the *Moab UMTRA Project Spill Prevention, Control, and Countermeasure Plan* and the *Moab UMTRA Project Environmental Air Monitoring Program and Mitigation of Public Exposure* (DOE-EM/GJRAC1988).

3.1 Spill Response to Petroleum Products or Hazardous Substance of Known Composition

Immediate and supplemental actions regarding responses to spills of petroleum products or substances of known composition are detailed below.

Immediate actions regarding responses to spills of petroleum products or substances of known composition are as follows.

1. **Stop** or secure the operation causing the spill (e.g., secure a dump gate, upright a container, stop a pump, close a valve) if safe to do so.
2. **Warn** others in the area using whatever means are available (e.g., voice, telephone, radio, car horn).
3. **Minimize** individual exposure to the spilled product or contaminant.
4. **Move** personnel upwind, upstream, and/or upgrade.
5. **Identify** other hazards that may be present (e.g., potential for fire or explosion).
6. **Isolate** the affected spill area and establish control boundaries, if possible.
7. **Contain** the spill to prevent further spread (e.g., moving soil to create berms, using absorbent material).
8. **Notify** the Operations/Site Manager, H&S Manager, or Environmental Compliance Manager.

Supplemental actions regarding responses to spills of petroleum products or substances of known composition are as follows.

1. Establish PPE requirements for the spill response team entry (H&S).
2. Determine the extent of the spill area and verify the adequacy of the control boundaries already established (H&S/Environmental Compliance Manager).
3. Install liners around the spill to stabilize the material and prevent further spread (as directed by H&S/Environmental Compliance Manager).
4. Remove personnel who may have initially responded to the spill without PPE from the spill area (H&S). H&S shall determine appropriate decontamination procedures and other necessary actions.

5. Obtain air samples and/or perform real-time airborne contaminant monitoring, as applicable, in the affected and adjacent spaces to assess the airborne contaminant concentrations (as directed by H&S/Environmental Compliance Manager).
6. Initiate the reporting requirements as outlined in Section 4.2 of this procedure (Site Management/Environmental Compliance).
7. Develop a follow-up action plan for recovery of the spilled material (responsible contractor or subcontractor). The follow-up action plan for recovery must be documented and reviewed by the Environmental Compliance Manager and approved by the Operations/Site Manager.
8. Initiate the spill incident investigation process as outlined in Section 5.0 of this procedure (site management).

3.2 Spill Response to Hazardous Substance of Unknown Composition

Immediate and supplemental actions regarding responses to spills of hazardous substances of unknown composition are detailed below.

Immediate actions regarding responses to spills of hazardous substances of unknown composition are as follows.

1. **Evacuate** personnel in the spill area to a safe distance.
2. **Warn** others in the area using whatever means are available (e.g., voice, telephone, radio, car horn).
3. **Isolate** the affected spill area and establish control boundaries, if possible.
4. **Minimize** individual exposure to the unknown contaminants.
5. **Move** personnel that may be affected by the spill to a position upwind, upstream, or upgrade.
6. **Notify** the Operations/Site Manager and H&S.

Supplemental actions regarding responses to spills of hazardous substances of unknown composition are as follows.

1. Establish PPE requirements for the spill response team entry (H&S).
2. Determine the extent of the spill area and verify the adequacy of the control boundaries already established (H&S/Environmental Compliance Manager).
3. Install liners around the spill to stabilize the material and to prevent further spread (as directed by H&S/Environmental Compliance Manager).
4. Remove personnel who may have initially responded to the spill without PPE from the spill area (H&S). H&S shall determine the appropriate decontamination procedures and other necessary actions.
5. Obtain air samples and/or perform real-time airborne contaminant monitoring, as applicable, in the affected and adjacent spaces to assess the airborne contaminant concentrations (as directed by H&S/Environmental Compliance Manager).
6. Initiate the reporting requirements as outlined in Section 4.2 (Site Management/Environmental Compliance Manager).
7. Develop a follow-up action plan for recovery of the spilled material (responsible contractor or subcontractor). The follow-up action plan for recovery must be documented and reviewed by the Environmental Compliance Manager and approved by the Operations/Site Manager.
8. Initiate the spill incident investigation process as outlined in Section 5.

3.3 Response to a Spill of Radioactive Materials

Immediate and supplemental actions regarding responses to spills of radioactive materials are detailed below.

Immediate actions regarding responses to spills of radioactive materials are as follows.

1. **Stop** or secure the operation causing the spill (e.g., secure a dump gate, upright a container, stop a pump, close a valve).
2. **Warn** others in the area using whatever means are available (e.g., voice, telephone, radio, car horn). Notify the Operations/Site Manager and RCM when possible.
3. **Isolate** the affected spill area and establish control boundaries, if possible.
4. **Minimize** individual exposure to radiation and contamination. (e.g., move personnel upwind, upstream, or upgrade).
5. **Secure** unfiltered ventilation if the spill occurs in an enclosed space where building or area ventilation is in use and may cause the further spread of airborne contamination.

Supplemental actions regarding responses to spills of radioactive materials are as follows:

1. Establish PPE requirements for the spill response team entry (Radiological Control Manager).
2. Stabilize the material to prevent further spread (as directed by RCM/Environmental Compliance Manager).
3. Determine the extent of the spill area and verify the control boundaries already established (RCM/Environmental Compliance Manager).
4. Remove personnel who may have initially responded to the spill without PPE from the spill area and survey them for radioactive contamination (RCM).
5. Personnel who are identified as contaminated shall be decontaminated in accordance with the *Radiation Protection Program* and the *Health Physics Plan* wherever applicable.
6. Obtain air samples in the affected and adjacent spaces to assess the airborne radioactive contamination levels (RCM).
7. Initiate the reporting requirements as outlined in Section 4.
8. Develop and document a follow-up action plan for recovery of the spilled radioactive material (responsible contractor or subcontractor). The follow-up action plan must be approved by the Operations/Site Manager.
9. Initiate the spill incident investigation process as outlined in Section 5.

3.4 Handling Waste from Spills

Drums and containers used during spill cleanup shall meet the appropriate DOT, OSHA, and EPA regulations for the wastes that they contain. When practical, drums and containers shall be inspected, and their integrity ensured before being moved. Drums or containers that cannot be inspected before being moved because of storage conditions (e.g., buried beneath the earth, stacked behind other drums, stacked several tiers high in a pile) shall be moved to an accessible location and inspected before further handling.

3.4.1 Material Handling Equipment

Material handling equipment used to transfer drums and containers shall be selected, positioned, and operated to minimize sources of ignition related to the equipment from igniting vapors released from ruptured drums or containers.

3.4.2 Sampling

Sampling of drums shall be done in accordance with the *Industrial Hygiene Program* and its associated sampling and monitoring procedures developed for and available to employees and others at the specific Project worksite.

3.4.3 Shipping and Transport

Drums and containers shall be identified and classified before packaging for shipment. Drum- or container-staging areas shall be kept to the minimum number necessary to safely identify and classify materials and prepare them for transport. Staging areas shall be provided with adequate access and egress routes. Bulking hazardous wastes shall be permitted only after a thorough characterization of the materials has been completed.

4.0 Notification and Reporting Requirements

Notifications and reporting steps below shall be conducted according to the *Incident Reporting Procedure* and the *Occurrence Reporting Procedure*.

4.1 Notification Requirements

Notification requirements are as follows.

- Notifications to agencies and organizations other than the contractor and DOE shall be approved by and coordinated through the FCD, the Project Manager, and the Technical Assistance Contractor (TAC) Public Affairs Manager.
- The person or persons identifying a spill shall immediately notify the Operations/Site Manager of spills.
- The Operations/Site Manager shall notify the Project Manager, H&S Manager, and the Environmental Compliance Manager.
- The Operations/Site Manager, the H&S Manager, and the ESH&Q Manager shall categorize the spill event in accordance with the Occurrence Reporting and Processing System categorization criteria.
- The Operations/Site Manager shall verbally report the incident to contractor management and DOE.
- Petroleum product releases shall be reported to the Environmental Compliance Manager to determine notification or reporting requirements.
- Releases of hazardous substances above the reportable quantity must be verbally reported by the Project Manager to the National Response Center at 800-424-8802.

4.2 Reporting Requirements

Reporting requirements are as follows.

- Spills or releases of hazardous substances or radioactive materials must be reported using the Incident Report Form 1743 (located on the Project's SharePoint website), regardless of the volume of the spill or activity involved.
- Spills or releases of petroleum products (oils) exceeding 5 gallons must be reported using the Incident Report Form 1743 (located on the Project's SharePoint website).
- Quantities of radioactive material with total activity in excess of concentrations listed in 49 CFR 173, "Shippers − General Requirements for Shipments and Packaging," spilled outside of posted and controlled radiological areas while in transport shall be reported to DOE by the Project Manager.

5.0 Spill Incident Investigation

A spill incident investigation shall be as follows:

- A critique shall be initiated as soon as practicable following stabilization of the spill.
- If classification of the event or results of the critique indicate that further investigation is required, the Project Manager and the H&S Manager shall initiate additional investigation as required in the Condition Report, which is also reported on Form 1013.
- Lessons learned from the critique and investigation shall be formally documented and distributed in an effort to prevent a similar spill. Lessons learned reporting and processing shall be performed in accordance with *Moab UMTRA Project Operating Experience and Lessons Learned Procedure* (DOE-EM/GJ1568).

6.0 Records

All documentation created as a result of compliance with this Plan is considered a Project record and will be managed in accordance with the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545), which follows DOE orders, policies, and regulations for retention and maintenance of records.

7.0 References

29 CFR 1910 (Code of Federal Regulations), "Occupational Safety and Health Standards – General Industry."

29 CFR 1926 (Code of Federal Regulations), "Safety and Health Regulations for Construction."

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency/Incident Response Plan* (DOE-EM/GJ1520).

DOE (U.S. Department of Energy), *Moab UMTRA Project Emergency Response Key Personnel/Agencies and Contact Information* (DOE-EM/GJ1757).

DOE (U.S. Department of Energy), *Moab UMTRA Project Health and Safety Suspected Hazardous Residual Radioactive Material Response Procedure* (DOE-EM/GJRAC2160).

DOE (U.S. Department of Energy), *Moab UMTRA Project Industrial Hygiene Program* (DOE-EM/GJ1615).

DOE (U.S. Department of Energy), *Moab UMTRA Project Personal Protective Equipment Procedure* (DOE-EM/GJ1619).

DOE (U.S. Department of Energy), *Moab UMTRA Project Radiation Protection Program* (DOE-EM/GJ610).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

DOE (U.S. Department of Energy), *Moab UMTRA Project Spill Prevention, Control, and Countermeasure Plan* (DOE-EM/GJ1477).

DOE (U.S. Department of Energy), *Moab UMTRA Project Waste Management Plan* (DOE-EM/GJ1633).