



Permit
DEPARTMENT OF ENERGY
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544



MAR 31 2010

John Kieling
Manager
RCRA Permits Management Program
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303



Dear Mr. Kieling:

Subject: Transmittal of Class 1 Permit Modification to the Emergency Equipment Listing in the Contingency Plan of the Los Alamos National Laboratory Hazardous Waste Facility Permit, EPA ID No. NM0890010515-1

This letter transmits a Class 1 permit modification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit issued to the National Nuclear Security Administration and Los Alamos National Security, LLC (NNSA/LANS). The permit modification updates the emergency equipment listing in Appendix D-1 within the Attachment D Contingency Plan of the LANL Hazardous Waste Facility Permit. Appendix D-1 is revised to reflect updates to the emergency communication procedures with functionally equivalent alternatives to past practices at the permitted hazardous waste storage units at Technical Areas 50 and 54.

This modification has been prepared in accordance with the New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20.4.1.900 NMAC) (incorporating Code of Federal Regulations [CFR], Title 40 § 270.42(a)), revised March 1, 2009. The attached permit modification package includes a revised Appendix D-1 for insertion into the LANL Hazardous Waste Facility Permit. This revision replaces equipment with functionally equivalent equipment, upgrades equipment, or relocates emergency equipment listed in the permit as described in Appendix I, Section B.6.b of 40 CFR § 270.42. This modification does not change any emergency procedures at or remove equipment from the LANL permitted container storage units.

This modification is necessary to comply with 40 CFR § 264.52(e) by ensuring that the emergency equipment listing is up to date and accurate. Notification of this modification will be sent to the New Mexico Environment Department- Hazardous Waste Bureau maintained LANL facility mailing list in accordance with 40 CFR § 270.42(a)(1)(ii). Included herein are three hard copies and one electronic copy of this submittal (LA-UR-10-01849). The submittal includes a version with editing marks as well as a clean version of Appendix D-1.

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MAR 31 2019

If you have any comments or questions regarding this permit modification, please contact Gene Turner of my staff at (505) 667-5794, or Jack Ellvinger of Los Alamos National Security at (505) 667-0633.

Sincerely,



Donald L. Winchell, Jr.
Manager

EP: 17GT-244069

Enclosure

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Official Contract File, LASO

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**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

EMERGENCY EQUIPMENT AT TA-54, AREA L (continued)

Communications Equipment

Alpha numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area

Telephones located inside TA-54-32, TA-54-55, TA-54-62, and TA-54-1058

Fire alarm pull boxes are located at TA-54-215

Emergency paging system-loud speakers located throughout the site

Evacuation alarms are located adjacent to the fence line crash gates at Area L, at the northeast end of TA-54-32, the exterior west end of TA-54-215, and at TA-54-62

Additional equipment includes two-way radios and cellular phones

Description of General Capabilities

External and internal Laboratory communications which may be used in emergency situations are listed.

Fire alarm may be activated by any employee in the event of a fire to notify the LACFD and security personnel.

Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The evacuation alarm is a pulsating sound that can be heard throughout Area L.

The emergency paging system can be utilized to alert workers of an emergency situation as well as appropriate response actions. Also, personnel will carry cellular phones, pagers or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

Decontamination Equipment

Emergency shower and eye wash stations are located immediately east of TA-54-31, in TA-54-215, next to TA-54-35, south of TA-54-215, and inside TA-54-39

Material Safety Data Sheets (MSDS) are available hard copy or via online database at the facility

Description of General Capabilities:

Safety showers and eye washes are used by personnel who receive a chemical splash to skin or eyes.

Specific MSDS for the chemical should be obtained prior to working with the chemical to determine if the application of water is indicated for decontamination.

Personal Protective Equipment

Personnel at Area L are required to use appropriate personal protective equipment (PPE) to protect themselves from the hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation or during sampling activities.

Spill kits throughout Area L may contain PPE items such as: gloves, goggles, safety glasses, coveralls, and face shields.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

TA-50

Emergency equipment at TA-50-69, the Waste Characterization, Reduction, and Repackaging Facility (WCRRF):

FIRE CONTROL EQUIPMENT:

Two fire extinguishers are located in TA-50-69
A fire extinguisher is located at the TA-50-69 Outdoor Container Storage Unit (CSU)

Description of General Capabilities:

Fire extinguishers may be used by any qualified employee in the event of a small fire. They are ABC or BC rated units.

Three fire alarm pull stations are located in TA-50-69
A wet-pipe sprinkler system is located in TA-50-69
A fire hydrant is located west of TA-50-69 inside the fenced yard

Description of General Capabilities:

Personnel working at the TA-50-69 Outdoor CSU may use the pull stations at TA-50-69 in the event of a fire.

Fire alarms may be activated by any employee in the event of a fire to notify the LACFD and security personnel. Upon activation, fire alarm horns and strobes provide audible and visual signals for personnel notification.

The sprinkler system is heat activated at 100°C (212°F).

Fire hydrants provide water for fire fighting. All fire hydrants are supplied by an 8-inch water line connected to the 12 inch water main on Pecos Drive.

SPILL CONTROL EQUIPMENT:

Spill control kits are located in TA-50-69 and outside for use at the TA-50-69 Outdoor CSU.

Description of General Capabilities:

The spill kits may contain items such as absorbents (e.g. pillows, pads, and pigs) or weighted tarps that can be used in the event of a small spill.

COMMUNICATION EQUIPMENT:

Telephones ~~with public address (PA) capabilities~~ for internal and external communication are available for use by any employee. Alphanumeric pagers or cellular phones with page/text capabilities are utilized for employees. Employees can be notified of an emergency situation and appropriate response action through the use of a test message sent to the alphanumeric pagers of cellular phones with page/text capabilities. Two way radios may also be utilized for communication. The PA system can be heard at the TA-50-69 Outdoor CSU. Personnel working at TA-50-69 will have immediate access to emergency communication equipment either directly or through visual or voice contact with another employee.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Emergency equipment at TA-50-69, the Waste Characterization, Reduction, and Repackaging Facility (WCRRF), (continued):

COMMUNICATION EQUIPMENT (continued):

~~Additional communication equipment may include cellular phones~~

Description of General Capabilities:

Telephones ~~with PA capabilities~~ for internal and external communication are available for use by any employee. ~~Also, personnel will carry cellular phones, pagers, or two way radios.~~ Fire alarms are activated in the event of a fire.

DECONTAMINATION EQUIPMENT:

A safety shower is located in the main room of TA-50-69 and a personnel shower is located adjacent to the change room in TA-50-69

An eyewash station is located in the main room of TA-50-69

A portable eyewash station will be available during active waste management operations at the Outdoor CSU if waste with free liquids is being managed

MSDS are available hard copy or via online database

Description of General Capabilities:

Safety showers and eyewashes are used by personnel who receive a chemical splash to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with hazardous or mixed waste to determine if the application of water is indicated for decontamination.

PERSONAL PROTECTIVE EQUIPMENT:

Appropriate personal protective equipment (PPE) will be worn to protect from hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation and may be found in the spill kits or at various locations throughout the site.

OTHER:

Continuous air monitors, giraffe monitors, or other appropriate air monitoring equipment (as determined by health physics personnel) may be located in the container storage units for detection of airborne radioactive constituents.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Emergency equipment at TA-54-38, the Radioassay and Nondestructive Testing (RANT) Facility,
(continued):**

COMMUNICATION EQUIPMENT:

Evacuation alarm buttons are located at the high bay, the low bay, and at the main entrance to TA-54-38.

Telephones are located in TA-54-38 in the high bay, in the low bay, and outside the main entrance. An emergency paging telephone is also located outside the main entrance.

Alpha-numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area.

Additional equipment includes cellular phones two-way radios.

Description of General Capabilities:

The evacuation alarm provides an audible alarm that can be heard throughout TA-54-38 and TA-54-34.

Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The emergency paging phone can be utilized to alert workers of an emergency situation as well as appropriate response actions. Also, personnel will carry cellular phones, pagers, or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

Telephones in the high bay and low bay have public address (PA) capabilities for internal and external communication and are available for use by any employee.

Fire and evacuation alarms may be activated in the event of a fire or in case an evacuation is required.

DECONTAMINATION EQUIPMENT:

Safety showers and portable eyewash stations are available at TA-54-38 in the high bay and near the loading dock. The portable eyewash stations will be present during active waste management operations involving free liquids at these locations.

Material Safety Data Sheets (MSDS) are available hard copy or via online database.

Description of General Capabilities:

Safety showers and eyewashes are used by personnel who receive a chemical splash to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with hazardous or mixed waste to determine if the application of water is indicated for decontamination.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Emergency equipment at TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10
(continued):**

COMMUNICATION EQUIPMENT:

Alpha-numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area.

Emergency paging system- loud speakers located throughout the site.

Additional equipment includes cellular telephones and two-way radios.

Evacuation alarm buttons are located at or near TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10

Description of General Capabilities:

Telephones and alarms are located throughout Area G. Evacuation alarms have horns mounted on telephone poles throughout Area G. The evacuation alarm is an audible alarm that can be heard throughout Area G. Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The emergency paging system can be utilized to alert workers of an emergency situation as well as appropriate response actions.

Also, any personnel will carry cellular phones, pagers, or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

DECONTAMINATION EQUIPMENT:

A portable eyewash station is available at TA-54-230 during active waste management operations involving free liquids in this location.

Material Safety Data Sheets (MSDS) are available hard copy of via online database.

Description of General Capabilities:

Showers and/or eyewash stations are used by personnel who receive chemical exposure to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with mixed waste to determine if the application of water is indicated for decontamination.

Clean Version of Appendix D-1 for Insertion into Permit

APPENDIX D-1
Emergency Equipment

**APPENDIX D-1
EMERGENCY EQUIPMENT ***

Hazardous Materials (HAZMAT) Vehicles and Associated Emergency Equipment:

HAZMAT vehicles and trailers are located at Technical Area (TA) 64, Building 39 (TA-64-39). They are available to the Hazardous Materials Response Group for emergency response to all of the TAs at Los Alamos National Laboratory (LANL). HAZMAT is responsible for maintaining the supplies of appropriate emergency equipment in each vehicle and trailer.

The HAZMAT vehicles and trailers are equipped with safety and emergency equipment, personal protective clothing, and other supplies, which may include, but are not limited to, some or all of the following:

- Assorted personal protective equipment, T-shirts, and gloves
- Safety goggles, safety glasses, and face shields
- Totally encapsulating suits and boots
- Level A and B suits
- Flash suits
- Self-contained breathing apparatus (SCBA) and SCBA bottles
- Respirators and cartridges
- Hazardous chemical reference books and other reference materials
- Shovels
- Siphon pumps
- Assorted spill kits and absorbents
- Neutralizing solutions: acids, bases, and caustics
- Two-way radios, cellular phones, facsimile, and communication equipment
- Bottles of leak detector and leak repair kits
- Emergency repair packs
- HAZMAT bags
- Gas detectors and chemical monitoring equipment
- Radiological monitoring equipment
- Sponges and cleaners
- Warning signs and barricade tape
- Traffic control barriers
- Flashlights
- Cameras and film
- Knives
- Portable power supplies
- Warning and signal horns
- Harnesses and belts
- Decontamination equipment
- Sampling equipment
- Lifting equipment and vetter bags
- Assorted tools, tape, and other supplies
- Non-sparking tools

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Hazardous Materials (HAZMAT) Vehicles and Associated Emergency Equipment (continued):

Biological detection equipment
Chemical vacuums
Sandia foam
Plugging and diking equipment
Sample van equipped with a glovebox and analysis equipment

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

EMERGENCY EQUIPMENT AT TA-54, AREA L

Fire Control Equipment

- 2 fire hydrants located near the main site entrance to Area L and at the southeast corner of TA-54-62 inside Area L
- 6 Class ABC and BC rated fire extinguishers are located at Area L
Class D rated fire extinguishers are available at Area L if combustible metals are being managed
- 2 freeze-proof faucets are located east of TA-54-31
- 1 dry-pipe sprinkler system is located at TA-54-215
- 3 Dry chemical fire-suppression systems are located in storage sheds TA-54-68, TA-54-69, and TA-54-70

Description of General Capabilities:

The fire hydrants supply water at an adequate volume and pressure to satisfy the requirements of the New Mexico Administrative Code, Title 20, Chapter 4, Part 1 Subpart V, 264.32, revised October 1, 2003.

The fire extinguishers may be used by any qualified employee in the event of a small fire.

The automatic dry-pipe sprinkler system is heat activated. Security personnel and Los Alamos County Fire Department (LACFD) are alerted when this system has been activated.

Spill Control Equipment

- Shovels
- Oversized drums
- Absorbent (various locations at Area L)
- Heavy equipment from Area G available for any emergencies at Area L
- Bermed storage area
- Spill kits are located throughout Area L

Description of General Capabilities:

Pieces of heavy equipment from Area G may be used in the event of large spills.

Spill kits may include items such as: bags of absorbent, absorbent pads or socks, caustic neutralizer, acid neutralizer, and an inventory of tools and supplies for clean up of small spills.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

EMERGENCY EQUIPMENT AT TA-54, AREA L (continued)

Communications Equipment

Alpha numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area

Telephones located inside TA-54-32, TA-54-55, TA-54-62, and TA-54-1058

Fire alarm pull boxes are located at TA-54-215

Emergency paging system-loud speakers located throughout the site

Evacuation alarms are located adjacent to the fence line crash gates at Area L, at the northeast end of TA-54-32, the exterior west end of TA-54-215, and at TA-54-62

Additional equipment includes two-way radios and cellular phones

Description of General Capabilities

External and internal Laboratory communications which may be used in emergency situations are listed.

Fire alarm may be activated by any employee in the event of a fire to notify the LACFD and security personnel.

Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The evacuation alarm is a pulsating sound that can be heard throughout Area L.

The emergency paging system can be utilized to alert workers of an emergency situation as well as appropriate response actions. Also, personnel will carry cellular phones, pagers or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

Decontamination Equipment

Emergency shower and eye wash stations are located immediately east of TA-54-31, in TA-54-215, next to TA-54-35, south of TA-54-215, and inside TA-54-39

Material Safety Data Sheets (MSDS) are available hard copy or via online database at the facility

Description of General Capabilities:

Safety showers and eye washes are used by personnel who receive a chemical splash to skin or eyes.

Specific MSDS for the chemical should be obtained prior to working with the chemical to determine if the application of water is indicated for decontamination.

Personal Protective Equipment

Personal at Area L are required to use appropriate personal protective equipment (PPE) to protect themselves from the hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation or during sampling activities.

Spill kits throughout Area L may contain PPE items such as: gloves, goggles, safety glasses, coveralls, and face shields.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

TA-50

Emergency equipment at TA-50-69, the Waste Characterization, Reduction, and Repackaging Facility (WCRRF):

FIRE CONTROL EQUIPMENT:

Two fire extinguishers are located in TA-50-69
A fire extinguisher is located at the TA-50-69 Outdoor Container Storage Unit (CSU)

Description of General Capabilities:

Fire extinguishers may be used by any qualified employee in the event of a small fire. They are ABC or BC rated units.

Three fire alarm pull stations are located in TA-50-69
A wet-pipe sprinkler system is located in TA-50-69
A fire hydrant is located west of TA-50-69 inside the fenced yard

Description of General Capabilities:

Personnel working at the TA-50-69 Outdoor CSU may use the pull stations at TA-50-69 in the event of a fire.
Fire alarms may be activated by any employee in the event of a fire to notify the LACFD and security personnel. Upon activation, fire alarm horns and strobes provide audible and visual signals for personnel notification.
The sprinkler system is heat activated at 100°C (212°F).
Fire hydrants provide water for fire fighting. All fire hydrants are supplied by an 8-inch water line connected to the 12 inch water main on Pecos Drive.

SPILL CONTROL EQUIPMENT:

Spill control kits are located in TA-50-69 and outside for use at the TA-50-69 Outdoor CSU.

Description of General Capabilities:

The spill kits may contain items such as absorbents (e.g. pillows, pads, and pigs) or weighted tarps that can be used in the event of a small spill.

COMMUNICATION EQUIPMENT:

Telephones for internal and external communication are available for use by any employee. Alphanumeric pagers or cellular phones with page/text capabilities are utilized for employees. Employees can be notified of an emergency situation and appropriate response action through the use of a test message sent to the alphanumeric pagers of cellular phones with page/text capabilities. Two way radios may also be utilized for communication. Personnel working at TA-50-69 will have immediate access to emergency communication equipment either directly or through visual or voice contact with another employee.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Emergency equipment at TA-50-69, the Waste Characterization, Reduction, and Repackaging Facility (WCRRF), (continued):

COMMUNICATION EQUIPMENT (continued):

Description of General Capabilities:

Telephones for internal and external communication are available for use by any employee. Also, personnel will carry cellular phones, pagers, or two way radios. Fire alarms are activated in the event of a fire.

DECONTAMINATION EQUIPMENT:

A safety shower is located in the main room of TA-50-69 and a personnel shower is located adjacent to the change room in TA-50-69

An eyewash station is located in the main room of TA-50-69

A portable eyewash station will be available during active waste management operations at the Outdoor CSU if waste with free liquids is being managed

MSDS are available hard copy or via online database

Description of General Capabilities:

Safety showers and eyewashes are used by personnel who receive a chemical splash to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with hazardous or mixed waste to determine if the application of water is indicated for decontamination.

PERSONAL PROTECTIVE EQUIPMENT:

Appropriate personal protective equipment (PPE) will be worn to protect from hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation and may be found in the spill kits or at various locations throughout the site.

OTHER:

Continuous air monitors, giraffe monitors, or other appropriate air monitoring equipment (as determined by health physics personnel) may be located in the container storage units for detection of airborne radioactive constituents.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

TA-54 West

Emergency equipment at TA-54-38, the Radioassay and Nondestructive Testing (RANT) Facility:

FIRE CONTROL EQUIPMENT:

ABC rated fire extinguishers are available at TA-54-38 in the high bay, the low bay and at the loading dock, adjacent to the Outdoor CSU.

Description of General Capabilities:

Fire extinguishers may be used by any qualified employee in the event of a small fire.

Fire alarm pull boxes are located inside TA-54-38 at the main entrance, in the high bay, and in the low bay.

A dry-pipe sprinkler system is located throughout TA-54-38, including the loading dock area.

Description of General Capabilities:

Fire alarms may be activated by any employee in the event of a fire to notify the LACFD and security personnel. Security personnel and LACFD are alerted when the automatic dry-pipe sprinkler system has been activated.

The dry pipe sprinkler system is heat activated in the high bay and at the loading dock. It is smoke activated in the low bay.

One fire hydrant is located west of TA-54-38 near the entrance to TA-54 West.

Freeze-proof faucets are located on the west, south, and east sides of TA-54-38. A wall hydrant is located on the west side of the building.

SPILL CONTROL EQUIPMENT:

A mobile response kit is located at TA-54-38. The kit includes items such as: absorbent socks, pillows, and sheets; and plastic bags.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Emergency equipment at TA-54-38, the Radioassay and Nondestructive Testing (RANT) Facility,
(continued):**

COMMUNICATION EQUIPMENT:

Evacuation alarm buttons are located at the high bay, the low bay, and at the main entrance to TA-54-38.

Telephones are located in TA-54-38 in the high bay, in the low bay, and outside the main entrance. An emergency paging telephone is also located outside the main entrance.

Alpha-numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area.

Additional equipment includes two-way radios.

Description of General Capabilities:

The evacuation alarm provides an audible alarm that can be heard throughout TA-54-38 and TA-54-34.

Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The emergency paging phone can be utilized to alert workers of an emergency situation as well as appropriate response actions. Also, personnel will carry cellular phones, pagers, or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

Telephones in the high bay and low bay have public address (PA) capabilities for internal and external communication and are available for use by any employee.

Fire and evacuation alarms may be activated in the event of a fire or in case an evacuation is required.

DECONTAMINATION EQUIPMENT:

Safety showers and portable eyewash stations are available at TA-54-38 in the high bay and near the loading dock. The portable eyewash stations will be present during active waste management operations involving free liquids at these locations.

Material Safety Data Sheets (MSDS) are available hard copy or via online database.

Description of General Capabilities:

Safety showers and eyewashes are used by personnel who receive a chemical splash to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with hazardous or mixed waste to determine if the application of water is indicated for decontamination.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Emergency equipment at TA-54-38, the Radioassay and Nondestructive Testing (RANT) Facility,
(continued):**

PERSONAL PROTECTIVE EQUIPMENT:

Appropriate personal protective equipment (PPE) will be worn to protect from hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation and may be found in the spill kits or at various locations throughout the site or at adjacent TA-54 facilities. Gloves and goggles are available in the spill kit located at TA-54-38. All workers located within the operating limits of a crane (fixed or mobile) wear hard hats.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

TA-54

Emergency equipment at TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10:

FIRE CONTROL EQUIPMENT:

ABC and/or BC rated fire extinguishers will be located in TA-54-229, TA-54-230, TA-54-231, TA-54-232, and on Pads 1, 9, and 10.

Description of General Capabilities:

These portable, manually operated units are available for use by technicians and/or firefighters in the event of a small fire. Security personnel and the LACFD are alerted for larger fires.

Flame or smoke detection equipment and fire alarm pull stations will be located within structures at TA-54-229, TA-54-230, TA-54-231, and TA-54-232.

Description of General Capabilities:

Fire alarms may be activated by any employee in the event of a fire to notify security personnel and the LACFD. Security personnel and LACFD are also notified upon activation of the flame or smoke detectors.

The sprinkler systems will automatically activate in the event of a fire.

Several fire hydrants are located in Area G.

Description of General Capabilities:

The fire hydrants will supply water at adequate volume and pressure (i.e., approximately 800 gallons per minute and 90 pounds per square inch) to satisfy the requirements of the New Mexico Administrative Code, Title 20, Chapter 4, Part 1, Subpart V, 264.32, revised October 1, 2003.

SPILL CONTROL EQUIPMENT:

Spill control stations and/or portable spill kits are located at TA-54-229, TA-54-230, TA-54-231 and TA-54-232. Spill kits may include items such as: bags of absorbent, absorbent pads or socks, and an inventory of tools and supplies.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Emergency equipment at TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10 (continued):

COMMUNICATION EQUIPMENT:

Alpha-numeric emergency pagers or cellular phones with page/text capabilities are given to employees working in the area.

Emergency paging system- loud speakers located throughout the site.

Additional equipment includes cellular telephones and two-way radios.

Evacuation alarm buttons are located at or near TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10

Description of General Capabilities:

Telephones and alarms are located throughout Area G. Evacuation alarms have horns mounted on telephone poles throughout Area G. The evacuation alarm is an audible alarm that can be heard throughout Area G. Employees can be notified of an emergency situation and appropriate response actions through the use of a text message sent on the emergency alpha-numeric pagers or cellular phones with page/text capabilities.

The emergency paging system can be utilized to alert workers of an emergency situation as well as appropriate response actions.

Also, any personnel will carry cellular phones, pagers, or two-way radios or will have immediate access to communication equipment through visual or voice contact with another employee.

DECONTAMINATION EQUIPMENT:

A portable eyewash station is available at TA-54-230 during active waste management operations involving free liquids in this location.

Material Safety Data Sheets (MSDS) are available hard copy of via online database.

Description of General Capabilities:

Showers and/or eyewash stations are used by personnel who receive chemical exposure to the skin or to the eyes. Specific MSDS for the chemical(s) being managed should be obtained prior to working with mixed waste to determine if the application of water is indicated for decontamination.

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Emergency equipment at TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pads 1, 9, and 10
(continued):**

PERSONAL PROTECTIVE EQUIPMENT:

Appropriate personal protective equipment (PPE) will be worn to protect from hazards found in the workplace under normal conditions. This PPE may include gloves, steel-toed shoes, and safety glasses. Additional PPE may be required during an unusual hazardous situation and may be found in the spill kits or at various locations throughout the site. Gloves and goggles or safety glasses are available in many of the spill kits located throughout the site.

OTHER:

Continuous air monitors, giraffe monitors, or other appropriate air monitoring equipment (as determined by health physics personnel) are located in many of the container storage units for detection of airborne radioactive constituents.

Heavy equipment available on site includes: scraper, back hoe, bulldozer, and front-end loader. Vehicles are also available to evacuate personnel from Area G (all-terrain vehicles, pick-up trucks, flat-bed trucks, micro trucks and vans).

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Supplemental emergency equipment and personnel available from the
Los Alamos County Fire Department (LACFD):**

Supplemental emergency equipment available from the LACFD may include, but is not limited to, some or all of the following:

- Fire engines
- Mini-tankers with compressed air foam capability
- Modular ambulances
- Rescue vehicles
- Crash-Fire-Rescue (CFR) units
- Water tankers with compressed air foam capability
- SCBA units
- SCBA air tanks
- Remote air system for confined space rescue
- Ladder truck with pump
- Personnel with Hazardous Material First Response Operational Level Training
- Personnel with Basic Emergency Medical Technician training
- Personnel with Advanced Life Support training

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Supplementary emergency equipment and personnel available from
KBR-Shaw-LATA (KSL):**

Supplemental emergency equipment available from KSL may include, but is not limited to, some or all of the following:

TRANSPORTATION EQUIPMENT:

Pickups, 1/2 through 3/4 ton
Trucks, 1 through 3 ton
Vans, panels, and carryalls
Buses

SPECIAL EQUIPMENT:

Graders
Loaders
Snowplows and snow blowers
Bulldozers
Scrapers
Semi trailers
Chain saws
Street flushers
Mobile transceivers
Generators
Handsets (2-way)
Pageboys (1-way)
Welders
Mobile site logistics support equipment/associated heavy equipment
Fully equipped spill response unit
Utilities equipment and emergency utility support
Fuel trucks
Light banks
Dumps trucks
Backhoes
Potable water trucks
Cranes
Forklifts

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

**Supplementary emergency equipment and personnel available from
KBR-Shaw-LATA (KSL) (continued):**

TRAINED PERSONNEL:

Heavy equipment operators
Dispatchers
Mechanics
Power saw operators
Radio and telephone operators
Truck drivers
Rodent/Pest Control personnel
HAZMAT response/cleanup personnel
Welders
Electricians

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Emergency equipment and personnel at the Occupational Medicine Clinic (667-7251):

At TA-3 (SM-1411) Central Clinic:

Emergency equipment and supplies available from the clinic may include, but are not limited to, some or all of the following:

PERSONNEL:

Physicians
Physician's Assistants
Nurses
X-ray Technician
Clinical Laboratory Technicians
Clinical Testing Technicians
Clinical Psychologist
Counselors

SPECIAL EQUIPMENT-PORTABLE:

Multi-channel emergency receiver-base station
Two-way radio on the State Med Net, The LANL Emergency Management channel and the LANL Health-Safety Net
Cardiac monitors and defibrillators
Crash cart emergency equipment with E-tank oxygen (O₂)
Portable physicians' bag with medications
Portable suction unit
Portable stretchers (ambulance, gurney, folding)
Wheelchairs
O₂ tanks
Manual resuscitators
Intravenous (IV) stands
IV solutions
Otosopes/ophthalmoscopes
Portable sphygmomanometers
Stethoscopes
Anticontamination apparel
Eye irrigation solution
First-aid kits
Extraction and cervical collars, crutches, canes
Suture sets
Protective apparel
Morgan lens irrigation sets
Decontamination equipment (portable)

**APPENDIX D-1
EMERGENCY EQUIPMENT
(continued)**

Emergency equipment and personnel at the Occupational Medicine Clinic (667-7251) (continued):

At TA-3 (SM-1411) Central Clinic (continued):

SUPPLIES-GENERAL:

- Bedding/pillows
- Rescue blankets
- Burn blankets
- Thermal/icing pouches
- Multi-trauma dressings, surgical and first aid supplies
- Disposable ice bags

SPECIAL FACILITIES - NONPORTABLE:

- Fully equipped decontamination room at the Occupational Medicine Clinic
- Completely equipped emergency room with ambulance entrance
- Emergency lighting system
- Complete X-ray suite
- Protective clothing and wound counters
- 12-lead electrocardiograph
- Fully equipped crash cart with Life Pak, defibrillator/external pacer intubation equipment, emergency medications.
- Fully equipped decontamination room at Los Alamos Medical Center (LAMC) adjacent to the LAMC emergency room

TRANSPORTATION:

Full ambulance service is available within minutes to the central facility.

COMMUNICATION:

Base station on State Medical Net and LACFD trunked radio system.

^a Equipment types and locations are subject to change.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



James C. Cantwell
Associate Director
Environment, Safety, Health, & Quality
Los Alamos National Laboratory
Operator

3/29/10

Date Signed



Donald L. Winchell, Jr.
Manager, Los Alamos Site Office
National Nuclear Security Administration
U.S. Department of Energy
Owner/Operator

3/31/10

Date Signed