

# **HAZARDOUS WASTE MANAGEMENT**

## **Contingency Plan and Emergency Procedures For Spills of Hazardous Materials**

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## PREFACE

This document, HAZARDOUS WASTE MANAGEMENT CONTINGENCY PLAN AND EMERGENCY PROCEDURES FOR SPILLS OF HAZARDOUS MATERIALS, (herein referred to as Contingency Plan), provides written instructions on how to take care of spills of hazardous substances. It is intended to meet the requirements of the Utah Hazardous Waste Rules and Subpart D of the EPA Resource Conservation and Recovery Act.

This CONTINGENCY PLAN does not replace, nor is it to be used instead of, the ATK Launch Systems - Promontory EMERGENCY AND DISASTER RESPONSE PLAN, or any other plan which outlines procedures to be followed during general emergencies, disasters, civil disturbances, riots, bomb threats, etc.

Most spills involving hazardous substances will not require use of the EMERGENCY AND DISASTER RESPONSE PLAN. Spills that create an emergency situation involving possible injury to personnel or damage to property will require use of the EMERGENCY AND DISASTER RESPONSE PLAN to take care of the emergency. This CONTINGENCY PLAN applies to containment and cleanup of a hazardous waste spill.

Definitions in the HAZARDOUS WASTE MANAGEMENT CONTINGENCY PLAN AND EMERGENCY PROCEDURES reflect EPA and State of Utah environmental language while those in the EMERGENCY AND DISASTER RESPONSE PLAN reflect OSHA, UOSH, FEMA, and ATK Launch Systems language. The user must be careful not to be confused by differences in language between these documents and must evaluate the applicability of each document to the particular situation.

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**I. INTRODUCTION**

**A. PURPOSE**

This plan may be activated by requesting emergency response on phone number 2222 or 911.

The purpose of this Contingency Plan and Emergency Procedures is to set forth responsibilities, establish organizational structure, and outline the procedures required to ensure effective warning, response, and control to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

**B. SCOPE**

This organizational plan is intended to meet requirements of the Utah Hazardous Waste Management Rules and Subpart D of the Resource Conservation and Recovery Act.

The provisions of this plan will be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents at one of the permitted facility that could threaten human health or the environment. This plan specifically addresses company actions to be initiated in the event of a spill or release of hazardous materials.

**C. NOTIFICATION**

Incidents covered by this contingency plan and which meet applicable State of Utah and U.S. EPA reporting requirements will be reported to the appropriate agencies by Environmental Specialists. The Environmental Specialist should confer with the Director or Manager of Environmental Services prior to notification.

**D. POSTING**

Copies of the Contingency Plan and all revisions must be:

1. Maintained at the facility and the Fire Department's Spill Response vehicle.
2. Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services. (Arrangements have been made between ATK Launch Systems – Promontory and the hospitals located at Brigham City and Tremonton regarding emergency services that would be provided as required. Letters of agreement are kept in the Environmental Services Central Files.)

**E. REVISIONS AND UPDATING**

This contingency plan will be reviewed and amended whenever:

1. Applicable regulations are revised.
2. The plan fails in an emergency.
3. The facility changes its design, construction, operations, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or release of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.

4. The list of emergency coordinators change.
5. The list of emergency equipment changes.

## **F. DEFINITIONS**

1. **Disaster** - An event in which loss of life, serious and/or multiple injuries, major property or environmental damage, or major disruption of normal operations has occurred. This includes serious fires or major hazardous material spills, explosions, injuries to multiple people, and acts of nature such as floods, violent storms, or earthquakes.
2. **Discharge** - The accidental or intentional spilling (see Spill), leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste on or into the air, land, or water.
3. **Emergency** - A situation which, if not quickly controlled, can lead to death, serious and/or multiple injuries, major loss or damage to property, significant damage to the environment, or disruption of normal operations.
4. **Emergency Command Unit** - The group of personnel selected by the emergency commander to assist in the full scope administration of the emergency.
5. **Emergency Commander** - The General Manager or his designee, as head of the Command Unit, is responsible for the overall direction, coordination, and function of all units charged with providing countermeasures to cope with conditions and/or events within the scope of this plan. The Command Unit will consist of any and all persons selected by the Emergency Commander.

### ***NOTE***

*The Emergency Commander will be the head of the Command Unit for all civil disturbances, bomb threats, national emergencies, and natural disasters.*

The Command Unit will operate from a pre-designated Emergency Operations Center specified by the Emergency Disaster Response Plan or the Emergency Commander.

6. **Emergency Operations Center (E.O.C.)** - The location of senior management where decisions and incident specific policies are made.
7. **Environmental Specialist** - The Environmental Specialist is the Spill Team Leader from Environmental Services. He or his designated alternate will assist the Incident Commander in the evaluation of the impact on the environment resulting from any emergency, disaster, or hazardous substance discharge.

### ***NOTE***

*When required, notification of Federal, State, and/or local environmental agencies shall be through the Environmental Specialist. Company policy requires that the event be discussed with the Vice President of the applicable division and ATK Corporate Environmental.*

8. **Fire Brigade** - A group of employees, generally from maintenance, who have received HAZWOPER training and are called on as needed to assist the full-time fire department in emergency response.

9. **Fire Warden** - A designated individual assigned in advance to assist the fire department in evacuation procedures and give information on the building and surrounding area.
10. **Hazardous Waste** - Identified in 40 CFR 261 and in Utah Hazardous Waste Management Rules, Section 2.1 on the basis of specific listed material and general characteristics. Specific listed wastes are found in these documents. The EPA regulations provide detailed technical specifications of four characteristics:
  - Ignitable (D001) - An ignitable compressed gas, an oxidizer, a liquid having a flashpoint < 140<sup>E</sup>F, or a non-liquid capable of causing fire, under standard temperature and pressure, through friction, absorption, moisture, or spontaneous chemical changes.
  - Corrosive (D002) - A solid waste that (1) is aqueous and has a pH < 2 or > 12.5; or (2) is a liquid and has a corrosion rate > 0.25 inches/year on steel.
  - Reactive (D003) - A solid waste that:
    - a. Is unstable and readily undergoes violent change without detonating.
    - b. Reacts violently with water.
    - c. Forms potentially explosive mixtures with water.
    - d. Generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment when mixed with water.
    - e. Is a cyanide or sulfide bearing waste which can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment when exposed to pH conditions between 2 and 12.5.
  - TCLP Toxicity - (as determined by Toxicity Characteristic Leachate Procedures) - Presence of certain listed toxic materials at levels greater than those specified in the regulation.
11. **Chemical Safety Software EMS-E** - a computer based system which contains a scanned image of the MSDS, plus additional safety and disposal information.
12. **Hazardous Waste Profile Data (HWPD) Sheet** - An ATK document that lists all EPA, DOT, and chemical information needed for marking, labeling, and identifying waste streams on plant.
13. **Hazardous Waste Operations and Emergency Response (HAZWOPER)** - Refers to specific training requirement for handling hazardous materials and for emergency operations. These requirements are found in 29 CFR 1910.120.
14. **Human Resource Coordination** - An intermediate between management and personnel who deals with employee concerns and interests.
15. **Incident Commander/Emergency Coordinator** - The Incident Commander will be the on-duty Assistant Fire Chief/Incident Commander.

The Incident Commander will direct the activities of all Field Units from a designated control

point at the scene of the emergency, disaster, or other event.

The Security Manager will be the Incident Commander for countermeasures in situations caused by hostile persons.

The Fire Prevention Captain will act as Incident Commander until relieved by an Assistant Fire Chief.

The following items are identified as principles for the Emergency Commander and Incident Commander to apply to the unique circumstances of the emergency or disaster:

- a. Assist the injured.
  - b. Stabilize situation and site.
  - c. Assure evidence is not destroyed, lost, or moved.
  - d. Record situation through text, photographs, videos, and/or mapping.
  - e. Notify State and local officials.
  - f. Secure and admit only qualified essential personnel to the site.
  - g. Debrief participants.
16. **Material Safety Data Sheet (MSDS)** - Provides information on safe handling , proper PPE, and disposal information for each chemical. This document is prepared by the chemical manufacture. For additional information, contact your local Industrial Hygiene representative.
17. **Non-sudden Release** - The accidental discharging (see Discharge), spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous wastes or materials which, when spilled become hazardous wastes, into or on any land or water over an extended period of time. This also includes spills onto asphalt or concrete pads.
18. **Reportable Spill (Discharge)** - A hazardous waste spill which must be reported to the Utah Department of Environmental Response and Remediation, National Response Center and/or other applicable Federal, State or local authorities. The Utah Hazardous Waste Management Rules list reportable spill quantities as:
- a. One kilogram (2.2 lb) of material in accordance with R315-9-1(b)(1). A spill of a lesser quantity must be reported if there is a potential threat to human health or the environment.
  - b. One-hundred kilograms (220 lb) of hazardous waste or material which, when spilled, becomes hazardous waste, in accordance with R315-9-1(b)(2). A spill of a lesser quantity must be reported if there is a potential threat to human health or the environment.
  - c. Subpart J of 40 CFR Part 265 of the Resource Conservation and Recovery Act stipulates that a spill of 1 lb from a leaking hazardous waste sump is a reportable quantity.

***NOTE***

*For complete descriptions and listings, contact Environmental Services or refer to R315-9 of the Utah Hazardous Waste Management Rules.*

The following is a partial list of materials used at ATK and the quantities which, if spilled, would require State or Federal notification:

	EPA	Utah
<u>Material</u>	<u>Quantity</u>	<u>Quantity</u>
Acetone	5000 lbs.	220 lbs.
Methanol	5000 lbs.	220 lbs.
Methylchloroform	1000 lbs.	220 lbs.
Methylene Chloride	1000 lbs.	220 lbs.
Methyl Ethyl Ketone	5000 lbs.	220 lbs.
Methyl Isobutyl Ketone	5000 lbs.	220 lbs.
Nitroglycerin	10 lbs.	2.2 lbs.
Propellants, reactive materials (HMX) oxidizers (AP)	100 lbs.	220 lbs.
Sodium Azide	1000 lbs.	2.2 lbs.
Toluene	1000 lbs.	220 lbs.
Xylene	100 lbs.	220 lbs.

19. **Solid Waste** - Any discarded material that is a solid, liquid, semi-solid or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations and is not excluded under 40 CFR 261.4(a), 260.30, or 260.31.
20. **Spill** - The accidental discharging (see Discharge), spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous wastes or materials which, when spilled become hazardous wastes, into or on any land or water. This also includes spills onto asphalt or concrete pads.
21. **Environmental Services** - A department with expertise in the areas of hazardous waste, air and water management, including environmental regulations in these areas.

## G. PLANT LOCATIONS AND SITE INFORMATION

1. The ATK Launch Systems – Promontory (ATK) plant is located in Box Elder County approximately 30 miles northwest of Brigham City. The 30-square mile plant site is remote from any major population centers and is reasonably isolated from ranches located at varying distances from the area boundaries. The plant site is composed of four major areas in which manufacturing and testing activities take place: South Plant, North Plant, Test Area, and Plant 3. There are approximately 675 buildings located on the plant site, (See Appendix I for facility site maps).

ATK owns and operates these 4 areas. All of these areas are contiguous and waste disposal is managed by one organization.

From the beginning of operations in 1956 to the present time, plant activities have encompassed a wide range of programs requiring the production of solid rocket propellants, rocket motor testing, and industrial support necessary to achieve each program's objectives. Solid rocket motors manufactured during this period vary from motors containing 7-9 lb of propellant to 1,100,000 lb. Programs have included Space Shuttle SRM, Peacekeeper, Trident, SRAM, HARM, Standard, Genie, Minuteman, Poseidon and a variety of ground and air launched flares.

2. The plant site has eight hazardous waste treatment and storage facilities: Burning Grounds at M-136, and M-225; Drum Storage areas at E-501 and M-186; the T-29B Hydrazine Dilution Facility; the M-705S Hazardous Waste Consolidation Room; and the solid propellant waste storage facilities at building M-629 and storage pad S-633.. The site maps and evacuation plans for these facilities are shown in Appendix I.

These eight facilities serve as waste management units for the entire facility. Reactive wastes treated at the burning grounds include waste propellants, waste explosives, oxidizers, or solid waste contaminated with propellants, explosives, or oxidizers. No propellants or explosives are ever stored in the drum storage areas; hazardous wastes that are flammable, toxic, or corrosive are stored in these units. The Hydrazine Dilution Facility at T-29B dilutes waste hydrazine to between 5 to 50 percent by volume for shipment to an off-plant disposal site. The M-705 Wastewater Treatment Facility treats hazardous and industrial waters from building sumps. Hazardous wastes are consolidated and lab packed at the M-705S Hazardous Waste Consolidation Room.

3. Approved hazardous waste accumulation areas are described in Table I.
4. Fire hydrants are located as follows: 101 hydrants in the Administrative and Manufacturing area, 95 at North Plant, 47 in the Test Area, and 9 in Plant 3. Static and dynamic pressure heads have been measured for each hydrant and the Fire Department maintains this information. The fire protection system at the plant site meets the NFPA codes for fire protection. ATK owns and operates two pumper fire engines and two brush trucks which are used for emergency response.

The following water tanks are interconnected:

<u>Location</u>	<u>Capacity (gal)</u>
X-1	200,000
X-2	20,000
M-131	50,000
M-132	50,000
M-133	100,000
M-587 (North Plant)	1,000,000
M-696	20,000
T-59 (Test)	1,000,000

The M-203 (Propellant Development Area) water tank with a 100,000 gallon capacity is not interconnected to the other tanks.

Fire hydrants throughout the plant are color coded according to capacity.

<u>Color Code</u>	<u>Flow Capacity (gpm)</u>
Green Fire Hydrant	1,000 or more
Orange Fire Hydrant	500 - 1,000
Red Fire Hydrant	500 or less

5. Information depicting the capacity, location, and practical consequences of a catastrophic failure of large hazardous material storage areas is found in Appendix II C, p.67.
6. All buildings with 10 or more regular occupants have an evacuation plan posted at all major exits of the building. (See Appendix I for the site maps and evacuation routes of the hazardous waste treatment and storage facilities).

## **H. PREVENTION OF RECURRENCE OR SPREAD OF FIRES, EXPLOSIONS, OR RELEASES**

1. There are many steps that can be taken to prevent the recurrence and spread of fires, explosions, or releases at the drum storage areas, burning grounds, and operating buildings. These include limiting propellant quantities placed in the burning trays, following safe handling procedures, personnel training, segregating incompatible and reactive materials in the burning trays and in the drum storage areas, practicing good housekeeping procedures, proper labeling, regular inspections, and separating the burning trays by safe distances. These procedures are outlined in company operating manuals.
2. Each fire, explosion, or release into the environment is unique. The Incident Commander must be an experienced individual who will take all possible steps to prevent a recurrence, to limit the extent of the damage, and to stop the discharge. These steps may include:
  - a. Stopping processes and operations.
  - b. Collecting and containing released wastes.
  - c. Removing and isolating containers.
  - d. Preventing additional harm to the environment through knowledge of the potential hazards associated with storage areas (found in Appendix II, A and B, pp. 65 and 66, their locations, capacities, and identification).
3. User organizations conduct regular inspections on items such as bulk storage containers that store hazardous wastes or materials which, if released to the environment, would become hazardous wastes. Audits are taken on volumes of stored materials versus consumption to ensure that non-sudden releases are not occurring. If a non-sudden release of materials is discovered, steps are taken immediately to minimize the impact on the environment.

## **II. REPORTING PROCEDURES AND INCIDENT IDENTIFICATION**

### **A. EVACUATION CRITERIA**

1. A fire that is a threat to human safety.
2. A spill that is a threat to human safety.

### **B. IDENTIFICATION OF A HAZARDOUS WASTE IN A SPILL**

1. The building personnel working the operation identify the material.
2. The Material Safety Data Sheet (MSDS) is referred to for chemical constituents, health hazards and protective clothing.
3. The Hazardous Waste Profile Data sheet, Chemical Safety Software EMS-E, or MSDS is referred to for proper disposal of the waste.

### **C. REPORTING OF EMERGENCY INCIDENTS**

1. Spilled material is reported to Security.
2. Security contacts the Environmental Service's Spill Advisory Team and Safety for technical support and advice.
3. Environmental Services contacts the State and EPA to report the incident (if required).
4. Environmental Services obtains the log from Security to prepare the written report to the State.
5. Within 15 days, Environmental Services submits the written report to the State and maintains a permanent copy in the Environmental Services' Central File as required.

### **D. PERSONNEL RESPONSIBILITIES**

#### **1. EMERGENCY MANAGER**

- a. At all times, there shall be at least one employee either present on the facility premises or on call with the responsibility for coordinating all emergency response measures.
- b. The facility emergency coordinator is thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of manifests and all other records within the facility, and the facility layout, or has immediate access to persons with this information.
- c. This person shall have the authority to commit the resources needed to carry out the contingency plan.
- d. Arranges for and directs a spill contingency plan simulation.

#### **2. EMPLOYEES, FIRST LINE SUPERVISORS AND FIRE WARDENS**

- a. Report all fires or emergencies by activating the fire alarm or calling the emergency number.
- b. Report from a safe telephone location:  
  
Your name and phone number  
Type of incident (fire, explosion, injury, spill, etc.)  
Location of incident
- c. Stay on the line when possible until released by the emergency operator.
- d. Do not attempt to fight fires involving live or possibly toxic hazardous materials.
- e. Do not attempt to contain spills that are beyond capability or training.

#### **3. FIRST LINE SUPERVISORS**

- a. Ensure personnel evacuate buildings or areas to the assembly point indicated on the Emergency/Evacuation Plan located in each building.

**NOTE**

*Handicapped personnel must be provided priority and assistance during evacuation and assembly.*

- b. Advise the Fire Captain and the Incident Commander of conditions at the scene.
- c. Account for all employees that were in or assigned to the affected building or area.
- d. Report any injured or missing personnel to the Incident Commander.
- e. Remain at the assembly point until released by the Incident Commander.
- f. Notify appropriate Safety Department and fill out a Mishap Report.

4. INCIDENT COMMANDER

- a. Initiate the first response actions.
- b. Contact line supervision at the assembly point to determine the details of the situation:
  - i. Nature of incident
  - ii. Number of personnel injured or not accounted for and the location of their last known assignment.
  - iii. Location and type of hazardous materials that may be exposed to fire or explosion (Quantity Distance Criteria).
- c. Applicable Quantity Distance Criteria.
- d. Assume control of emergency area.
- e. Declare severity of event such as an emergency or disaster as appropriate.
- f. Establish emergency scene, coordinate road blocks, cordon the site, and control entry/exit from the area.
- g. Make an initial assessment of situation.
- h. Notify the Security Radio Dispatcher as appropriate, close the switchboard, if absolutely necessary. The Environmental Specialists must be included if a building deluge system has been activated and the building sump has overflowed or another known spill of hazardous material has taken place.
- i. Identify safe response routes for follow-on units.
- j. Coordinate activities with other emergency units.
- k. Commit rescue and first aid crews as necessary.
- l. Obtain emergency rescue and ambulance as required.
- m. Keep the Emergency Commander informed of the emergency situation.
- n. Request outside assistance from the EOC as needed.

- p. Check with building's supervision to identify propellant ingredients and hazardous constituents in any building or building sump which must be pumped by Water Operations personnel. Evaluate what hazards, if any, exist which may hinder safe access to the building.
- q. Perform actions in accordance with 29 CFR 1910.120 (HAZWOPER).

5. SECURITY

- a. Set up road blocks as directed by the Incident Commander to preclude unauthorized entry of personnel and provide clear traffic flow for emergency vehicles.
- b. Coordinate with Incident Commander to ensure orderly evacuation of personnel.
- c. Provide protection for classified information, valuable records, and special equipment.
- d. Ensure protection of Company and Government property from theft or sabotage.
- e. Provide proper disposition, storage, and protection of classified material in accordance with the Department of Defense Industrial Security Manual.
- f. Establish perimeter boundary for emergency scene, set up road blocks, cordons, etc.
- g. Above actions must be consistent with HAZWOPER requirements.

6. SECURITY RADIO DISPATCHER

- a. When directed by the Incident Commander, notify appropriate personnel in accordance with the *Emergency and Disaster Response Plan*.
- b. Monitor and record all emergency radio communications, and establish required communications between radio units.
- c. Upon direction of the Incident Commander, notifies appropriate ATK management.

7. TELEPHONE OPERATORS

- a. When directed by the Incident Commander, refuse incoming and outgoing calls unless directed otherwise by the Emergency Commander.

8. INDUSTRIAL HYGIENIST

- a. Report to the Incident Commander at the assembly point or Field Command Post.
- b. Advise the Incident Commander on emergencies involving toxic chemical or radiation hazards.
- c. Perform the following activities as necessary:
  - i. Sample air at the scene, including any sumps which have to be pumped. (if determined to be necessary by the Industrial Hygienist (IH) on the scene)

- ii. Monitor radioactivity at the scene. (if determined to be necessary by the IH on the scene)
  - iii. Advise Emergency Response Team concerning proper decontamination controls.
  - iv. Notify Medical Services of personnel exposure to toxic chemicals or radioactive materials.
  - v. Advise the Incident Commander to notify public health authorities.
- d. Performs these duties in accordance with HAZWOPER requirements.
9. MAINTENANCE CRAFTS PERSONNEL
- a. Respond to all alarms when notified by the Security Police Radio Dispatcher and report to the Incident Commander at the command post.
  - b. Control distribution of air, water, steam, and electrical power as directed by the Incident Commander.
  - c. Provide equipment, barricading, and shoring as necessary per direction of Incident Commander.
  - d. As Fire Brigade, assist when needed.
  - e. Provide construction type materials and services for containment of hazardous material spills.
  - f. Performs these duties per direction of Incident Commander.
10. ENVIRONMENTAL SERVICES PERSONNEL
- a. Report to the Incident Commander at the command post, when notified by Security Police Radio Dispatch.
  - b. Perform duties as directed by the Incident Commander after material to be collected has been identified, any hazards associated with the material have been identified, and safe procedures to handle the material have been established.
  - c. Perform these duties in accordance with HAZWOPER requirements.
  - d. Advise the Incident Commander on potential environmental hazards, safe handling, and disposal options.
11. MEDICAL SERVICES PERSONNEL
- a. Remain at or report to the Dispensary to receive and treat patients.
  - b. Report to the emergency area when requested by the Incident Commander.
  - c. Coordinate with surrounding community hospitals and doctors for the receipt and treatment of injured.
  - d. Requisition supplemental medical supplies, equipment, and personnel as needed. May request helicopter transportation in life or death situations.

- e. Conduct and supervise treatment for injured personnel.
  - f. Review MSDS and other relevant information, and transmit same to receiving hospital.
12. TRANSPORTATION PERSONNEL (IN-PLANT TAXI SERVICE)
- a. Coordinate with Incident Commander to ensure adequate transportation of plant personnel.
13. EMERGENCY COMMANDER
- a. Control and coordinate overall activities of the emergency situation. The Emergency Commander will work from the Emergency Command Center, and will assist and direct the On-Scene Incident Commander as needed.
  - b. Evaluate situation and determine need to convene the Emergency Command Unit.
  - c. Direct the Telephone Operators to open or close the switchboard according to the nature of the emergency.
  - d. Open the Emergency Operations Center as necessary.
  - e. Identify the disaster potential posed by the emergency.
  - f. Make the disaster declaration when necessary (disaster responsibilities are listed in Section III).
14. PHOTOGRAPHER
- a. Report to the Incident Commander at the Command Post.
  - b. Advise the Incident Commander on photo coverage.
  - c. Photograph the scene as directed.
  - d. Expedite printing and delivery of the photographs.
  - e. Interpret the photographs as required.
15. HUMAN RESOURCES COORDINATOR
- a. Provide food and assistance with personal needs for emergency team members and those affected.
  - b. Notify next of kin of injured persons when advised by Emergency Commander. (See Section IV, the *Emergency and Disaster Response Plan* for procedures).
16. ENVIRONMENTAL SPECIALIST
- a. Assess possible environmental hazards resulting from the incident including assessment of spills caused by the activation of a building deluge system which in turn caused the building sump to overflow.
  - b. Initiate reports required by the Comprehensive Environmental Response

Compensation and Liability Act (CERCLA) and Utah Solid and Hazardous Waste Regulations.

- c. Determine (along with the responding local emergency agency) whether the facility has had a discharge, fire, or explosion which could threaten the environment outside of the facility. Assure immediate implementation of emergency procedures.
- d. Notify the State and Federal environmental agencies as required.
- e. The Environmental Specialist contacts either the government official designated as the on-scene coordinator or the National Response Center, (800) 424-8802, and Utah Dept. of Environmental Response and Remediation (DERR) at (801) 536-4123 to relaying the following information:
  - i. Name and telephone number of reporter.
  - ii. Name and address of facility.
  - iii. Time and type of incident (such as discharge, fire, etc.).
  - iv. Name and quantity of material(s) involved, to the extent known.
  - v. The extent of injuries, if any.
  - vi. The possible hazards to human health or to the environment outside the facility.
- f. Notify the Corporate Environmental Engineer if the spill is reportable.

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- g. Utah Hazardous Waste Management Rules require that the Environmental Specialist note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Director of the Division of Waste Management and Radiation Control. The report must include:
  - i. Name, address, and telephone number of the owner or operator.
  - ii. Name, address, and telephone number of the facility.
  - iii. Date, time, and type of incident (such as fire, explosion, etc.).
  - iv. Name and quantity of material(s) involved.
  - v. The extent of injuries, if any.
  - vi. An assessment of actual or potential hazards to human health or the environment where this is applicable.
  - vii. Estimated quantity and disposition of material recovered from the incident.
- h. Notify the community emergency coordinator for the local emergency planning committee in compliance with requirements outlined in 40 CFR 355.40, where

applicable.

- i. Immediately after an emergency, the Environmental Specialist must provide direction for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a discharge, fire, or explosion at the facility.
- j. The Environmental Specialist and the Incident Commander must ensure that, in the affected area(s) of the facility:
  - i. A determination is made who will do the spill remediation work (Building Personnel, ATK Spill Remediation Team, or Off-Site Contractor).
  - ii. No waste that may be incompatible with the discharged material is stored or disposed of until cleanup procedures are completed; and
  - iii. All emergency equipment listed in the contingency plan is cleaned and ready for its intended use before normal operations are resumed.

#### 17. CORPORATE PUBLIC AFFAIRS

- a. Establish liaison with representatives of public information media.
- b. Prepare drafts of general/public information press releases relating to the emergency.
- c. Release information as directed by the Emergency Commander, according to ATK Policy.

#### 18. RECORDER

- a. Record incoming and outgoing communications at the EOC.
- b. Record all significant events and actions.
- c. Initiate and maintain record information in a time line log.
- d. Assist in the preparation of interim and final reports.

### E. ALARM SYSTEMS

1. Alarm systems are available at ATK for fires or building evacuations if an emergency or disaster situation exists:

<u>Type</u>	<u>People/Materials</u>	<u>Sound</u>
Fire and Building Evacuation	People	Fire Alarm
Hazardous Waste	People	Verbal Signal (or fire alarm, if available)
Storage and Thermal Treatment	Materials	Verbal Signal (fire alarm or air horn, if available)

2. The hazardous waste storage facilities at M-186 and E-501 are located outdoors in open areas, evacuation of personnel will be in any direction away from the problem. The assembly area for E-501 is directly across the street (to the north) from the entrance gate. The assembly point for M-186 is at the M-381 trailer.
3. The hazardous waste storage facility at the M-705 Consolidation Room is a single room equipped with two exits, a single door on the west and a double door on the east. Both sets of doors open directly to an open outdoor area where personnel are to evacuate to an area near the intersection of the main in-plant road and the M-705 access road. The room is equipped with a heat sensor alarm, a fire alarm and a carbon monoxide alarm on the supplied air system.
4. M-629 is a storage building with multiple exits as outlined in the evacuation plan in Appendix I.
5. Tables and maps showing the function of the various hazardous waste sites and area evacuation plans are found in Appendix I, p. 34.

#### **F. LOCAL LAW-ENFORCEMENT AGENCIES, FIRE DEPARTMENTS, AND HOSPITALS**

1. Local law-enforcement agencies, fire departments, and hospitals have been contacted to respond to or treat any ATK emergency. The most recent copy of this Contingency Plan is sent to each agency in order to familiarize them with the layout, description of hazardous wastes handled, and evacuation plan for the plant. Copies of the letters sent to each agency are kept in the Operating Record.
2. All emergency response units from off-plant will be escorted from the gate to the fire/explosion/spill site by an ATK authorized agent. This will ensure the units reach the location as quickly and efficiently as possible.

### **III. SPILL CONTAINMENT AND CLEANUP**

#### **A. CONTROL PROCEDURES**

1. Detailed emergency response procedures whenever there is a fire, explosion, or release (spill) are found in the current *Emergency and Disaster Response Plan*.
2. Specific directives for cleaning up spills are given in the Hazardous Waste Profile Data (HWPD). There are over 1,000 chemical entries in the HPWD. Approximately 800 of the chemicals in current use exhibit hazardous properties. The MHSI documents are generated in-house to provide a standard format for easy use. Each entry contains Material Safety Data Sheet (MSDS) information as well as other information. There are approximately 100 sets of MHSI distributed throughout the facility. In addition, a complete MHSI is accessible through over 1,000 computer terminals at the facility.
3. The Wastewater Treatment Facility (M-705) is designed to treat wastewater containing hazardous constituents. The responsible building foreman or supervisor should report to the M-705 facility personnel any spill or accidental discharge to a sump suspected of containing chemicals at concentrations above the levels normally discharged. The report should include the incident location, name of person reporting, chemical involved, and approximate quantity. The treatment facility personnel will then be able to determine how best to handle the wastewater.

4. The propellant storage buildings will be inspected daily or weekly as required when in use. While the propellants stored in these buildings are solid, occasionally a small amount of nitro glycerin or similar material can ooze from the motor and drip to the floor. These drips will be checked for during the inspections, and cleaned up using rags and acetone within 24 hours of discovery or as soon as is practicable.

## **B. SPILL CONTAINMENT AND CONTROL**

§265.56(e) of the Resource Conservation and Recovery Act (RCRA) states:

"During an emergency, the Emergency Commander must take all reasonable measures to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include where applicable, stopping processes and operations, collecting and containing released waste and removing or isolating containers."

Confine hazardous material spills to the affected area with dams, Quicksorb, or other approved means. Hazardous material properties may be determined by consulting the Hazardous Waste Profile Data Sheet, MHSI, or the DOT Emergency Response Guidebook. No attempt will be made to contain a spill until the hazardous properties are known. Secondary containment is provided for most storage tanks. For those tanks without secondary containment, consult Appendix II for spill containment considerations.

## **C. SPILL CLEANUP**

1. Waste Management and Environmental Services will be responsible for the coordination of spill cleanup activities. Building personnel will clean up smaller sized spills, incidental to the work process, that are deemed within the skills and level of training possessed by available building personnel, where the spill occurred. All other spills will be cleaned up by the Spill Remediation Team or a company contracted by ATK.

Proper procedures will be followed for every release of hazardous wastes. Because of the extensive inventory of hazardous materials managed at ATK Corporation, each release will require specific safety precautions, cleanup procedures, and/or disposal methods. See Table II p. for chemical compatibility information.

### **WARNING**

*Do not attempt to contain or clean up any spill until hazards associated with the material are known and proper safety precautions are taken.*

2. Response procedures to be used during container spills or leaks are as outlined:
  - a. Identify the material
    - ! From the hazardous waste label
    - ! From Waste Management and Environmental Services inventory records
    - ! Through laboratory analysis
    - ! From carrier manifest or placard DOT guide number
  - b. Protect personnel through the use of personal protective equipment specific to the identified material (refer to MHSI or Material Safety Data Sheet, available from Industrial Hygiene.)
  - c. Stops the spill or leak

- d. Contain the material
  - ! Eliminate the source
  - ! Use Quicksorb, or other approved methods
- e. Clean up the material
  - ! Re-drum
  - ! Wipe up, use absorbent material, excavate soil
- f. Dispose of the material (refer to Haz Com Web and Disposal Instructions for Waste Materials, GM-3.1)
- g. Decontaminate the site and clean the equipment

**D. FOLLOWUP PROCEDURES**

- 1. When the spill has been properly contained and stopped, appropriate equipment will be used to remove the spilled material to a disposal site
- 2. Spills involving very large quantities of material caused by the failure of a large storage tank should be dealt with as quickly as possible to minimize exposure to the environment. The method of pickup generally will be pumping material into a tank truck, the original tank after repairs, or into another tank. An alternative may be to use the Environmental Waste Disposal sump truck to pump liquid hazardous wastes and transfer them to a 5,000 gallon storage tank trailer at M-705. Contact Waste Management and Environmental Services for use.
- 3. Proper steps will be taken to repair equipment and facilities and/or remove the cause of the spill.
- 4. Operating procedures will be changed, if necessary, to prevent recurrence of a spill.
- 5. Safety and Operational Training will be instigated, if required.
- 6. When possible, all reasonable effort will be made to salvage reusable material.

**E. INCOMPATIBLE WASTE**

The Environmental Coordinator and Incident Commander will ensure no waste is incompatible with any material during the cleanup of a discharge. Table II, p. lists the information and its available location to the Environmental Coordinator and Incident Commander to make decisions regarding compatibility. All of these materials are available for inspection at the plant site.

**F. CLEANUP MATERIAL AND EQUIPMENT**

The following is a partial list of safety equipment that may be used for cleanup as required per Chemical Safety Software EMS-E. All items can be obtained from Stores or from a call contract.

<u>Item</u>	<u>Stock No.</u>	<u>Use</u>
Coveralls		Live Operations
Smocks		Manufacturing Area

Tyvek Suit (m)	Asbestos & Dust
Tyvek Suit (l)	Asbestos & Dust
Tyvek Suit (xl)	Asbestos & Dust
Tyvek Sack Suit	Asbestos & Chemical Spills
Tyvek Hood	Asbestos & Chemical Spills
Polyethylene- Tyvek Suit	Asbestos & Chemical Spills
Saranex Tyvek Suit	Chemical Spills
Booties (Yellow)	Asbestos & Chemical Spills
Booties (Clear)	Asbestos & Chemical Spills
Boots (Rubber)	Chemical Spills
Glasses, Safety	Spills-Less than 1 quart
Monogoggles	Spills-Greater than 1 quart
Ear Plugs	Noise-Greater than 90 B(A)
Gloves, Rubber (s)	Methyl Ethyl Ketone
Gloves, Rubber (m)	Methyl Ethyl Ketone
Gloves, Rubber (l)	Methyl Ethyl Ketone
Gloves, Leather	General Use
Gloves, Cotton	General Use
Gloves	Solvent Resistant
Gloves, NBR (s)	Methyl Chloroform
Gloves, NBR (m)	Methyl Chloroform
Gloves, NBR (l)	Methyl Chloroform
Respirator, Half Mask	
Air Purifying Respirator,	In O <sub>2</sub> Sufficient Areas Only
Full-face Cart	
Respirator, Fresh Air	In O <sub>2</sub> Sufficient Areas Only
Respirator, No. 8710	In O <sub>2</sub> Deficient Areas Only
Filter S (Gray)	Dust, Single-use Only
	Dusts, Mists, Fumes, Radon
Filter H (Purple)	Daughters, Asbestos
	Dusts, Mists, Fumes, Radio-
	nuclides, Asbestos
Filter GMA (Black)	Organic Vapors
Filter GMC (Yellow)	Organic Vapors, Acid Gases
Filter GMD (Green)	Ammonia & Methylamine
Filter (Purple/Black)	Organic Vapors, Dusts, Mists,
GMA-H	Fumes, Radionuclides,
	Asbestos
Filter (Purple/ Yellow) GMC-H	
	Organic Vapors, Acid Gases,
	Dusts, Fumes, Mists,
	Radionuclides, Asbestos
Filter (Black/Olive)	Pesticides
GMP	
Acetone	Propellant solvent
Rumple cloth	wipe
Chemliner bag	Contain solvent rags
Velostat bag	Conductive bag to contain chemiliner

In addition, the following materials are available if required:

<u>Item</u>	<u>Location</u>	<u>Ext</u>	<u>Description</u>
Lumber	M-90	2680/2757	Plywood, Lumbers
Sawdust	M-90	2680/2757	Bulk
Pipe	M-90	2680/2757	All dimensions
Quicksorb (27-200002)	M-3 (Stores)	2757	50 lb Bag
Absorption Clay	Landfill	2837	Bulk
Hydrated Lime (54-426006)	M-3 (Stores)	2757	50 lb Bag
Chemical Spill Neutralizer	J. T. Baker		
Acids (General)	M-53	2617	3.2 kg
Bases (General)	M-53	2617/7436	1.2 kg
Flammable Solvents	M-53	2617	(1.1 kg) (18 kg)
Mercury Cleanup Kits	M-53	2617	0.9 kg
NG Spill and Detector Kit	M-585	8446	5 liter bottle
Bulldozer (Space/DLV)	M-55/M-321	2837/2455	D-8
Front-end Loader	M-55/M-321	2837/2455	1½ and 3 yd bucket
Portable Lights and Generator	M-6	3431	2 Mercury Lamps
Sump Tank	M-136	2520	3,000 gal
Portable Diaphragm Pumps	M-55/M-321	2837/2455	
General Trucks	M-55/M-321	2837/2455	1½ - 5 Ton
SCBA Respirators	Fire Dept	2222	30 Min. Tank
Water Ops. Equip	M-705	2222	Sump Trucks, Etc.
Spill Response Truck	Fire Dept	2222	Spill Response and Rescue

#### **G. DECONTAMINATION EQUIPMENT AND PROCEDURES**

1. Equipment available for decontamination includes two disposable wading pools, a wood-framed plastic pool carried on the spill truck for tool and spill team decontamination, and fire trucks to supply wash down water. Decontamination procedures outlined on Figures 1 and 2 will be followed to ensure spill containment and to minimize the area of contamination.
2. The M-186 hazardous waste drum storage site is located near the burning grounds. This area is serviced by the E-522 Fire Station which is located 3-5 minutes away. The M-705 Hazardous Waste consolidation room and the E-501 drum storage yard are also serviced by the E-522 Fire Station which is located 1-2 minutes away. Both the E-522 and M-11 Fire Stations are outfitted with quick-response spill control equipment (See maps, Appendix I). In addition, spill response kits are available at the M-53 and M-585 Laboratories.

#### **H. EQUIPMENT DECONTAMINATION AND REPLENISHMENT**

1. The Incident Commander, or his designee, will ensure all equipment has been properly decontaminated, cleaned, and replaced before normal operations are resumed. The following guidelines are to be used for decontamination of equipment after a discharge has occurred. These steps are also supplemented by the information found in the sources listed in Paragraph F.
2. As much as possible, measures should be taken to prevent contamination of equipment. Any delicate instrument which cannot be decontaminated easily should be

protected while it is being used. It should be bagged and the bag taped and secured around the instrument. Openings can be made in the bag for sample intake.

a. Sampling Devices

Sampling devices require special cleaning. The instruction and care manuals provide information on proper decontamination methods for each instrument used.

b. Tools and Equipment

Equipment and tools designated for spill response should be disposable; however, some tools and equipment require decontamination.

Decontamination equipment, materials, and supplies are generally selected based on availability. Soft-bristle scrub brushes or long-handle brushes are used to remove contaminants. Water in buckets is used for rinsing. Large galvanized wash tanks or stock tanks can hold wash and rinse solutions; children's wading pools can also be used. Open top (55-gallon) drums or similar containers lined with plastic bags can be used to store contaminated clothing and equipment. Contaminated liquids can be stored temporarily in metal or plastic cans or drums. Other supplies include paper or cloth towels for drying protective clothing and equipment.

Personal protective equipment, sampling tools, and other equipment are usually decontaminated by scrubbing with detergent-water using a soft-bristle brush followed by rinsing with copious amounts of water. While this process may not be fully effective in removing some contaminants, it is a relatively safe option compared with using a chemical decontaminating solution. Occasionally, a decontamination chemical is then needed to change the contaminant into a less harmful substance during decontamination. The Environmental Coordinator and Incident Commander, or his designee, may consult the information sources in Table I, p. 33, to determine the necessity of using a chemical decontamination solution.

All materials and equipment used for decontamination must comply with proper disposal. Clothing, tools, buckets, brushes, and all other equipment that are contaminated must be secured in drums or other containers and labeled. Clothing not completely decontaminated onsite should be secured in plastic bags before being removed from the site.

Contaminated wash and rinse solutions should be contained to hold spent solutions. The spent solutions are transferred to drums which are labeled and properly disposed of. The Environmental Specialist and Incident Commander, or his designee, will ensure the disposal of these materials is done in an appropriate manner.

c. Respirators

Certain parts of contaminated respirators, such as the harness assembly and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded with the other spill cleanup wastes. Rubber components can be soaked in soap and water and scrubbed with a brush. Regulators must be maintained according to manufacturer's recommendations. Persons responsible for decontaminating respirators should be thoroughly trained in respirator maintenance.

d. Heavy Equipment

Bulldozers, trucks, back-hoes, bulking chambers, and other heavy equipment are difficult to decontaminate. The method generally used is to wash them with water under high pressure and/or to scrub accessible parts with detergent/water solution under pressure, if possible. Shovels, scoops, and lifts may be sandblasted or steam cleaned. Particular care must be given to those components in direct contact with contaminants such as tires and scoops. Wash water generated during the decontamination process must be contained and disposed of in a proper manner.

**IV. INSTALLATION RESPONSE TEAM TRAINING**

Building/area personnel responding to spills of hazardous materials incidental to the normal processes within their building/area will not need training beyond that required by ATK's Hazard Communication Program. Personnel responding to spills, who are not assigned to the building/area where the spill occurred, are to be members of the Spill Remediation Team with the proper OSHA training.

**NOTE**

*Hazard Communication Plus Program is a combination of the HAZ-COM Program required by OSHA 29 CFR 1910.1200 and HAZWOPER first awareness level required by OSHA 29 CFR 1910.120.*

**A. TRAINING**

All personnel involved in cleanup operations will be trained. This training will include an awareness of the locations of cleanup materials and equipment and the procedures for the operation of such equipment.

**B. SIMULATION**

The Spill Contingency Plan will be simulated annually under the direction of the Emergency Commander.

**V. TRAINING PLAN**

One of the most important objectives of the Contingency Plan is to ensure that the emergency responders are properly trained. Training should include teaching, exercise and critique phases. Re-training and review should be completed at least annually. The following is an outline of training plan elements:

**A. SCOPE AND PURPOSE OF THE CONTINGENCY PLAN**

**B. REVIEW OF LEGAL REQUIREMENTS**

1. Authority
2. OSHA requirements
3. State requirements
4. EPA requirements
5. State Fire Marshall requirements
6. Law enforcement requirements
7. Medical Examiner/Coroner requirements

**C. LOCAL ATK REQUIREMENTS**

**D. CUSTOMER REQUIREMENTS**

Contract review

**E. REVIEW AUTHORITY AND FUNCTION OF EACH RESPONSE TEAM MEMBER**

**F. EMERGENCY COMMUNICATION SYSTEM**

1. Initial notification and follow-up
2. Verification of information
3. Radio discipline
4. Communication intercept

**G. FIRE PLANS/FIRE DRILL**

1. Use
2. Exercise
3. Evaluate
4. Evacuation
5. Assembly points

**H. BOMB SEARCH TECHNIQUES**

1. Outside to Inside
2. Left to right
3. Bottom to Top
4. Evacuation
5. Suspect items (Isolate; don't touch or disturb)

**I. FIRE BARRICADE/CORDON AREAS**

1. Function
2. Initiate/release

**J. EMERGENCY MEDICAL TREATMENT**

1. EMT training, equipment
2. First response first aid

**K. SECURITY OF SITE**

1. Purpose
2. Authority
3. Who authorizes access

**L. INVESTIGATION**

1. OSHA
2. EPA
3. Local Law enforcement
4. Medical Examiner/Coroner
5. Customer
6. ATK

**M. PUBLIC RELEASE OF INFORMATION**

1. Who authorizes
2. Importance of controlling
3. Who releases
4. Who reviews
5. Next of kin

**N. FACT-FINDING METHODS**

1. Initial interview
2. Follow-up interview
3. Recordings
4. Photo Coverage
5. Mapping damage
  - a. Who?
  - b. How?
  - c. Why?
6. Personnel security checks
7. Drug and alcohol tests
8. Weather conditions
9. Product status
10. Operational status
11. Equipment records and history
12. Facility, tooling, modification and history

**O. SAFING THE AREA**

1. Electric Power
2. Water
3. Steam
4. Toxic chemicals
5. Falling hazards
6. Explosives

**P. CONTROL OF THE CURIOUS**

1. Outsider
2. Employees
3. Press

**Q. HANDLING OF REMAINS**

1. Notification
2. Photo
3. Movement (after authorization by Medical Examiner)
4. Release (after authorization by Medical Examiner)

**R. NOTIFICATION PROCEDURES**

1. When?
2. Who?
3. How?
4. Verification

**S. RESCUE EFFORTS**

1. When?
2. When not to
3. How to determine

TABLE I  
COMPATIBILITY INFORMATION

<u>Source of Compatibility Information</u>	<u>Location</u>
1. Hazardous Waste Compatibility Chart Table 9-2 of Attachment 9	Available at Environmental Services offices
2. Material Health and Safety Information (example of informa- tion found in plan)	Available in hard copy form at approximately 100 locations through- the plant; also available on 1,000 computer terminals throughout the plant*
3. Material Safety and Data Sheets	Located on the internal web Chemical Safety Software EMS-E
4. Work Experience	Knowledge of each member of the Response Team when responding to a discharge

## **VI. EMERGENCY COORDINATOR**

The Emergency Coordinator is the ATK Fire Department's Emergency Manager. The alternate Emergency Coordinators are the ATK Fire Department Shift Supervisors. A primary or alternate Emergency Coordinator is on plant or on call at all times. In this plan, the Emergency Coordinator may be referred to as the Incident Commander (IC). The primary and alternate Emergency Coordinators or ICs are identified in the Operating Record, which is maintained onsite at the Promontory facility. ATK Promontory security headquarters/dispatch can be contacted 24/7 at 435-863-8545. ATK Promontory security headquarters/dispatch can contact the on plant Emergency Coordinator or IC.



FIGURE 1. DECONTAMINATION/SPILL SCENE  
Difficult Decontamination Situations

Some situations, such as a solvent spilled on tiles or large spills on unprotected ground require the removal and disposal of the affected material. Other situations, such as contaminated equipment or fixtures, require steam cleaning and the use of a detergent. Frequently, the rinse from steam cleaning is best controlled with a wet/dry vacuum. Steam cleaners, detergents, and wet/dry vacuums can be obtained from local rental companies. The rinse should be tested for the contaminant and managed appropriately.

## The Spill Scene

While each spill is unique, every spill shares common features best referred to as the "Spill Scene." This allows a conceptual illustration of the work area which emphasizes the relationship of the various components.

Complete decontamination of workers, tools, and the spill site must be performed before the spill response is completed.

It is prudent to establish an area for worker decontamination through which all SPILL TEAM members must pass prior to leaving the site. In this TEAM DECONTAMINATION SITE (TDS) protective clothing can be thoroughly washed with detergent and rinsed with water, if necessary. The soles of ALL WORKERS SHOES MUST BE RINSED before they leave the area. Outer coveralls (Tyvek, etc.) must be removed in this area. These steps are necessary to prevent spreading the contamination or introducing toxic substances into workers homes.

Tools can be rinsed with detergent and water prior to removal from the spill scene. All rinses from these decontamination procedures must be treated as hazardous waste.

Dry decontamination may be used when appropriate.

It is frequently necessary to test the site for completeness of decontamination prior to declaring the emergency resolved. Spills which contaminate soil, asphalt, concrete, or other absorbent materials will require that samples be obtained and analyzed. After all residual contamination is removed, asphalt and concrete areas must receive a thorough wash-down with fresh water.

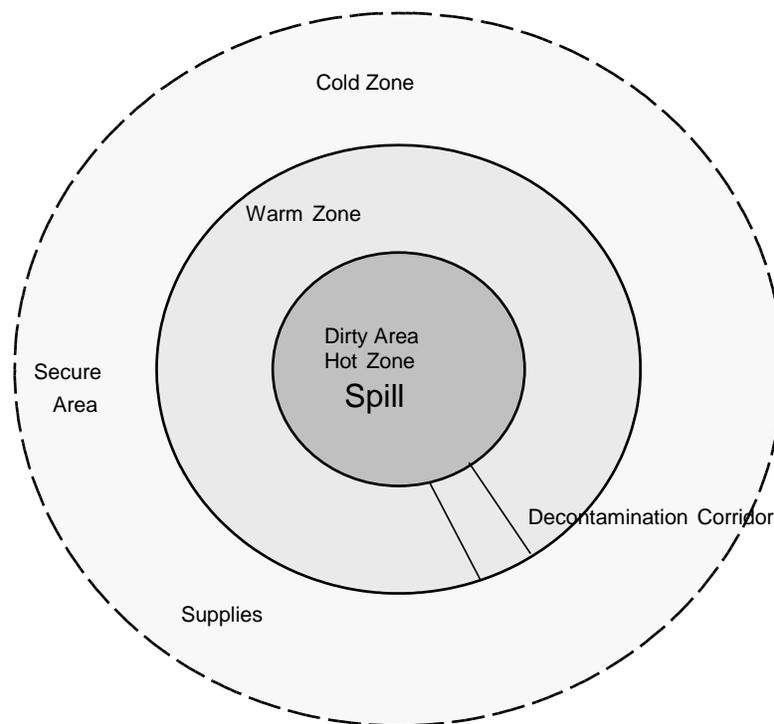
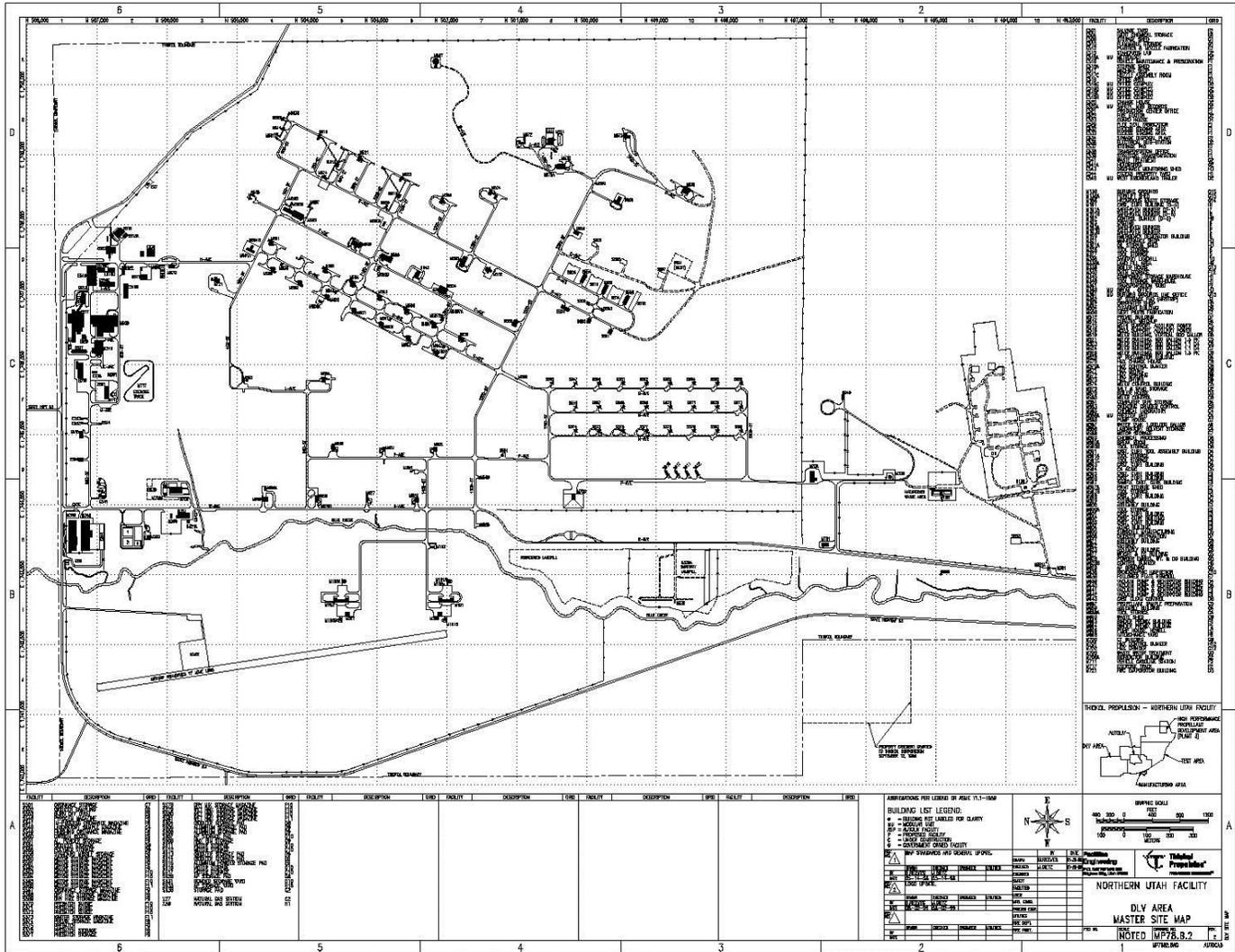


FIGURE 2. DECONTAMINATION

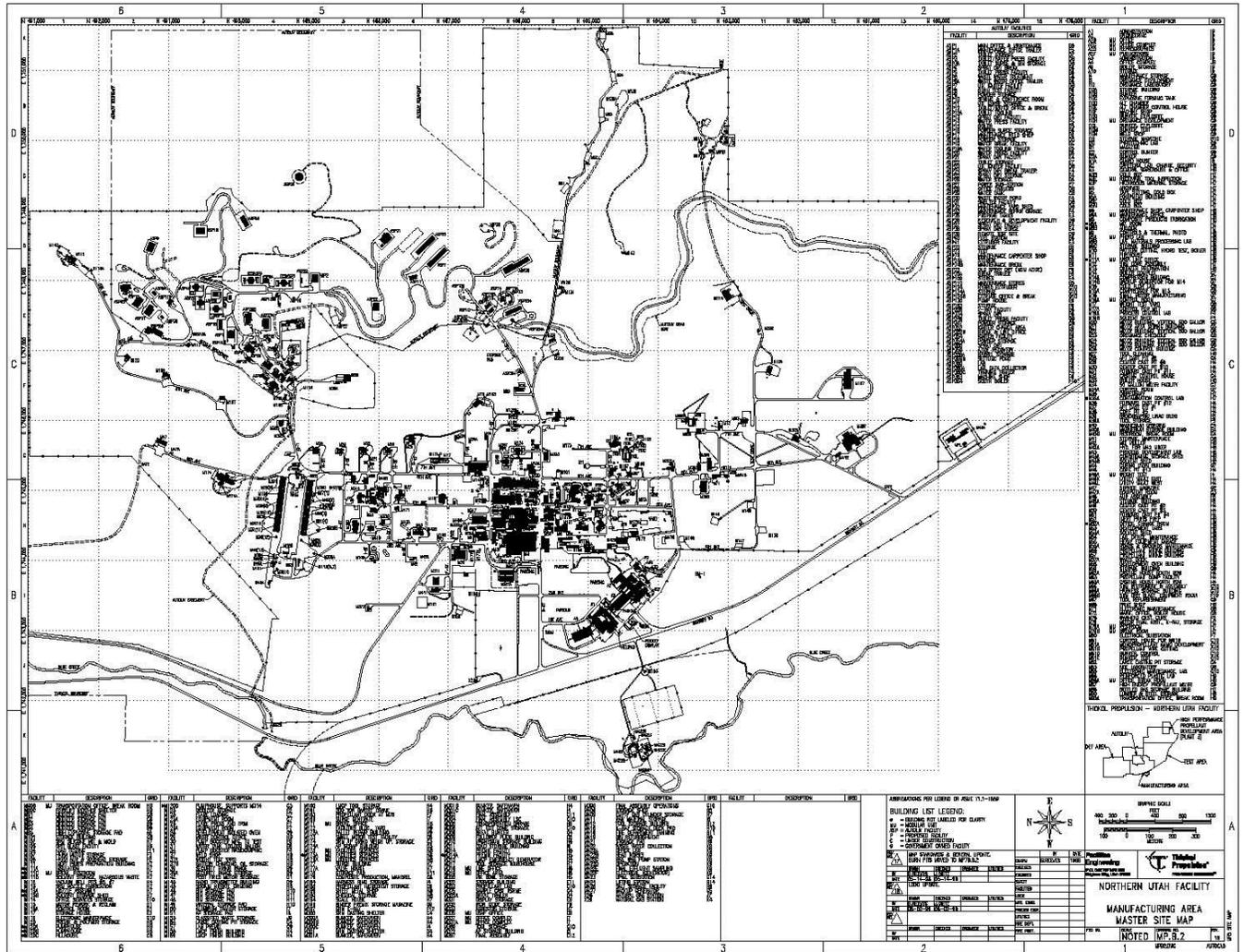
APPENDIX I

FACILITY FUNCTION TABLES, SITE MAPS, & EVACUATION PLANS

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NORTH PLANT SITE MAP



MANUFACTURING AREA SITE MAP  
 (South Plant)





**M-136 BURNING GROUNDS**

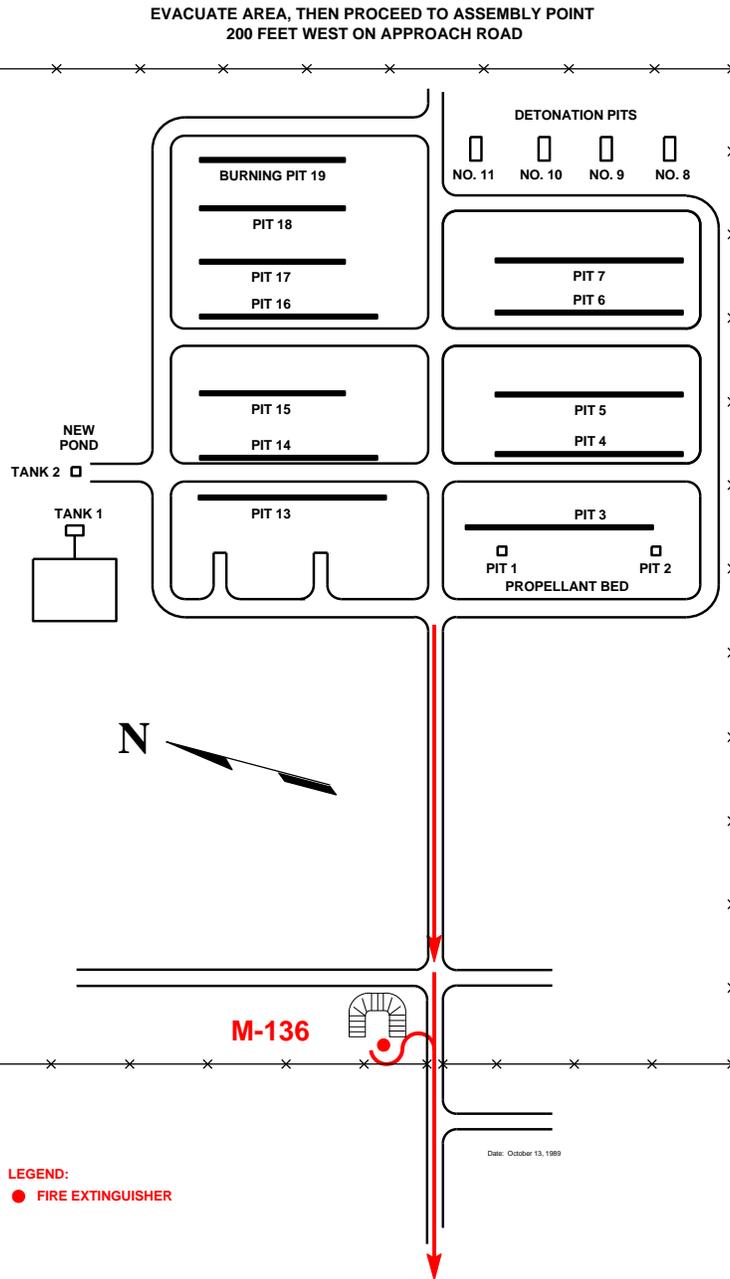
**FACILITY FUNCTION: Propellant, explosives, unstable and pyrotechnic waste disposal**

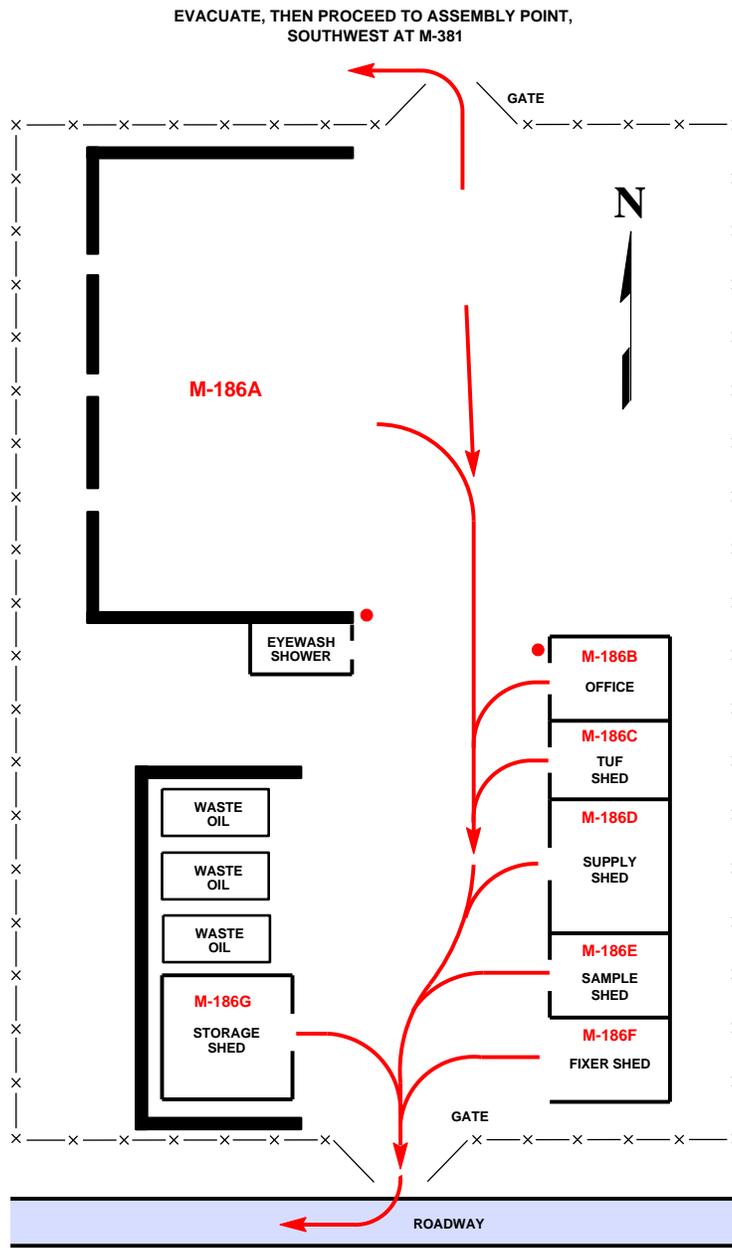
<u>Waste Products Into Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Class 1.1 and 1.3 propellant wastes, propellant contaminated wastes, and unstable waste.	Burning	Flashing in waste propellant disposal areas

**M-186 HAZARDOUS WASTE AREA**

**FACILITY FUNCTION: Receive hazardous waste materials and store for shipment**

<u>Waste Products Into Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Methyl Chloroform Methyl Ethyl Ketone Xylene Toluene Paint Thinners	Store for off-plant shipment	Six UN Drums Quicksorb, 100 lb Two shovels One broom One fire extinguisher Emergency shower/eye wash
Oil Lab Chemicals Photographic Fixer Solution Rags & debris	Store for off-plant shipment	Two overpack drums Saranex suit (level B)





LEGEND:  
● FIRE EXTINGUISHER

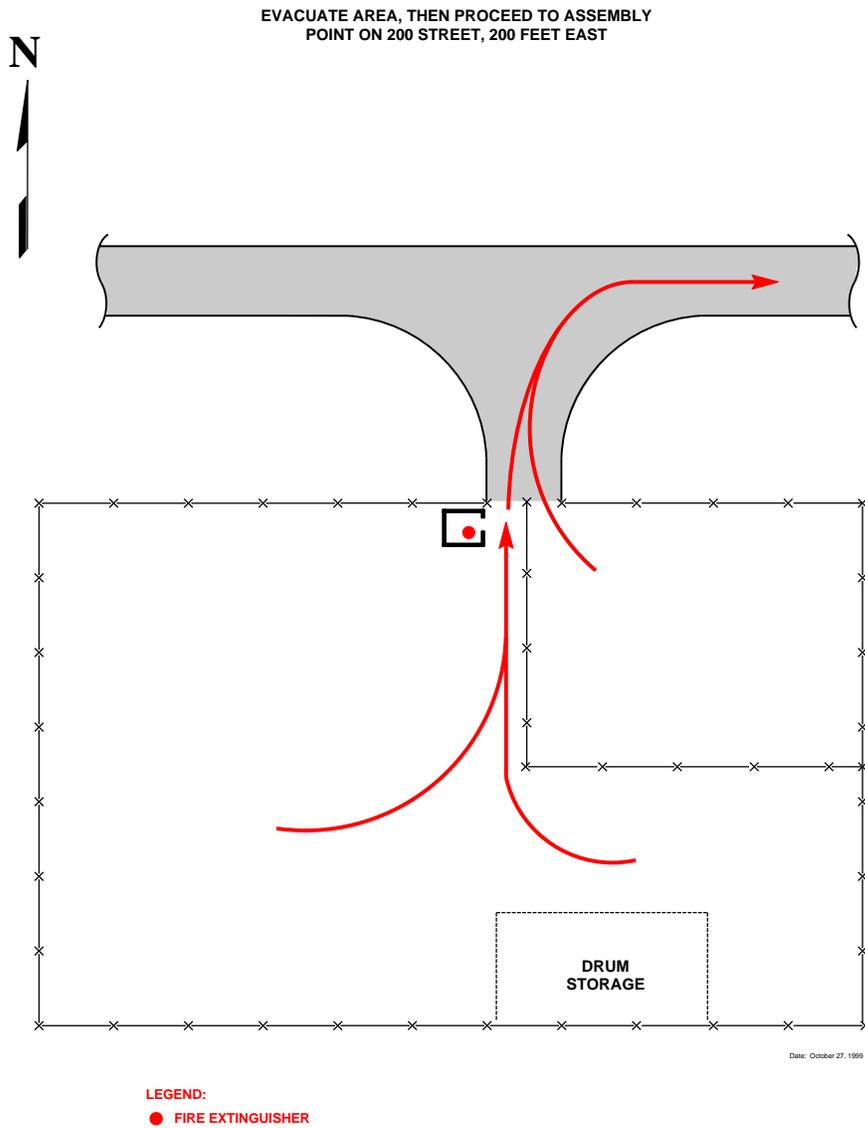
Date: March 2, 2000

**HAZARDOUS WASTE TREATMENT,  
STORAGE, DISPOSAL, AND FACILITIES  
M-186**

**BUILDING E-501 STORAGE YARD**

**FACILITY FUNCTION: Hazardous Waste Storage Yard**

<u>Waste Products Into Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Various	Shipment off-plant for disposal	Two fire extinguishers Absorbent Two repack drums Electrical pump
Other assorted materials that may be recycled	N/A	Telephone/radio Eyewash/shower Safety gates Safety flags Six UN 55-gal drums (empty) Saranex suit (level B)

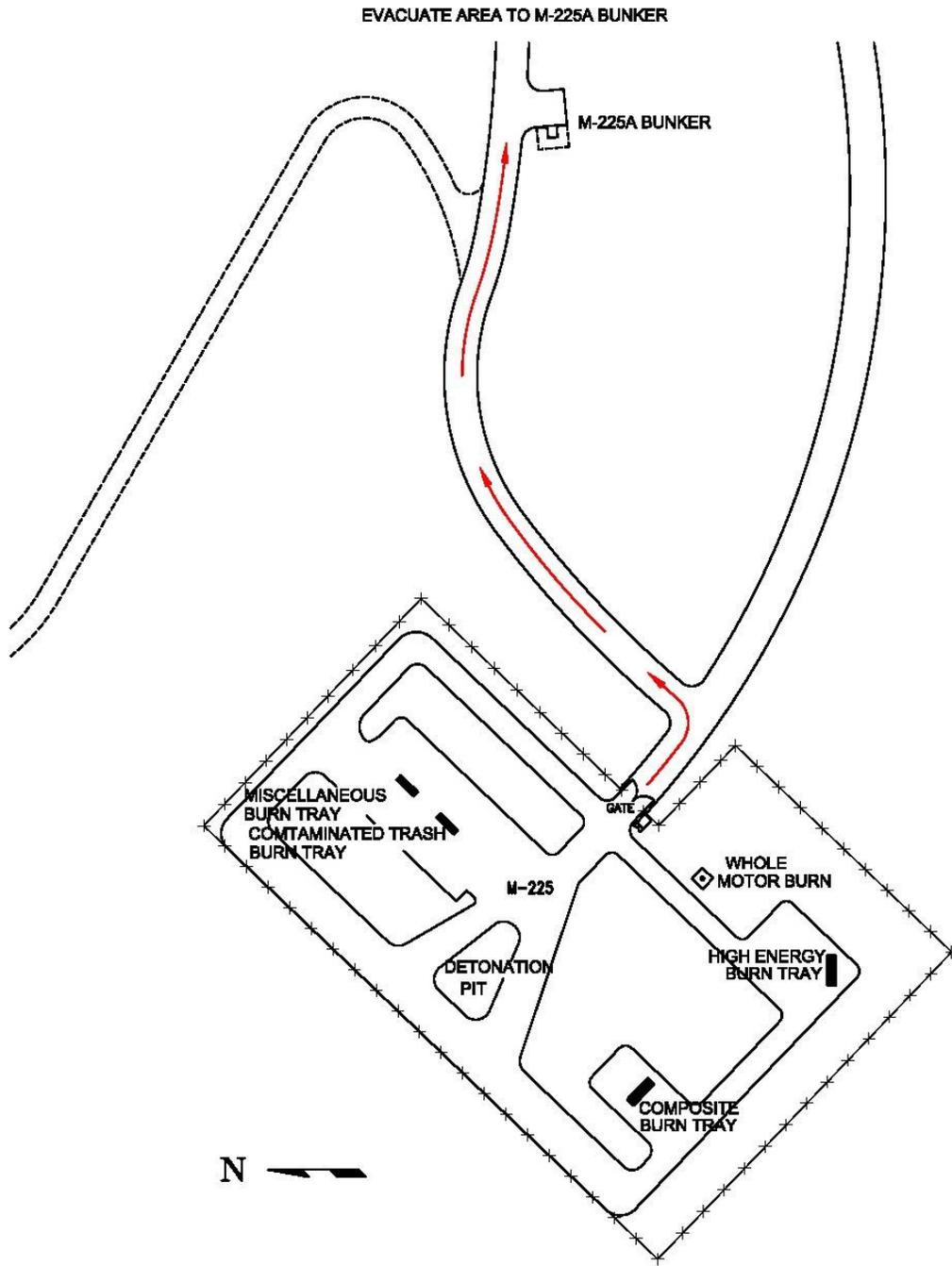


**E-501  
and  
SALVAGE YARD**

**M-225 BURNING GROUNDS**

**FACILITY FUNCTION: Disposal of waste products from High Performance Propellant Development Area and miscellaneous rocket motors, igniters, and related materials**

<u>Waste Products Into Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Composite propellant, uncured from M-209	Burn	Dampened rags (wipes)
Composite propellant, cured from M-221	Burn	Pick up, soft brush or wet rags (wipes)
NG propellant, uncured from M-208, M-241	Burn	Solvent dampened rags followed by NG detector to verify cleanliness
NG propellant, cured from M-221	Burn	Pick up, soft brush and/or wet rags
HMX from M-208, M-210	Burn with diesel	Soft brush and/or water-damp rags. If possible, wet HMX with water before handling
AP from M-210 (fine only)	Burn with propellant	Sweep with soft brush. Wipe with composite water-wet rag. Flush with water into sump
Binder premix (NG or other nitrate, etc.)	Burn or detonate depending on materials and/or condition	Contain, absorb into sawdust or pulp, pick up with wipes, wet rags. Apply NG detector to verify cleanliness
PEP contaminated waste (rags, containers, etc.)	Burn with respective propellant	Pick up, clean with method used for respective propellant or ingredient
Miscellaneous (motor, igniters)	Burn or detonate depending on materials and/or condition	Each case must be dealt with on an individual basis



## M-225

## T-29B SATELLITE ACCUMULATION AREA

### BUILDING FUNCTION: Hydrazine Storage and Dilution Facility

Waste Product Method of disposal

From Building

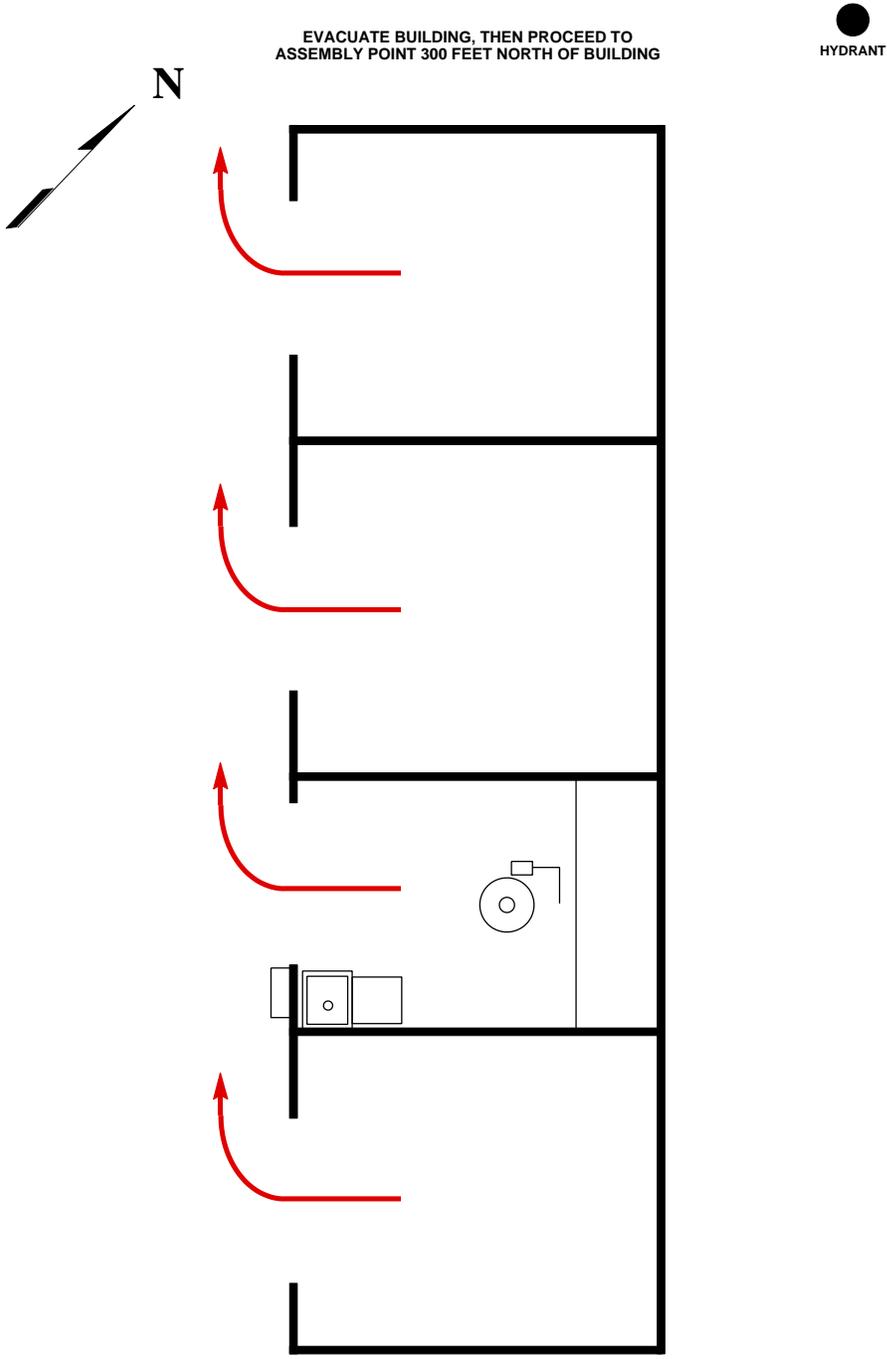
Pure hydrazine  
Hydrazine-citric  
acid solution  
5-50% dilute  
hydrazine  
contaminated  
waste

Disposal

Dilute with  
water to 5-50%  
solution by  
volume. Waste  
hydrazine is  
shipped for  
disposal/Treatment.  
Contaminated  
waste is also  
shipped for  
disposal/treatment

Spill Cleanup/Handling

All areas where normal operations are performed have a drainage system which culminates in a common sump. Spills should be flushed thoroughly with large amounts of water. The wash water is then drummed and shipped for disposal



**T-29B**

### M-705 WASTEWATER TREATMENT FACILITY

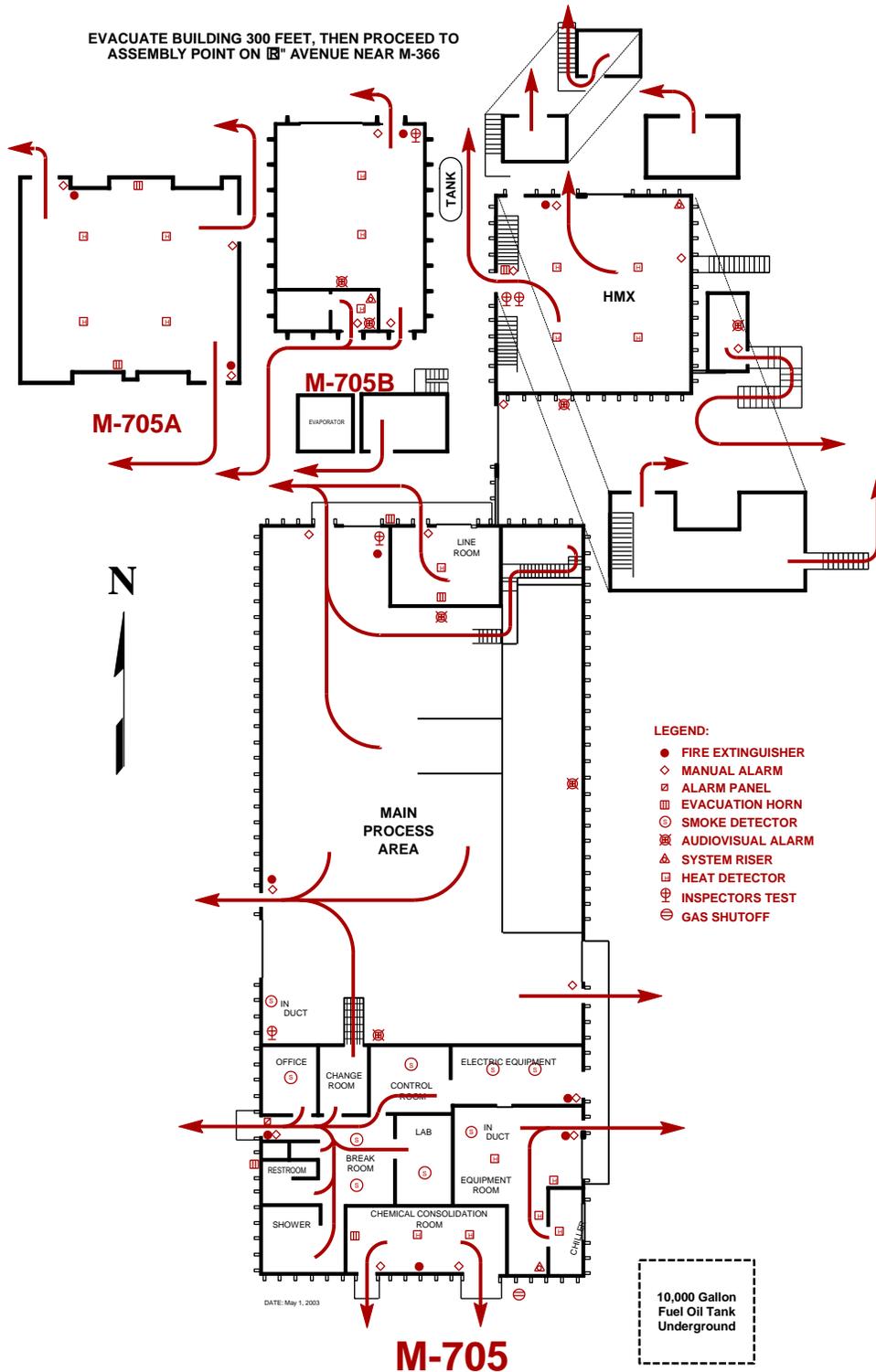
**BUILDING FUNCTION:** Removal of reactive wastes from sump water

<u>Waste Products From Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Lime Sludge (Heavy Metals)	Shipment to off-plant disposal company	Two shovels One broom Plastic gloves One bin Saranex suit (level B)
Potassium Perchlorate	Burning	
Classifier Decanter Solids	Burning	

### M-705 HAZARDOUS WASTE CONSOLIDATION ROOM

**BUILDING FUNCTION:** Consolidation and lab packing of hazardous wastes

<u>Waste Products From Area</u>	<u>Method of Disposal</u>	<u>Spill Cleanup/Handling</u>
Consolidated hazardous wastes Lab packed hazardous wastes	Shipment to M-186 for eventual off-plant disposal	Two shovels One broom Plastic Gloves One Fire Extinguisher Emergency shower/eyewash Quicksorb, 100 lb Two overpack drums Six UN drums Saranex suit (level B)

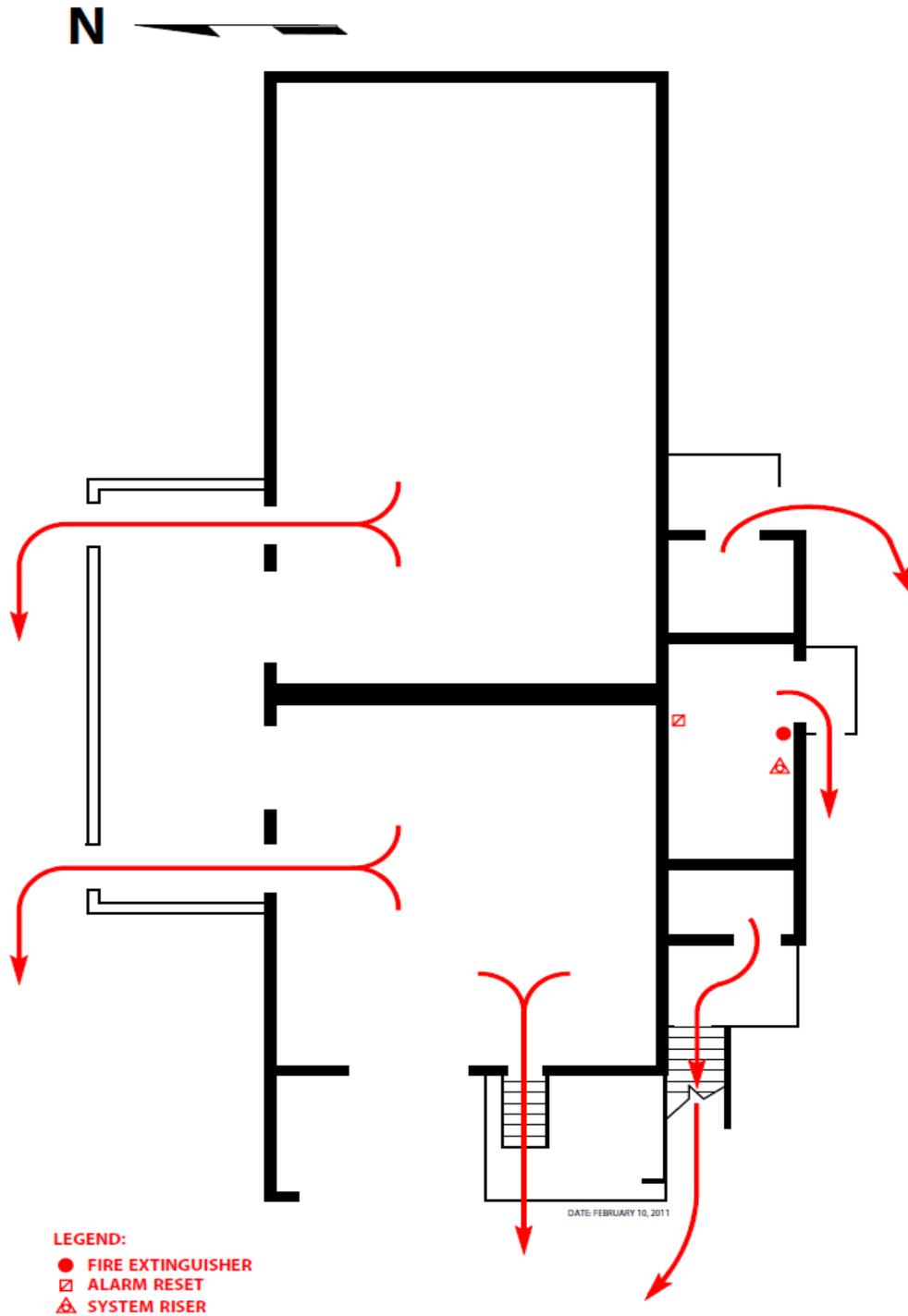


## M-629 PROPELLANT and Propellant Waste STORAGE FACILITY

**BUILDING FUNCTION:** Storage of reactive hazardous waste propellant/propellant contaminated materials, motors. Non-waste propellant,(donor propellant) and explosive initiation articles are also stored within the building.

<u>Solid Hazardous Waste</u>	<u>Method of Disposal</u>	<u>Spill Cleanup Materials</u>
1.3C Propellant/propellant contaminated materials	Thermal Treatment	Obtain clean up material as needed
1.3C Rocket Motors	Thermal Treatment	Obtain clean up material as needed
1.1C Propellant/propellant contaminated materials	Thermal Treatment	Obtain clean up material as needed
1.1C Rocket Motors	Thermal Treatment	Obtain clean up material as needed
1.3C Flares and Flare Illuminate contaminated materials	Thermal Treatment	Obtain clean up material as needed

**EVACUATE BUILDING, THEN PROCEED  
TO ASSEMBLY POINT AT BUILDING M-583**



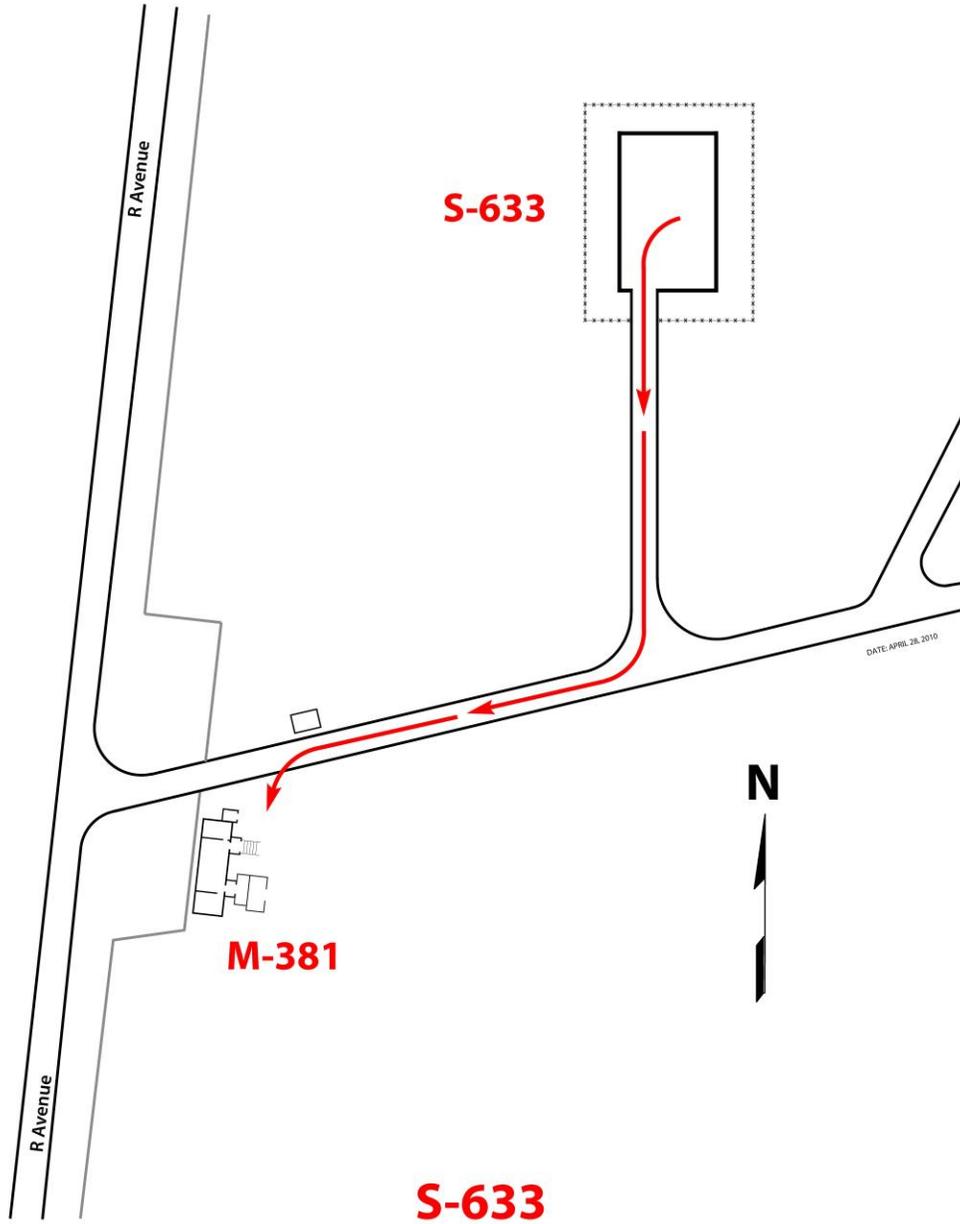
# M-629

## S-633 REACTIVE HAZARDOUS WASTE STORAGE PAD

**STORAGE PAD FUNCTION:** Storage of reactive hazardous waste propellant/propellant contaminated materials and motors and non-waste propellant

<u>Waste and non-waste Products</u>	<u>Method of Disposal</u>	<u>Spill Cleanup Materials</u>
1.3C Propellant/propellant contaminated materials	Thermal Treatment	Obtain clean up material as needed
1.3C Rocket Motors	Thermal Treatment	Obtain clean up material as needed
1.1C Propellant/propellant contaminated materials	Thermal Treatment	Obtain clean up material as needed
1.1C Rocket Motors	Thermal Treatment	Obtain clean up material as needed
1.3C Donor Burn Propellant	Burn Enhancer	Obtain clean up material as needed
1.3C Flares and Flare Material	Thermal Treatment	Obtain clean up material as needed

**EVACUATE PAD, THEN PROCEED TO ASSEMBLY POINT AT M-381**



APPENDIX II  
BULK STORAGE AREAS INFORMATION

A. BULK FLAMMABLE LIQUID STORAGE AREAS .....50  
B. PRACTICAL CONSEQUENCES OF A CATASTROPHIC FAILURE ..... 51

APPENDIX III  
ARRANGEMENTS WITH LOCAL AUTHORITIES.....52

A. BULK FLAMMABLE LIQUID STORAGE AREAS

<u>Location</u>	<u>Type of Flammable Liquid</u>	<u>Capacity (Gallons)</u>	<u>Above/Below Ground</u>
M-4	Butanol	40	Above
	Ethanol	60	Above
	Isopropanol	530	Above
	Methanol	500	Above
	Methyl Ethyl Ketone	400	Above
	Paint	500	Above
	Paint Thinner	120	Above
M-53	Acetone	60	Above
	Ethanol	10	Above
	Heptane	10	Above
	Methanol	50	Above
	Methyl Ethyl Ketone	60	Above
M-55	Gasoline	17,000	Below
M-66	Assorted	80	Above
I-10	Methanol	15	Above
	Methyl Ethyl Ketone	50	Above
M-585	Acetone	50	Above
	Ethyl Acetate	15	Above
	Methanol	10	Above
	Toluene	30	Above
M-711	Gasoline	10,000	Below
E-510	Ethanol	100	Above
	Isopropanol	1,660	Above
	Methanol	35	Above
E-512	Acetone	100	Above
	Isopropanol	50	Above
	Paint Thinner	50	Above
	Polyester Resin	160	Above
	Toluene	50	Above
	Xylene	160	Above
E-517	Isopropanol	170	Above
	Kerosene	50	Above
	Methyl Ethyl Ketone	450	
T-29B	Hydrazine	100	Above

B. PRACTICAL CONSEQUENCES OF A CATASTROPHIC FAILURE

<u>Building Number</u>	<u>Location</u>	<u>Direction of Flow*</u>
I-10	Shed west of building	Has self-containment concrete berm
M-4**	Building north of M-3 system	Liquid would run west across asphalt into drain
M-8**	Two sheds west of building	Spill would drain down west hill
M-43B	Shed south of building	Self-contained storage building
M-53A	Shed south of building	Self-contained storage building
M-66	Shed southwest of building	Spill would run into ditch (trench or grading needed to keep surface runoff from accumulating in containment area)
M-504	Shed south of building	Spill would flow into ditch
M-585	Shed east of building	Spill would drain into ditch
M-605	Waste dock north of building	Spill would drain into ditch
E-512	Shed west of building	Spill would drain into ditch
E-517	Shed north of building	Spill would drain into ditch

\* All other storage areas have self-containment

\*\* Fire flows and/or spilled material from these buildings will flow into a gated spill containment structure below M-2. The gates are hand operated.

## APPENDIX III

### Arrangements with Local Authorities

ATK has a well trained and full time Fire Department and Security Department onsite. ATK's roads and grounds and Water Operations departments maintains a fleet of trucks, tractors, vacuum trucks and other equipment that could be used during an emergency response. The facility also has a nursing staff during normal business hour, and a 24/7 ambulance service operated by ATK firemen with EMT certifications.

Due to these capabilities, the need for outside assistance is greatly reduced. The most likely need for outside assistance would be that of hospital service. Arrangement will be made with both the Bear River Valley Hospital and the Brigham City Community Hospital to accept employees that may have been injured due to an explosion, chemical exposure or other accident. This arrangement will include information on the types of chemicals used at ATK Promontory as well as explosive hazards and other mechanical hazards associated with work performed at ATK.

The most likely scenario that would require assistance from a police agency would be the need to control traffic on Highway 83. Arrangements for assistance in this area will be made with the Box Elder County Sheriff's Department and the Utah Highway Patrol. All on plant traffic control will be handled by ATK's security department.

ATK has established contracts with three different emergency response/remediation contractors for use as needed. While we do not anticipate the need for emergency service assistance, these companies are on call to provide service if needed.

All emergency response at the plant will be handled by the ATK Fire Department, who will act as the primary emergency authority. Arrangements will also be made with the Box Elder County Fire Department and the Tremonton Fire Department. We do not anticipate any need for assistance from the Utah Department of Environmental Response and Remediation, although notification of emergencies will be made to this department as required. In addition to those agencies listed above, ATK will also provide a copy of the contingency plan to the Box Elder County Emergency Planning Committee for review and comment.

Below is a summary list of those agencies/service providers for which service arrangements will be sought:

Bear River Valley Hospital  
Brigham City Community Hospital  
Box Elder County Sheriff's Department  
Utah Highway Patrol  
Box Elder County Fire Department  
Tremonton Fire Department

The most recent copy of the Contingency Plan will be sent to each of these agencies in order to familiarize them with the layout, description of hazardous wastes handled, and evacuation plans for the plant. All correspondence with these agencies, in regard to the Contingency Plan and service arrangements will be kept in the Operating Record.