



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2044 Galisteo St., Bldg. A
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Telephone (505) 827-1557
Fax (505) 827-1544



PETER MAGGIORE
SECRETARY

PAUL R. RITZMA
DEPUTY SECRETARY

FAX COVER SHEET

DATE: 12/19/00

TO: DAVID GANDY

COMPANY:

FAX #: 396-6887

TELEPHONE #:

MESSAGE: THIS IN ADDITION TO SAMPLES OF CONTINGENCY
PLANS WILL BE SENT TO MONTGOMERY WATSON DENVER VIA FED EX
LAST FRIDAY, 12/15/00.

FROM: JOHN KIELINK
827 1558 x1012

NO. OF PAGES: 2
(Including cover page)

If you did not receive all pages, please call me at (505) 827-1558 x1012

HAVE A GREAT DAY

RED TPDPF 2000



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2044 A Galisteo, P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Telephone (505) 827-1557
Fax (505) 827-1544



PETER MAGGIORE
SECRETARY

PAUL R. RITZMA
DEPUTY SECRETARY

TO: Pat Corser, Montgomery Watson
FROM: John Kieling, Hazardous Waste Bureau 
DATE: December 14, 2000
RE: **CONTINGENCY PLAN**

Through legal review it was determined that the requirements for the contingency plan as required by 20.4.1.500 NMAC incorporating §264.50 through §264.56 have not been adequately addressed and therefore the application for Triassic Park (Gandy Marley Inc.) is deficient.

I have included some partial examples of contingency plans from solid waste facilities that could help in formulating an appropriate contingency plan. I have also included the NASA contingency plan and some tables from the LANL permit that should also be helpful in providing a complete plan.

Information that is required is included in the attached CFRs for the contingency plan.

Below I have identified the key elements of the contingency plan:

The map of evacuation routes should also show the alternate routes and the location of emergency equipment located within the facility (e.g., alarm system, fire hydrants, fire extinguishing systems).

Provide in the plan a list of emergency equipment, a physical description and its capabilities.

List the equipment that is located in vehicles (e.g., first aid kits, fire extinguishers, shovel) and its capabilities.

Identify an emergency coordinator that meets the requirements of §264.55

Also include in the plan procedures complying with §264.56

If you need to discuss further please do not hesitate in calling me at (505) 827-1558 ext. 1012 or Steve Pullen at (505) 827-1558 ext. 1020.

Subpart D -- Contingency Plan and Emergency Procedures

40 CFR 264.40 through 264.56

Subpart D -- Contingency Plan and Emergency Procedures

264.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 264.1 provides otherwise.

264.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed 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) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

264.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with 264.51 and 264.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with part 112 of this chapter, or part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 264.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 264.55), and this list must be kept up to date. Where more than one person is listed, one must be named as

primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the Regional Administrator at the time of certification, rather than at the time of permit application.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

264.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) 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.

Comment: The contingency plan must be submitted to the Regional Administrator with part B of the permit application under part 270, of this chapter and, after modification or approval, will become a condition of any permit issued.

264.54 Amendment of contingency plan.

The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

(a) The facility permit is revised;

(b) The plan fails in an emergency;

(c) The facility changes -- in its design, construction, operation, maintenance, or other circumstances -- in a way that

materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

264.55 Emergency coordinator.

At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be 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 all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

Comment: The emergency coordinator's responsibilities are more fully spelled out in 264.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.

264.56 Emergency procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release,

fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under part 1510 of this title) or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

- (i) Name and telephone number of reporter;
- (ii) Name and address of facility;
- (iii) Time and type of incident (e.g., release, fire);
- (iv) Name and quantity of material(s) involved, to the extent known;
- (v) The extent of injuries, if any; and
- (vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator must take all reasonable measures necessary 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 release waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor

for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

Comment: Unless the owner or operator can demonstrate, in accordance with 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 264 of this chapter.

(h) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.

(j) The owner or operator must 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 Regional Administrator. The report must include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

Subpart C -- Preparedness and Prevention

40 CFR 264.30 through 264.37

Subpart C -- Preparedness and Prevention

264.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 264.1 provides otherwise.

264.31 Design and operation of facility.

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

264.32 Required equipment.

All facilities must be equipped with the following, unless it can be demonstrated to the Regional Administrator that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

Comment: Part 270 of this chapter requires that an owner or operator who wishes to make the demonstration referred to above must do so with part B of the permit application.

264.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

264.34 Access to communications or alarm system.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the Regional Administrator has ruled that such a device is not required under 264.32.

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless the Regional Administrator has ruled that such a device is not required under 264.32.

264.35 Required aisle space.

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the Regional Administrator that aisle space is not needed for any of these purposes.

Comment: Part 270 of this chapter requires that an owner or operator who wishes to make the demonstration referred to above must do so with part B of the permit application.

264.36 [Reserved]

264.37 Arrangements with local authorities.

(a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility,

properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

CITY OF LAS VEGAS
SOLID WASTE MANAGEMENT DEPARTMENT
TRANSFER STATION
EMERGENCY PROCEDURES CONTINGENCY PLAN

TABLE OF CONTENTS

Page 1-2	Section 101, AUTHORITY, Section 102, RESPONSIBILITY Section 103, EMERGENCY COORDINATORS Section 104, EMERGENCY PHONE LIST
Page 3	Section 105, DUTIES FOR THE SITE SUPERVISOR
Page 4	Section 106, DUTIES FOR THE WASTE MONITOR, Section 107, GENERAL RESPONSE TO EMERGENCY
Page 5-6	Section 108, SPECIFIC RESPONSE TO FIRE Section 109, SPECIFIC RESPONSE TO EXPLOSIONS OR BOMB THREATS
Page 7-9	Section 110, RELEASE OF CONTAMINANTS Section 111, MEDICAL EMERGENCIES
Page 10	, BOMB THREAT CHECKLIST

Following Items located in Permit Attachments
Attachment I. Evacuation Routes
Attachment H. Safety equipment Inventory

101. AUTHORITY

The emergency contingency plan as per Section 811 of New Mexico Solid Waste Management regulations is to minimize hazards to the public health, welfare and the environment from fires, explosions, or any unplanned sudden or non-sudden release of contaminants or hazardous waste constituents to air, soil, surface water or ground water.

102. RESPONSIBILITY

It is the responsibility of each Transfer Station individual to know what to do in case of an emergency. That is the key to minimizing the hazards to human health, environment and property. Transfer stations and convenience centers pride themselves in providing the safest work environment possible for its work force and the public along with complying with all set regulations which help maintain a clean and safe environment for the entire community.

A contingency plan is only effective if it is read and understood. It will be the responsibility of every SUPERVISOR to ensure that the contingency plan is read by his or her assigned personnel. **SUPERVISORS** should also conduct drills on a regular basis to give his or her personnel the knowledge, experience and responsibilities assigned to each member in the contingency plan.

The potential severity of an accident involving fires, explosions, or hazardous waste release may be reduced through waste screening and response measures within this plan. **Be aware that when components or situations of an incident are unknown, it is advisable to act with extreme caution until further information is obtained from a professional source.**

103. EMERGENCY COORDINATORS

**I. Las Vegas Transfer Station
Primary Emergency Coordinator**

HAROLD GARCIA

Work: 454-1401

Home: 425-1858

103. Emergency Coordinators
(cont.)

II. Las Vegas Transfer Station
Secondary Emergency Coordinator

Adolpho Bachicha

Work: 454-1401

Home: 425-6701

104. EMERGENCY TELEPHONE NUMBER LIST

NEW MEXICO STATE POLICE	425-6771
FIRE DEPARTMENT	911 OR 425-6321
POLICE DEPARTMENT	911 OR 425-7504
SAN MIGUEL COUNTY SHERIFF	425-7589
BOMB DISPOSAL	911
HAZARDOUS MATERIALS INFORMATION	911
EMERGENCY RESPONSE TEAM	425-6190
SANTA FE OFFICE / NMED CHARLES HULES PROGRAM MANAGER	1 (505) 827-2924
HAZARDOUS & RADIOACTIVE MATERIALS BUREAU	1 (505) 827-1567
RCRA HOTLINE	1-800-424-9346
MEDICAL EMERGENCY	911
NORTHEAST REGIONAL HOSPITAL	425-6751

105. DUTIES FOR THE SITE SUPERVISOR

- A. In accordance with New Mexico Solid Waste Management Regulations Section 811, the primary emergency coordinator will do the following:
1. During a release, fire or explosion he/she must immediately identify the character, exact source, amount and extent of any released materials, fire or explosion.
 2. Immediately turn incident over to the City of Las Vegas Fire Department for purposes of hazard identification and recommendation.
 3. Assess possible hazards to human health or environment resulting from releases, fires, or explosions.
 4. If operation must stop in response to a release, fire or explosion, the City of Las Vegas Fire Department will check for leaks, pressure build-up, gas generation, ruptures in valves, pipes and equipment, when the area has been declared safe, operations will restart.
 5. After the emergency the primary emergency coordinator must provide for sorting, treating or disposing of recovered waste, resulting from release, fire or explosion. The facility to be utilized for storing, treating or disposing must be authorized by the Secretary of the New Mexico Environment Department,
 6. The Solid Waste Monitor will ensure, after an emergency, before any waste is released that it be treated, cleaned and stored using recovered waste methods that are approved by the Secretary of the Environment Department.
 7. The site supervisor is responsible for emergency operations through the entire facility. Transfer Station manager will select and train an adequate staff. He prepares personnel prior to emergencies and directs personnel during emergencies. Also, he is the primary communication link between the facility and outside departments, i.e., Fire Department, Police Department, Medical emergency Response Team, and Hazardous Material Response Team.

106. DUTIES FOR THE HAZARDOUS WASTE MONITOR

- A. The primary duty of the hazardous waste monitor is to serve as a source of information to the primary emergency coordinator regarding hazardous waste contaminants, monitoring, assessing hazards, fires and explosions.
- B. If clean up of contaminants is necessary the hazardous waste monitor will assume to lead in assessing and developing clean up, safety and operational procedures.

107. GENERAL RESPONSE TO EMERGENCY

- A. If it is necessary to evacuate during an emergency, it is imperative that it is conducted in the most efficient manner as possible, while maintaining a strict order. A high level of importance should be placed on common sense in order to ensure a calm response to the emergency.
- B. During evacuation, it will be the responsibility of the emergency coordinators, primary and secondary, to evacuate, and to account for all personnel.
- C. A general assembly point has been designated by the emergency coordinator. Please refer to rendezvous Drawings in Attachment I for further detail.

108. SPECIFIC RESPONSE TO FIRE

1. If fire is considered **minor**
 - a. Contact the site supervisor or alternate, and inform them of the situation.
 - b. All personnel should be aware of the physical location of alarms and fire extinguishers, and evacuation routes. A diagram is provided in Attachment H showing locations of all safety equipment and alarms, along with primary and alternative evacuation routes. This same diagram will be posted in various locations throughout the facility, with, "You are here" references at each location. In addition, this same diagram will be provided to the Las Vegas Fire Department. 
 - c. Attempt to extinguish the fire. Activate pull alarm, if necessary.
 - d. Always follow the contingency plan and allow common sense to dictate.
 - e. Primary emergency coordinator will assess the situation and report to all proper authorities, as needed.
2. If fire is considered **major**
 - a. Immediately activate pull alarm and proceed with evacuation plan.
 - b. Contact primary or secondary emergency coordinator, if neither of the emergency coordinators can be reached anyone can and should call 911.
 - c. As shown in Appendix I, evacuation routes have been established as well as predesignated assembly areas. After evacuation, primary or secondary emergency coordinators will account for everyone.
 - d. The primary emergency coordinator will assess the situation according to his assigned duties.
 - e. The contingency plan should be followed allowing common sense to dictate.

109. SPECIFIC RESPONSE TO EXPLOSIONS OR BOMB THREATS

A. EXPLOSION

1. Explosions can be caused by many different medium. They can result from chemical incompatibilities, unplanned pressure release due to machinery failure, up to device detonation. In any case, if an explosion occurs anywhere at the Transfer Station facilities proceed as follows:

109. Specific response to explosions or bomb threats

A.1. (cont.)

- a. Immediately activate the alarm and begin evacuation of the premises.
- b. Contact the site supervisor or alternate.
- c. If fire occurs due to the explosion, do not attempt to extinguish the fire. It is not uncommon for secondary or chain reactive explosions to follow initial blast. Evacuation should be your primary concern.
- d. In the event of injuries due to the explosion, when notifying site supervisor, ensure that he/she is made aware of the following:
 1. Your name
 2. Your location and location of injured.
 3. The number of people injured and magnitude of injuries, how bad they are hurt.
 4. Identify the source of explosion, if possible.
 5. If source is identifiable, has it all been expended?
- e. **Follow the contingency plan always allowing common sense to dictate.**

B. BOMB THREATS

1. If a bomb threat is received by anyone at the Transfer Station facilities, proceed with the following:
 - a. Immediately notify site supervisor. Provide him/her with as much information as you received in the threat.
 - b. Attached to this plan, you will find a bomb threat check list. It is highly recommended that personnel under every day operational procedures who answer the telephones familiarize themselves with the form. A copy should be visible on the desk at all times.
 - c. If site supervisor orders an evacuation, immediately evacuate premises.
 - d. Follow the contingency plan always allowing common sense to dictate.

110. RELEASE OF CONTAMINANTS

A. INVENTORY OF CONTAMINANTS

When the waste components are not known, it is advisable to assume that an industrial waste is hazardous and should be treated with due care until more information becomes available from reliable and professional sources.

1. **COMBUSTIBLE REFUES:** Refuse of highly combustible nature, such as solvents, saturated waste or excelsior.
2. **FLAMMABLE LIQUIDS AND SOLVENTS:** These liquids have variable flash points, hence varying levels of hazard, all depending on their composition. Most of the industrially or commercially generated flammable liquid and solvents are collected in 5 gallon cans or 55 gallon drums. Many of these liquids may contain solids, tar, waxes, and other materials that will impede flow, disguising the physical properties of liquid.
3. **Polychlorinated biphenyl's (PCB's)** were manufactured in the 1920's and used in a wide variety of lubrication and insulation applications. PCB's have been known to cause chloro-acne and are suspected carcinogens. Mode of entry into the landfill could be in old ballast's, some refrigerator compressors, or various transformers/capacitors.
4. **COMBUSTIBLE OR REACTIVE METALS:** The metals under this category that may be encountered at the Transfer Station are lithium, potassium, sodium, and magnesium. They may be found as chips, scraps, or clippings. These metals are water reactive some more reactive than others. Sodium will react violently with water and will produce sodium hydroxide as a product of the reaction.
5. **OXIDIZING MATERIALS:** Oxidizers simply supply oxygen that can become volatile under increased temperatures or pressures. Ammonium nitrate which is found in various fertilizers and herbicide is an oxidizer. Under confinement or temperatures exceeding 105 degrees fahrenheit, it can become explosive.
6. **CORROSIVE MATERIALS:** By definition a corrosive material is capable of corroding one quarter inch of steel per year, or has a pH equal to or less than 2.0, or equal to or greater than 12.5. There are many chemicals and combination of chemicals (solutions) that will fit into this category. Most of the corrosive materials coming into the Transfer Station will be in a liquid physical state.

7. **PESICIDES, POISONS, INFECTIOUS MATERIALS:** These are materials or viable organisms and their toxins that affect humans.
8. **RADIOACTIVE MATERIAL:** Any material or combination of materials that spontaneously emit ionizing radiation.

B. HAZARD PREVENTION AND CONTROL

Thorough engineering methods and preventive measures, the Transfer Station strive to reduce the probability of exposing personnel, the community, and the environment to hazardous materials. Engineering methods and preventive measures include the following:

1. Hazardous waste screening is performed on a daily basis and such screenings are recorded and constantly analyzed to meet compliance levels. The screenings are performed at the gate house and at the tipping floor by operators and spotters.

C. RESPONSE PROCEDURES

The response measures to a hazardous waste spill or release will be supervised by the hazardous waste monitor. He procedures are as follows:

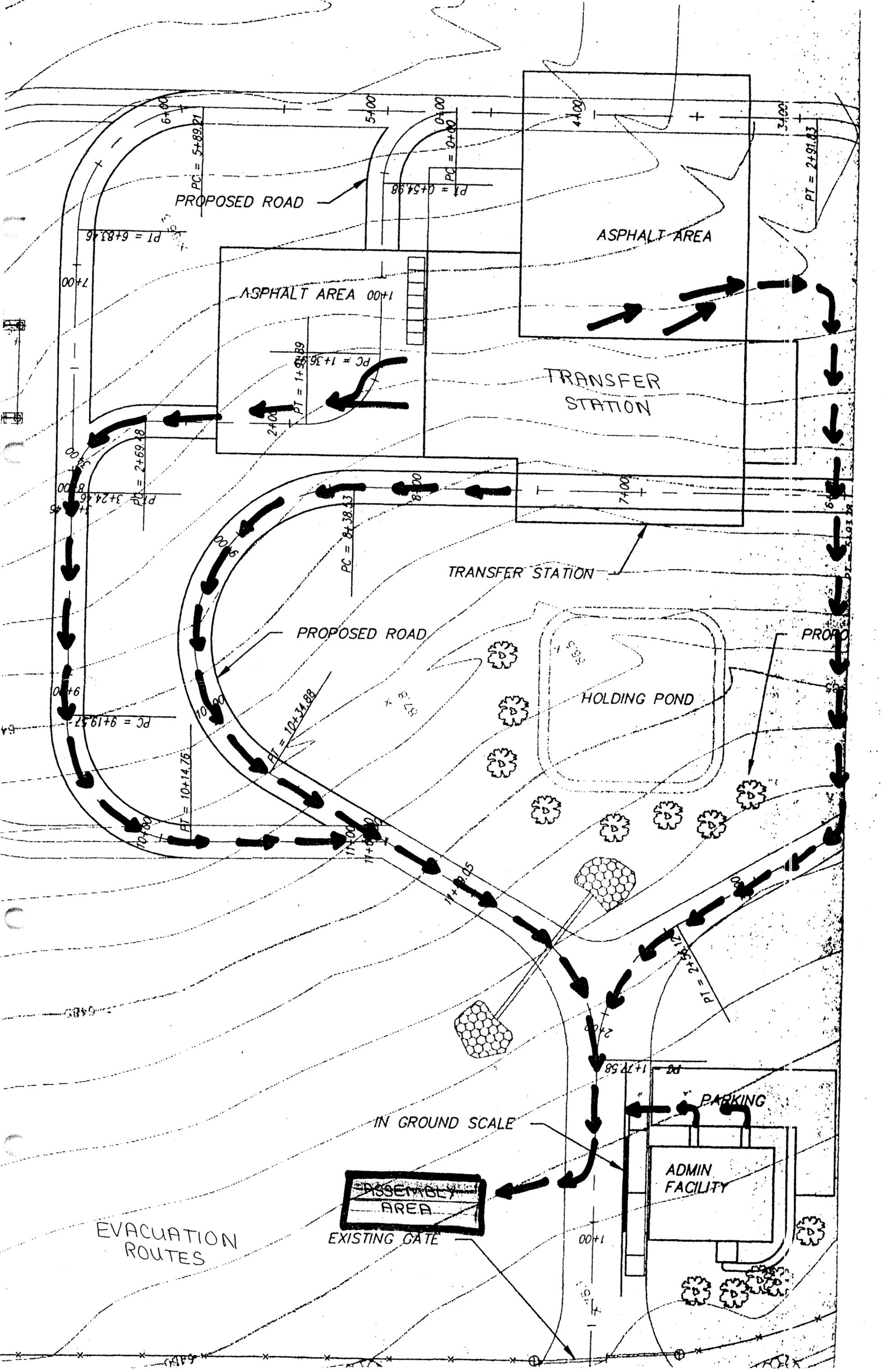
1. If spill is minor, use appropriated protective equipment before any attempt of controlling.
2. Use appropriate detection devices to check for corrosively, flammability, or radioactivity.
3. Dike the area around he liquid of limit spread with a Basco 7 Gal. HazMat Spill Kit.
4. Control access to contaminated area.
5. Ensure proper decontamination is performed after cleanup is completed.
6. Call all authorities as indicated and take measures to remove the waste within 24 hours.
7. If spill is considered large, quickly evacuate area and give notice to the primary emergency coordinator or hazardous waste screener.

110. Release of Contaminants
C.9 (cont.)

8. The site supervisor, or hazardous waste monitor will contact the New Mexico State Police, the Las Vegas Fire Department, and the New Mexico Environment Department immediately.
9. If anyone was exposed or contaminated, quickly isolate person and hold for Las Vegas Fire Department. Ensure medical authorities are notified and avoid contaminating other personnel or equipment.
10. If clothes are removed, ensure that they are segregated and cannot contaminate anyone or anything else.
11. Record the incident to include all possible circumstance that lead to the incident. All the information gathered should be evaluated to help create preventive measures to avoid an incident of similar circumstance.

111. MEDICAL EMERGENCIES

- A. Protect all wounds, familiarize yourself with the locations of all first aid kits..
- B. If injury requires professional medical assistance. Ensure you have called the health center and informed them of the situation.
- C. Contact the Transfer Station manager as soon as possible and inform him of the incident.
- D. If professional emergency medical aid is required to dial 911. Ensure that the dispatcher is informed of the following:
 1. Patient problem or type of incident
 2. Approximate age of patient
 3. Conscious: yes/no (or alert)?
 4. Breathing: yes/no (or difficulty)?
 5. Remain calm.



ATTACHMENT CC
CONTINGENCY PLAN

TORRANCE COUNTY REGIONAL LANDFILL

CONTINGENCY PLAN

I. INTRODUCTION

The Torrance County Regional Landfill will be located approximately 7 miles east of Moriarty, New Mexico. The landfill will be owned and operated by the Torrance County Solid Waste Authority (TCSWA) and will have an approximate area of 70 acres. A total area of 480 acres has been purchased for the landfill, although the majority of this area will be open land used for grazing and as a buffer zone.

The Contingency Plan for the Torrance County Regional Landfill addresses measures that will be enacted to deal with a range of potential situations that may occur during the construction and operation of the landfill. The Plan has been prepared to meet the requirements of Section 811 of the New Mexico Solid Waste Management Regulations (20 NMAC 9.1) as well as other requirements related to the management of emergencies.

The purpose of this Contingency Plan is to present an organized, concise, and feasible course of action to be taken in response to emergencies during the construction and operation of the Torrance County Regional Landfill. This Plan will be implemented in the unlikely event that an emergency situation were to develop which could cause harm to public health, welfare or the environment. This Plan will be updated if any change in the design or operation of the landfill necessitates its modification. A copy of this Contingency Plan will be provided to all emergency agencies listed in **-Appendix A.**

1. Implementation of Emergency Plan

The decision to implement the Contingency Plan at the Torrance County Regional Landfill will depend upon whether or not the emergency (i.e. fire, explosion, etc.) could potentially endanger public health and safety, and/or the environment.

2. Emergency Response Procedures

Whenever there is any type of emergency incident at the landfill, the Emergency Coordinator(s) will immediately notify the facility staff and any other personnel on-site (e.g. visitors or users). The Coordinator(s) must then identify the source and assess the extent of the emergency, and take action to control the situation.

a. Notification

In the event of an imminent or actual emergency, the first person on the scene will notify the Emergency Coordinator, who in turn, will initiate a proper response to the situation. Having been apprised of the situation, the Emergency Coordinator will proceed to notify all facility personnel by initiating the internal communications system (if not previously initiated), and aid in evacuation, if necessary. Progression of notification will continue to any local, state and federal response agencies deemed appropriate by the Emergency Coordinator. A list of the designated Emergency Coordinator(s) and phone numbers is included in this document and will be posted in a conspicuous location in the scale house and equipment building. A list of Emergency Response Agency phone numbers and contacts is included in Appendix A, and will also be posted in a conspicuous location in the scale house and equipment building.

b. Identification

Whenever there is a fire, explosion, spill or release, or any other incident presenting a potential threat to public health and safety or the environment, the Emergency Coordinator must immediately identify the source and extent of the emergency.

c. Assessment

In the case of an emergency situation, an assessment of the possible hazard must be made. If the Emergency Coordinator determines that the facility has experienced an incident which may cause a hazard to the public health and safety or the environment, he must then initiate the Contingency Plan. This will include contacting local authorities in order to inform them of the situation, particularly if an evacuation of the surrounding area is necessary. The NMED will also be advised of all pertinent facts regarding the incident as soon as is practical.

- * A major spill or leak that cannot be contained and constitutes a potential threat to human health.

When evacuation of the facility is required, the following procedures will be followed:

- * Alert all personnel at the facility by two-way radio system
- * Shut down all landfill equipment
- * All personnel will proceed to the designated meeting point, which shall be at the scale house located 200 feet inside of the main gate. This will permit the determination and identification of any missing persons.
- * Once assembled at the scale house, the group will standby for assistance if necessary, or evacuate through the main entrance.

when time does not permit this procedure to take place or when the main evacuation route is blocked by fire or releases of hazardous waste, the emergency coordinator will sound a loud horn to warn all personnel on-site to evacuate the facility premises as soon as possible by the nearest property boundary. This will be possible since there will not be a fence surrounding the entire facility. All personnel will then make their way around the facility property to the gate at the main entrance of the facility. At this point, any missing persons will be identified and personnel will await further instructions from the emergency coordinator and/or emergency response personnel.

- * The Emergency Coordinator and landfill personnel will exercise judgement and common sense in finding the best evacuation route in this instance.

6. Emergency Equipment

Various emergency equipment will be available at the Torrance County Regional Landfill facility as described below. Personnel will be thoroughly trained in the use of all emergency equipment.

a. Warning System

The Torrance County Regional Landfill Facility will be equipped with a two-way radio system and a cellular phone which will be utilized to provide notification and instructions to on-site personnel, as well as to contact local, State, and Federal Agencies in order to obtain emergency assistance. Emergency numbers will be posted at the site (see Appendix A).

Two way radios will be carried by all personnel at all times when inside the

problems with insects and other pests. Vectors are greatly discouraged when waste materials are not easily available. With the operation of the landfill, compaction of the daily cover further helps to minimize potential problems associated with vectors.

F. Fire Prevention and Control

The possibility of a fire, whether in the landfilled refuse or within a vehicle or other piece of equipment, is a potential hazard associated with the daily operations at the proposed facility. Fire prevention for the on-site vehicles and equipment will include regular maintenance, particularly on potential heat sources (e.g. radiators). If a piece of equipment or landfill vehicle catches fire, the fire will be immediately extinguished using a fire extinguisher from the vehicle or the maintenance/equipment building. The vehicle will be moved away from any exposed refuse if it is possible and safe to do so.

If a fire breaks out in the refuse area, cover material will be placed immediately on top of the refuse to extinguish the fire. Water from the on-site tank truck can also be used to supplement the use of cover soil or serve as an alternative means of controlling fires. The water tank truck will be available for use during emergency situations and fire extinguishers will be kept in strategic locations as a precautionary measure.

In the event of a larger fire (i.e. within the equipment/maintenance building), the local fire department and other emergency authorities will be contacted.

G. Unusual Traffic Conditions

Traffic is not expected to pose problems at the proposed site due to the remote area of its location and the following reasons:

- * The roadways near the proposed landfill are more than adequate to manage the anticipated landfill related traffic.
- * The roadways accessing the landfill are designed to manage the type of traffic that will regularly use the landfill facility during peak hours and during any inclement weather.
- * Landfill personnel will be trained for, and available to direct incoming and outgoing traffic from the facility to limit any congestion.

In the unlikely event of traffic backup at the site, the facility will take the following actions depending on the cause of the traffic problem:

- * Post an employee at the problem area to direct traffic.
- * Increase the working face area to accommodate the increase in incoming volumes.

d. Control Procedures

Although the likelihood of an emergency at the Torrance County Regional Landfill will be quite small, such an emergency can be controlled by utilizing well planned control procedures to address the specific contingency to minimize any negative impacts.

In the event of any emergency situation, the Emergency Coordinator must take all reasonable measures to prevent the occurrence, recurrence, or spreading of a fire or explosion or unplanned release to other portions of the facility or its surroundings. These measures include, when applicable and necessary, ceasing facility operations, and containing and collecting any released materials or fires.

e. Emergency Response Personnel

If an emergency occurs, fully trained response personnel will be contacted as soon as possible. The 911 dispatcher at the Torrance County Sheriff's Office will be contacted immediately and the coordination of the local response teams will be through the 911 dispatch center. A full list of emergency response agencies and contact numbers is listed in Appendix A. Arrangements with all of these agencies will be made prior to the opening of the proposed facility. Requests for assistance will include the following information if available:

- * Name, address, and telephone number of the facility
- * Type and time of incident
- * Extent of any injuries
- * Possible hazard to public health and safety and/or the environment
- * Type and quantities of materials involved

Immediate action by on-site personnel will concentrate on preventing the spread of any fire/explosion, or spill/leak situation that occurs, and administering immediate emergency medical attention to injured personnel, if necessary. Any possible sources of ignition will be removed from the incident area, if this can possibly be done without risk, and vehicular traffic will be suspended and work ceased until the emergency situation is under control.

f. Storage and Treatment of Released Materials

Immediately following the emergency situation, the Emergency Coordinator must make arrangements for the storage, or disposal of any recovered wastes, water, or any

contaminated materials resulting from the incident. An evaluation of the waste or contamination will be performed as soon as possible following the incident to prevent any future accidents.

g. Post-Emergency Equipment Maintenance

Following an emergency incident, all emergency response equipment that have been used must be cleaned and made fit for re-use, or replaced as necessary, so that the equipment will be available when facility operations resume. An inspection of all equipment must take place before operations resume at the landfill to ensure that each item is in proper working condition. Remedial activities resulting from this inspection may include, but not be limited to, recharging of fire extinguishers, replacement of personal protective gear and restocking of used disposable items.

3. Internal Communication/Warning System

An internal communication system consisting of two-way radios will be available at the Torrance County Regional Landfill for notifying facility personnel in the event of an emergency situation. Units will be carried by all field personnel at all times. This system will provide facility personnel with immediate emergency notification capabilities, and the opportunity to receive necessary instructions in the event of an accident.

4. External Communication/Warning System

The list presented in Appendix B includes the addresses and telephone numbers of the Torrance County Regional Landfill Designated Emergency Coordinators. Also, a list of the Emergency Response Agencies and Contacts that will be notified by telephone should an emergency situation arise is presented in Appendix A.

The lists included in these Appendices will be displayed prominently at the landfill in the maintenance/equipment building and the scale house for easy employee accessibility in the event of an emergency. Training of personnel will include familiarizing employees and regular site visitors (i.e. engineering staff and trucking contractors) with the posted lists and other contingency plan elements.

5. Evacuation Plan for Facility Personnel

In an emergency situation, the Emergency Coordinator will determine when evacuation of the facility is required. Examples of imminent or actual dangers that constitute a situation requiring evacuation include, but are not limited to:

- * A generalized fire or threat of generalized fire that cannot be avoided.
- * An explosion or the threat of explosion that cannot be averted.

landfill facility. A cellular telephone will be available in the equipment/maintenance building and the scale house and will be used to notify local and state officials as well as emergency response crews in the event of an emergency. Radios will also be carried by personnel in landfill vehicles.

b. Fire Fighting Equipment

The Torrance County Facility will maintain several types of equipment on-site that may be used in firefighting efforts. Earthmoving equipment that is utilized on a regular basis for landfill operations may be used to move and apply cover material to smother fires. Cover material will be readily available on-site for fire control purposes. A water tank truck filled with water will be available on-site at all times. An on-site water tank will also be available for fire control purposes if needed.

The Facility will also maintain a supply of fire extinguishers that may be used in the event of an emergency. These extinguishers will be located at strategic points in the maintenance/equipment building and the scale house for easy accessibility. Fire extinguishers will also be located on all landfill vehicles and equipment. All extinguishers will be maintained in conformance with the state and local fire codes and regulations.

c. First-Aid/Safety Equipment

First-aid and safety equipment will be located in strategic locations within the facility. First-aid kits will be located in the scale house and maintenance/equipment building and will be readily accessible and contain a full range of items necessary to care for minor injuries requiring prompt attention.

7. Medical Emergencies/First-Aid

In cases of a medical emergency, trained medical response personnel will be contacted immediately. First-aid administered by on-site facility personnel will continue until professional assistance arrives. Personnel training will include first-aid measures and emergency response contact.

The initial responsibility for first-aid will rest with the first person at the scene who will react quickly, but in a calm and reassuring manner. The person assuming responsibility will immediately summon medical assistance, being as explicit as possible in reporting suspected types of injuries or illness. The injured person will not be moved, except when necessary to prevent further injury.

III. SITE OPERATIONS

Conditions may be encountered at the site during normal landfilling activities that will

require response actions that are not included as part of typical daily site operations.

A. Dust Control

During dry periods, fugitive dust may be nuisance resulting from the landfill operation. The water tank truck kept at the site will be used to control dust wherever a potential problem exists. In the event of unusually dusty conditions, the landfill will bring in an additional water truck to assist in dust control.

B. Litter Control

Every practicable measure will be taken to contain litter as close to the working area as possible. The employees will manually pick up any blowing litter as required daily.

To assist in the control of litter, the active working face will be restricted to as small an area as possible. Cover material will be spread on the waste during the on-going operation when excessive wind presents a problem. Under normal conditions, 6-12" of on-site soil will be spread over the waste at the end of each day of operation. The active portion of the fill will progress in a direction perpendicular with respect to the prevailing wind direction. Moveable trash fences will also be placed near the active fill area to assist in the control of this problem.

C. Odor Control

Odors generated from decomposing wastes are controlled by the daily application of sufficient amounts of cover material. If odors are detected off-site, the source will be determined and proper mitigative actions implemented.

The following contingency steps may be implemented:

- * Application of additional cover soils
- * Use of odor masking agents
- * Modification of gas control system

D. Noise Control

Since the landfill operations will be concentrated in an area distant from local residences, the noise generated from the landfill operations should not present an off-site impact. All landfill equipment working at the site will have muffler systems to diminish any potential nuisance from noise.

E. Vector Control

As in the case of odor control, proper daily covering of the waste will assist in eliminating

through the use of perimeter drainage swales.

V. GAS MIGRATION

The production of methane gas is a normal occurrence at municipal landfills. For this reason, methane gas levels will be monitored at the proposed site regularly. This will be accomplished by probing the area surrounding all cells and the general landfill boundary with the use of a field measurement device. Methane gas levels will also be regularly checked within the scale house and the equipment/maintenance building.

In the event that a combustible gas concentration is encountered above 25 percent of the lower explosive limit (LEL) during the measurement of gas concentrations at a given location that indicates the migration of methane gas from a cell, control measures will be employed after analysis and confirmation of the source. Measures that could be implemented include the installation of gas venting or extraction wells within the cell source(s).

A. Monitoring of Facilities

Routine gas monitoring will be conducted within the on-site buildings and in sub-soils adjacent to the buildings. This would include the maintenance/equipment building and the scale house. Within the interiors of the buildings, monitoring for methane will be performed on a monthly basis at locations with greatest potential for LFG migration. These locations include: electrical outlets on walls, floor drain penetrations of the concrete slabs, cracks in the concrete floor, etc. Also, an inspection of the equipment will be routinely performed according to the manufacturer's recommendation to verify the alarm's sensor. Review of the instruction manual is recommended prior to installation and/or testing.

If the alarm is activated, the following minimum procedures will be implemented to ensure safety:

METHANE SENSOR RESPONSE ACTIONS

1. DO NOT turn on or off, unplug or operate any electrical items (i.e. lights, fans, etc.).
2. Open all available doors and windows to ventilate the structure. The monitor will continue to alarm until methane concentrations drop below the specified level.
3. If the alarm continues after ventilating the area, evacuation of all personnel from the structure will be carried out according to the **Evacuation Plan for Facility Personnel**, as discussed in an earlier section.
Note: Personnel will be educated regarding the alarm trigger levels, factor of safety, potential gas sources, alarm interferences, etc.

H. Equipment Breakdown

The routine preventative maintenance program will minimize equipment down-time. If a vehicle or piece of equipment is unavailable, other suitable pieces of equipment will be used to perform the required task. In the unlikely event of multiple breakdowns, additional equipment will be leased from local contractors or suppliers until the landfill equipment is restored to proper working order.

I. Alternative Waste Disposal

During the unlikely event of landfill operations being shut down for an emergency, the waste stream will be diverted to an alternative waste disposal site. Presently, the waste from the Tarrant County Region is transported to the Cerro Colorado Landfill in Albuquerque. It is likely that this arrangement will continue if an emergency situation dictates. If this alternative site is not possible to use, then the waste stream will be diverted to the Sandoval County Landfill during the interim period. Regardless of the alternative waste disposal site(s) used, each site will be contacted in advance to secure the appropriate arrangements prior to the shipment of any refuse.

IV. WATER CONTAMINATION

Water contamination at the site could conceivably occur through two primary mechanisms:

1. leachate seepage with overland flow; and
2. subsurface leachate flow to groundwater resources.

The landfill has been designed to eliminate potential contamination which may result from either of these mechanisms. The cells and the leachate evaporation pond incorporate a flexible geomembrane liner over a geosynthetic clay liner (GCL) subbase. Each cell will be capped with a final impermeable cover to minimize leachate production due to infiltration into the cell. A geologic investigation revealed that the depth to groundwater at the site is at least 200 feet. Several low permeable layers lie between the landfill cell and groundwater, including a granitic-gneiss structure at approximately 180 feet below existing grade. A HELP Model simulation performed for this site revealed that no leachate migrated down to the granitic-gneiss basement during an 85 year simulation period. Also, a contaminant migration analysis performed assuming unsaturated conditions in the underlying soils determined a minimum travel time of 274 years to the landfill boundary and over 2000 years to the nearest producing well. Because of the geologic conditions at the site and the lack of leachate movement revealed by the HELP model and Contaminant Migration Analysis, it is highly unlikely that any leachate will migrate to the water table beneath the site and therefore, the installation of groundwater monitoring wells is not planned.

The occurrence of leachate seepage with overland flow usually occurs around the perimeter of a lined cell when the volume of the cell is compacted above existing grade. This can occur after a large storm event and is usually accompanied by erosion around and near the cell. In the event that this should occur, the eroded area near and around the cell will be immediately filled and regraded. All surface water within the landfill will be directed away from the cells and the Chavez Draw

4. designated personnel using gas detection equipment, and following approved safety protocol, will be dispatched to determine the source of methane gas (i.e. floor drains, foundation cracks, underground utility connections, etc.).
5. After the areas of concern are identified, the source of migration will be sealed to prevent recurrence. Silicone caulks will not be used as they are deleterious to the gas detection equipment and may result in invalid test results.
6. Torrance County Regional Landfill staff will be notified of the situation. An assessment will then be performed to determine the source and nature of the problem. Corrective measures will be implemented as appropriate. Occupation of the structure will not be allowed until gas monitoring results indicate that the situation has been remedied.

False triggering due to some of the conditions listed below will be avoided as several occurrences may affect the calibration of the monitor. These conditions are:

- a. high concentrations of carbon dioxide
- b. paint thinner, gasoline fumes and other vapor emitting components.
- c. aerosol spray or cleaners

Staff will be instructed as to the sensitivity of the monitoring devices and the conditions which may impact them.

Amendment of Contingency Plan

The contents of this contingency plan will be immediately amended accordingly whenever:

1. the facility permit is revised or modified;
2. the plan fails in an emergency;
3. the facility changes design, construction, operation, maintenance, or other circumstances in a way that increase the potential for fires, explosions, or releases of hazardous waste constituents, or changes the response necessary in an emergency;
4. the list of Emergency Coordinators changes; or
5. the list of emergency equipment changes.

**APPENDIX A
EMERGENCY RESPONSE AGENCIES AND CONTACTS**

<u>Agency/Organization</u>	<u>Emergency Number</u>
911 Dispatch Center Torrance County /sherriff's Office	(505) 384-2704 2705
Fire Moriarty Fire Department	(505) 832-4301
Police Moriarty Police Department Moriarty State Police	(505) 832-6060 (505) 832-4491
Medical Moriarty Health Clinic	(505) 832-4434

Local Emergency Response Contacts

Torrance County encourages 911 emergency service for all emergency calls.

Preparedness and Prevention

Internal Communications and Alarm Equipment (264.32(a))

All inhabited buildings at WSTF are equipped with telephone communication and fire alarm systems. Pull box alarms are available and accessible in buildings near the hazardous waste management units (Figures II-6-1 and II-6-2). Pull box alarm locations, for those buildings located nearest the hazardous waste units, are indicated in Appendix 1. In the case of an emergency, facility personnel will be notified through public address system announcements, siren wails or fire bells.

External Communications and Alarm Equipment (264.32(b))

Any site telephone may be used to summon emergency assistance from WSTF security, fire and emergency response teams. The Emergency Center, in addition to telephones, maintains a radio system which is capable to summoning assistance.

When a pull box alarm is used, an alarm signal is sent to the Emergency Center in Building 112. If the emergency involves a fire or potential fire, and off-site assistance is required, it can then be summoned by telephone.

Telephone communication is provided by U.S. West. Telephones are located at the 100 Area Container Storage Unit, at the 200 Area Evaporation Tank Unit (evaporation tanks), at the 500 Area Waste Fuel Treatment Unit, in every occupied building, and in marked boxes along the access road. The Emergency Center is immediately alerted by either lifting the receiver or by dialing 5111, depending on the type of phone.

Additional communications are provided by the use of hand-held and mobile two-way radios. In addition to the extensive telephone network available for internal and external communications, WSTF maintains 4 dedicated radio frequencies. The security personnel, the Emergency Services Center, Fire Department and personnel operation at the 700 Area Open Detonation Unit are all equipped with hand-held or mobile radios which can be utilized in the event of an emergency.

Fire Control Equipment and Procedures (264.32(c))

WSTF fire protection is provided by the use of fire hydrants, fire extinguishers, hose racks, and an on site Fire Department. Fire hydrants and water supply risers are located 700 feet south of the Container Storage Unit; there is another one adjacent to the Evaporation Tanks Unit (evaporation tanks); and one at the Waste Fuel Treatment Unit. The Container Storage Unit is located one half mile north of the WSTF Fire Department and is equipped

200 and 800 Areas	NAME	WORK NO.	HOME NO.	PAGER NO.
Primary	H. Johnson	524-5725	522-8137	5725
Alternate	D. Baker	524-5605	526-5480	5605
Second Alternate	H. Beeson	524-5542	521-0960	5542

Organization and Duties

The Emergency Coordinator will establish a command post for specific response to a spill and receive input from all WSTF responsible groups and make decisions on clean-up methods and resource allocations.

The on site contractor will provide an Emergency Response Team trained in the cleanup of spills of hazardous substances.

Coordinated Emergency Services

All emergency response activities will be directed by the NASA EC. In the event outside support is required, the EC will maintain authority over response activities.

Training

All personnel involved in spill response have received specialized training as outlined in the Training Plan, Permit Attachment II-4, Training Plan.

Contingency Plan Distribution

The Contingency Plan will be distributed as follows. Any changes to the original will be followed up with a change notice or revised copy to all Contingency Plan holders.

Distribution and locations of the Contingency Plan is as follows:

WSTF Site Copies:

- Original Copy - NASA WSTF Manager's Office
- WSTF Environmental Emergency Coordinator
- On site Contractor's Environmental Section
- Fire Department
- 200 Area Office Chief
- 300 Area Blockhouse
- 400 Area Blockhouse

environment, or any release of hazardous waste from a permitted unit.

Release - Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

Spill Response Team

Responsibilities

All persons appearing on the list of emergency coordinators (Table II-6-1) are persons with a minimum of one year experience in the areas for which they are involved. They have the authority to commit necessary resources in the event of an emergency. Their responsibilities are described below.

Emergency Coordinator (EC) - The official predesignated by the NASA WSTF Manager to act as an emergency response commander. The specific response actions to be taken in the event of an emergency will be determined by the EC, utilizing environmental information provided to him by the EPM and the AeNC. He will coordinate and direct the actual emergency activities. He is typically head of the Quality Assurance, Reliability and Safety Office because of familiarity with availability of resources and his first hand knowledge of emergency response. In the chain of command, the EC is directly responsible to the WSTF Manager.

Environmental Program Manager (EPM) - The official predesignated by the NASA WSTF Manager who will act as an advisor on environmental matters to the EC. This person is the contact to the regulatory community and other outside agencies. The EPM will also be responsible for fulfilling the notification requirement referred to in this plan. In the chain of command, the EPM is directly responsible to the WSTF Manager.

Area Environmental Coordinator (AeNC) - The official predesignated by the NASA Manager for his familiarity with specific wastes streams in the affected Area of the facility and his ability to provide specific chemical information to the EC. After the Emergency Response Team has completed their work, the AeNC will coordinate activities of the Spill Response Team in completing the task of waste clean-up. In the chain of command the AeNC is responsible both to the EC and the EPM.

The NMED will be notified within 90 days of any personnel changes which effect the Emergency Coordinator List

Table of Contents
for the
Contingency Plan

<u>Contents</u>	<u>Page</u>
Introduction.....	2
Purpose.....	2
Definitions.....	2
Responsibilities	3
Organization and Duties	5
Coordinated Emergency Services.....	5
Training.....	5
Contingency Plan Distribution.....	5
Amendment of Plan	6
Preparedness and Prevention.....	7
Internal Communications and Alarm Equipment.....	7
External Communications and Alarm Equipment.....	7
Fire Control Equipment and Procedures.....	7
Spill Control and Equipment.....	8
Decontamination of Equipment.....	10
Water Supply.....	11
Arrangements with Local Authorities.....	11
Emergency Procedures.....	12
General.....	12
Releases From Permitted Hazardous Waste Units.....	14
Soil Assessment and Clean-Up Procedures.....	17
Fires and Explosions.....	18
Containment Activities.....	20
Decontamination Procedures.....	20
Evacuation Plan	21
Record Keeping and Incident Reports.....	22
Operating Record	22
Incident Reports.....	22
Compliance.....	23
Corrective Action.....	23
Appendix 1 Floor Plan of Buildings Nearest Permitted Units Showing Locations of Fire Alarms, Electric Supply Pull Boxes and Fire Extinguishers	
Appendix 2 Chemical Hazard Information	

with fire extinguishers and a communication system that can be used to notify the appropriate personnel in the case of an emergency. All fire hydrants and fire protection water risers are inspected semiannually by the WSTF Fire Department for static pressure, flow pressure and water flow.

The WSTF Fire Department can respond with three fire trucks/pumpers in the event of an emergency. Each pumper truck carries 500 gallons of water and has an operating pressure of 150 psi. Two of the trucks pump at a rate of 750 gallons per minute and are capable of operating two 2 1/2-inch fire hoses. The other truck delivers 1,000 gallons per minute and can operate five 2 1/2-inch fire hoses. Each vehicle's operational status is checked daily and preventive maintenance is conducted on a weekly basis. Additionally, each pumper is back-flushed semi-monthly.

Portable fire extinguishers are present throughout WSTF. Fire extinguisher locations and types, for buildings near the hazardous waste units, are found in Appendix 1.

Fire control vehicles have an unobstructed path to all hazardous waste management areas and emergency procedures restrict access to authorized vehicles and personnel.

Spill Control and Equipment (264.32(c))

The WSTF contingency plan employs a spill response team, which is provided by the Environmental Section, that responds immediately to emergencies. The team is made up of professionals with experience in supervision, heavy equipment operations, fire fighting, safety engineering, contamination control, and environmental protection. This team is equipped with a portable source of self-contained breathing air, protective suits, commercial adsorbents, neutralization solutions, and assorted hand tools and containers. In the event of a spill or release at WSTF, the containment activities outlined the section on "Containment Activities" will be implemented.

A wide variety of the WSTF heavy equipment can be utilized for containment and clean-up in the event of a hazardous waste spill. In the event of a large spill, a bulldozer, backhoe and front-end loader are available for spill control.

Temporary storage tanks, portable pumps and hoses can be used to transfer and provide temporary storage for spill materials.

Absorbents and temporary construction materials, such as soil, sand and gravel, are readily available at WSTF. Other materials such as emulsifiers, specialty adsorbents, and containers can be obtained immediately from a central on site spill response stockpile. WSTF also maintains numerous hand tools, such as shovels and rakes, which can be utilized in the event of an

Personnel Protection Equipment:	Safety Crib Building 120	
- Hard Hats		
- Goggles		
- Safety Glasses		
- Face Shields		
- Splash Suits		
- Totally Encapsulates Suits		
- SCBA's		
- Chemical Cartridges		
- Respirators		
- Escape Masks		
- Assorted Gloves		
Spill Pillows	Warehouse	
Shovels	Facilities	
Rakes	Facilities	
Rope and Line	Warehouse	
Drums	150 Yard	
Salvage Drums	150 Yard	
Drum Hoist	Facilities	
Bung Wrench	Container Storage Unit	
Hand Pumps	Warehouse	

Decontamination of Equipment

If a spill should occur, all contaminated equipment will be decontaminated as a latter part of the response process. WSTF is equipped with a cleaning unit for decontamination. Post-

this plan in order to familiarize them with the layout and possible hazards at WSTF.

Emergency Procedures

General

WSTF emergencies will be reported to the Emergency Center switchboard which is manned 24 hours a day. The initial notification may be automatic, such as fire alarms or manual by telephone (Emergency Center, dial 5111) or radio. Site tours by firemen every 90 minutes during off-duty hours assists in notification. In the event of an emergency situation during working hours there are personnel in all areas who are trained and authorized to act as first responders. The Emergency Center will still be notified and the rest of the chain of events followed even if a first responder is on scene at the time of the emergency.

The switchboard operator at the Emergency Center will concurrently: dispatch the Fire Department; notify the area specific EC for the area in which the emergency is located; and notify the EEC.

The Fire Department will act as the first responder when they arrive on scene.

The First Responder will obtain technical information about hazards (Appendix 2: Contains information on the chemical hazards of the most widely used chemicals on site), perform search and rescue as required, identify vapor clouds, establish the command post, set up road blocks, and evaluate and implement initial Containment Activities procedures and the Evacuation Plan procedures as needed.

The Emergency Center will relay the information on the type of emergency to the EC and the EPM. The EC will proceed to the scene of the emergency and evaluate the situation. The EC will determine actions to be taken in response to the emergency. The EC will maintain contact with the EPM during all stages of the emergency.

EMERGENCY PHONE NUMBERS

White Sands Missile Range	(505) 678-4187
Memorial General Hospital	(505) 522-8641
NMED Emergency Response	(505) 827-9329

control, the EC will relinquish control of the clean-up effort to the Aenc who will oversee the clean up of the on site contractor.

Releases From Permitted Hazardous Waste Units

This section outlines some specific considerations for the units which handle hazardous waste.

Evaporation Tanks (264.56(e), 264.194(c))

The 200 Area hazardous waste evaporation tanks at WSTF provide for leak detection and secondary containment. In the event of a double failure or handling accident, the EC will make an initial assessment of fire, explosive, toxicity hazards, and potential threat to human health and the environment as previously described. The Contingency Plan will then be implemented as necessary and as outlined in the first part of the Emergency Procedures section. In the event a release from a tank is suspected or documented, the EC will be immediately notified and insure that the process flow to the tank is shut-off and the waste diverted to the stand-by tank. Because both tanks have independent leak detection systems, a leak in one tank will not preclude the use of the other independent tank. Notifications will be made as outlined in the section of this plan on Record Keeping and Incident Reports.

After the initial assessment has been made, any free-standing liquid will be contained with berms to prevent any further migration and to contain any additional releases which may occur until the tank is repaired and the remaining waste is removed. Any free-standing liquid and any hazardous waste residue which remains in the tank will then be removed and placed in another tank or container and transported off-site to a permitted disposal facility. A soil assessment and clean up will be performed as outlined in the Soil Assessment and Clean-Up Procedures portion of the plan.

During the decontamination operation, the tanks will be inspected to determine the cause of the hazardous waste leak. If the leak cannot be repaired or the tank's integrity is so impaired that it is no longer usable, the tank will be decontaminated using appropriate decontamination solutions, removed from service and the Closure Plan implemented. If the leak is repaired, the tank will be leak tested prior to returning to service.

If the tank cannot be successfully decontaminated it will be removed from its location and transported off-site for disposal at a permitted disposal facility.

Initial assessment of the fire, explosive, toxicity hazards, and the potential threat to human health or the environment will be made by the EC as described in the General portion of the plan. Subsequent to the initial assessment, any spills will be cleaned up and packaged for disposal at an permitted off-site RCRA facility.

Subsequent assessment will be made to determine if any contamination has escaped from the containment system. If contamination is confirmed, the soils will be excavated to remove all contamination by measures outlined in the plan section, Soil Assessment and Clean-Up Procedures. Contaminated soils will be disposed of at an off-site permitted disposal location.

Drums in the storage area will be inspected for deterioration, leakage or improperly secured closure devices. Any drums that are deteriorated or that cannot be sealed will have the contents removed and repackaged in serviceable drums. Unserviceable drums will be removed from service, cleaned in accordance with the Decontamination Procedures or disposed of off-site at a permitted disposal location if they cannot be decontaminated.

Open Detonation Unit (264.56(e), 264.171)

Any release of hazardous waste from the Open Detonation Unit (OD) would be indicated by elevated explosive residual organics and total metals in the soil as a result of inefficient treatment (refer to the Permit Attachment II-1, Waste Analysis). If elevated hazardous wastes are detected in the soil, a soil assessment and clean-up will be performed as noted in the Soil Assessment and Clean-Up Procedures portion of the plan.

In the event of a fire involving explosives, all personnel and equipment will be evacuated to a position no closer than the entrance to the Sanitary Landfill (refer to Figure II-6-2). The fire will be observed from this position until it burns out or undergoes a transition from deflagration to detonation. A waiting period of 24 hours will be observed before explosive personnel can approach the OD Unit and assess the situation. Soils around the OD Unit, which show indications of contamination from the burning of explosives, will be managed in accordance with Soil Assessment and Clean-Up Procedures. The soil will then be analyzed for explosive residual organics and total metals as discussed in Permit Attachment II-1, Waste Analysis. Any soils exhibiting concentrations in excess of the established background will be disposed in accordance with HWMR-6.

In the event there are other emergency situation not involving fire, all unnecessary personnel will be evacuated from the OD Unit. Only the qualified personnel needed to handle the emergency and take corrective measures will remain at the site.

Using portable monitoring instrumentation and visual observations, the soils that appear to be contaminated will be excavated. All excavated soils will be properly containerized, characterized and disposed of in compliance with HWMR-6.

After all soils that appear to be contaminated are removed from the area, a sampling grid will be developed based on the size and quantity of the spill to determine the extent of horizontal and vertical contamination. Core samples will be taken and analyzed from different locations and depths within and adjacent to the spill area. Analytical parameters will be based on the knowledge of the waste stream.

Based on the analytical results, and background or risk assessment levels, the AeNC will determine if the initial clean-up removed all contaminated soils or if more excavating, sampling, and analyses are required. All equipment used for the clean-up will be washed after completing the response, in accordance with the Decontamination Procedures. Equipment that cannot be successfully decontaminated will be characterized and disposed of in accordance with HWMR-6.

Fires and Explosions (264.56(e))

In the event of a potential or actual fire or explosion at WSTF, the Emergency Center or the Fire Department will be notified through either emergency fire alarms, telephone or radio contact. The Emergency Center or Fire Department will then notify the EC and the appropriate AeNC of the Area in which the emergency exists. The EC will activate the Contingency Plan. The WSTF Fire Department will have the duty to take the necessary actions to contain and alleviate the emergency under the direction of the Fire Department Chief and the command of the EC.

If flammable materials are involved in an incident and are on fire, the EC will immediately:

- 1) have all non-essential personnel evacuated from the affected area;
- 2) ensure that the appropriate fire control measures are taken (e.g., removal of ignition sources, availability of suitable fire control agents, activation of fire suppression systems);
- 3) direct containment activities (e.g., dikes, berms) to control the spread of flammable materials and potentially contaminated run-off; and
- 4) ensure that all process control systems are shut off and monitored for any leaks or pressure build-up.

with all applicable regulations.

Containment Activities

In the event of a spill or release of a hazardous substance, one of the duties of the first responder is the containment of any free liquids. This is to be done with spill control booms, spill pillows, earth, or any materials available, as needed. The objective of containment activities is to first control the spread and runoff of the material, and then to absorb the contained materials to minimize infiltration into the ground.

Decontamination Procedures (264.56(h)(2))

Post clean-up decontamination of personnel will take place in a decon stations designed to prevent the spread of contamination. The clean-up personnel will wear disposable outer garments or totally encapsulated suits. Decontamination will include: the physical removal of loose contaminants using rinse water and antistatic solutions; the scraping, brushing, wiping or absorption of adhering contaminants; and the rinsing or evaporation of volatile liquids. Disposable garments will be containerized for disposal in compliance with HWMR-6 and the totally encapsulated suits will be cleaned and inspected by the WSTF contamination control facility (clean room).

WSTF is equipped with a cleaning facility for the decontamination of a wide variety of materials that are tested on site. Post-emergency equipment for decontamination can be serviced in the "clean room" or on the "clean pad" by the on site cleaning facility. The location for cleaning will depend upon the size of equipment contaminated. Decontamination will be accomplished with the use of biodegradable soap, hot water, and steam. The resulting waste will be of such a dilute nature that no incompatibilities will result. Decontamination will be determined by visual inspection or by analysis of the rinsate. The determination of decontamination will be based on the chemical and physical nature of the contaminant.

Decontaminated equipment will be inspected by the facilities maintenance group. Diaphragms, gaskets, seals, and other soft goods that require replacement will be disposed in compliance with HWMR-6. Protective breathing equipment is inspected and maintained by the WSTF Quality Assurance, Reliability Safety Office. Materials that require disposal will be restocked from with the WSTF warehouse or reordered by the WSTF Environmental Section.

Any hazardous waste generated by the decontamination process at the cleaning facility will be collected by the 200 area evaporation tanks, which services the clean room and clean pad. Any emergency response equipment or materials which cannot be

Record Keeping and Incident Reports (264.56(j))

Operating Record (264.56(j))

After any incident occurs which requires implementation of the Contingency Plan, the same information required in Incident Reports section, regarding that incident will also be entered into the NASA operating record.

Incident Reports (264.56(j))

If it is determined that the emergency situation poses a threat to human health or the environment, or that the spill is a reportable spill, the EPM will make the following notifications:

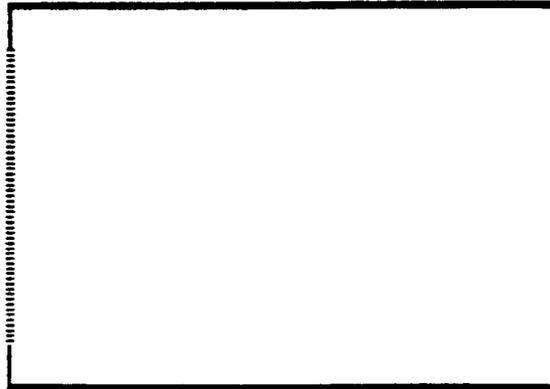
1. Immediate notification to the National Response Center (800) 424-8802;
2. Within 24 hours after any spill or release of hazardous waste, WSTF will notify the NMED Secretary or their designee. The report will include:
 - a. name and telephone number of reporter;
 - b. name address of facility;
 - c. time and type of incident (e.g., spill, fire);
 - d. name and quantity of materials involved, to the extent known;
 - e. the extent of injuries, if any; and,
 - f. the possible hazards to human health or the environment.
3. Within 15 days after any incident occurs, NASA will submit to the NMED Secretary a written report on the incident. The report will include:
 - a. name, address, and telephone number of the owner or operator;
 - b. name, address, and telephone number of the facility;
 - c. date, time, and type of incident (e.g., fire, explosion);
 - d. name and quantity of material(s) involved;
 - e. the extent of injuries, if any;
 - f. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and

APPENDIX 1

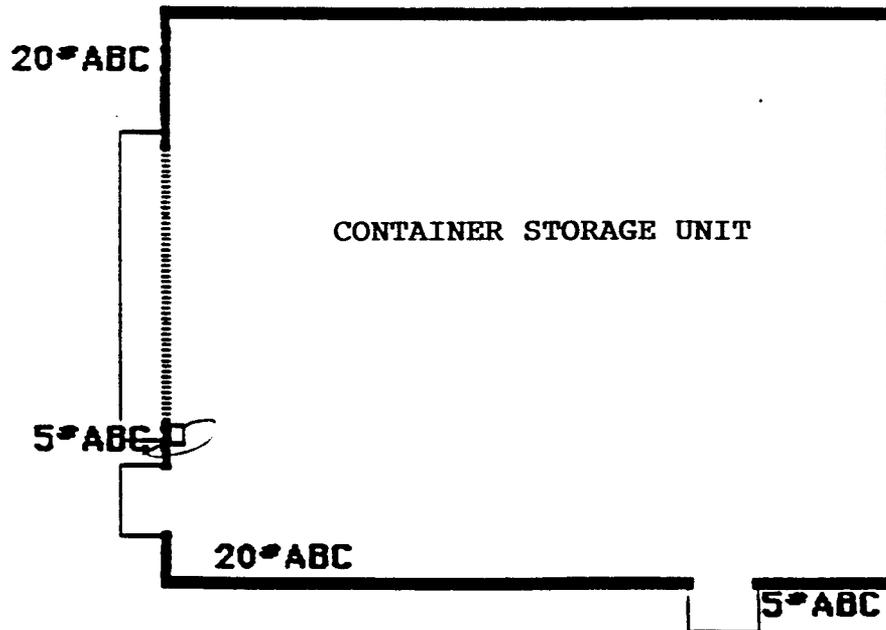
(PERMIT ATTACHMENT II-6)

**FLOOR PLANS OF BUILDINGS NEAREST PERMITTED UNITS
SHOWING LOCATIONS OF
FIRE ALARMS, ELECTRIC SUPPLY PULL BOXES AND FIRE EXTINGUISHERS**

EMERGENCY RESPONSE BUILDING

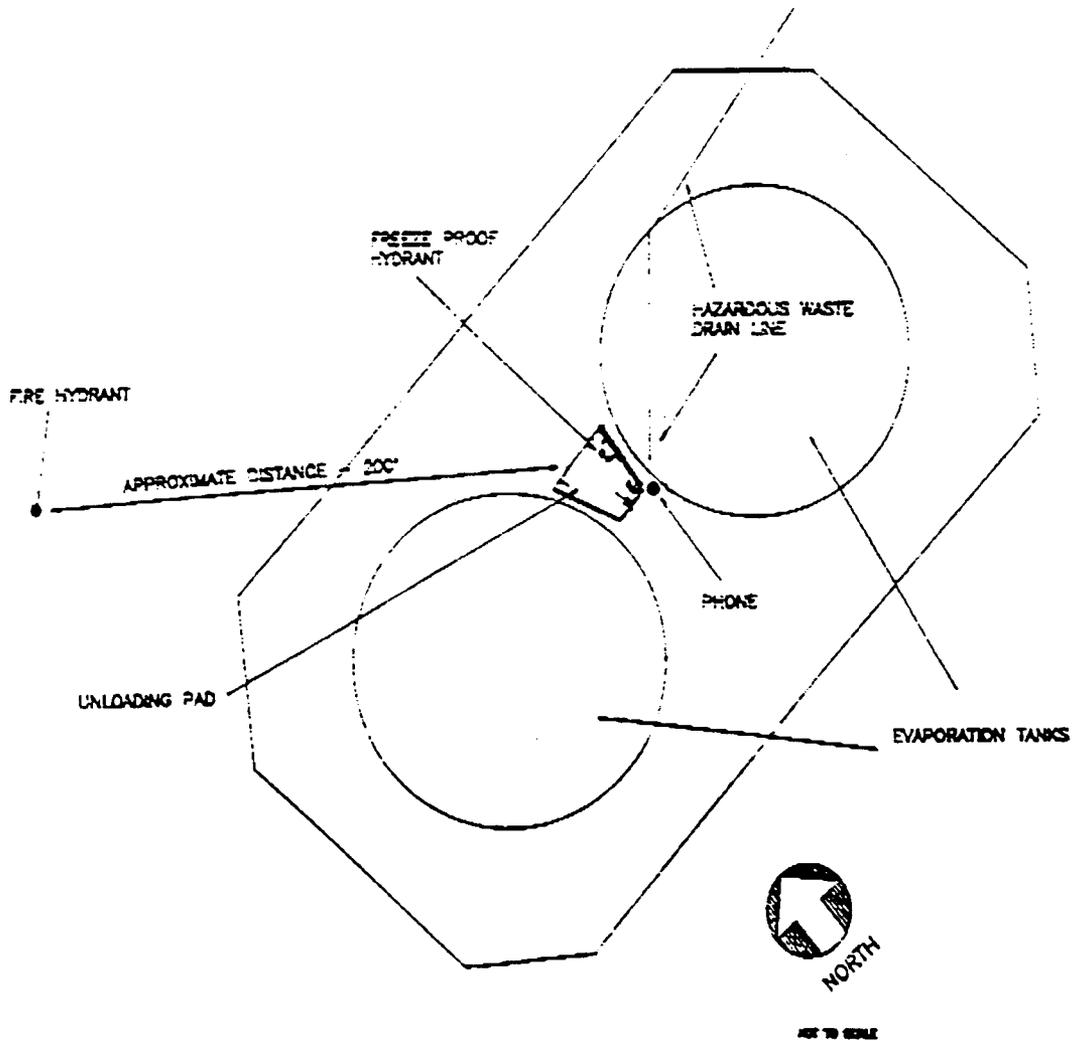


BLDG. 161



- 2- ABC-20# DRY POWDER FIRE EXTINGUISHERS
- 2- ABC- 5# DRY POWDER FIRE EXTINGUISHERS
- 1- □ -FIRE ALARM PULL BOX

EVAPORATION TANK UNIT



APPENDIX 2

(PERMIT ATTACHMENT II-6)

CHEMICAL HAZARD INFORMATION

1. Chromic acid

Toxicity:

PEL 0.1mg Cr O₂/m³ (ceiling). Very high via inhalation route.
Corrosive to all tissues. Respiratory and dermal protection
required.

Fire Hazard:

Non-flammable, but a powerful oxidizing agent which can react
violently with reducing agents and organic matter.

Explosion Hazard:

Can cause violent explosions upon contact with powerful reducing
agents.

Potential Incompatibilities:

Alcohols - Heat generation

Caustics - Heat generation

Halogenated organics - Heat and toxic gas generation

Ketones - Heat generation

Toxic metals - Solubilization

2. Freon 113

Toxicity:

TLV = 1000 ppm

Fire Hazard:

Non-flammable.

When heated to decomposition may emit highly toxic fumes of phosgene
and/or fluorides.

Dangerous when exposed to heat or flame.

Fire Hazard:

Flash point = 35° F

Vapor density = 2.42

LEL = 1.8%

UEL = 10%

Dangerous when exposed to heat or flame.

Explosion Hazard:

Moderate when exposed to flame.

Potential Incompatibilities:

Non-oxidizing mineral acids - Heat generation.

Caustics - Heat generation.

5. Phosphoric acid

Toxicity:

Corrosive via dermal and inhalation routes. Suitable respiratory and dermal protection required.

Fire Hazard:

Non-flammable.

When heated to decomposition emits toxic fumes of PO_x .

Explosion Hazard:

Not applicable.

Potential Incompatibilities:

Alcohols - Heat generation.

Caustics - Heat generation.

Halogenated organics - Heat and toxic gas generation.

Ketones - Heat generation.

UEL = 7%

Slight when exposed to heat, flame. or oxidizers. Can emit toxic fumes when heated to decomposition.

Explosion Hazard:

Moderate when exposed to flame.

Potential Incompatibilities:

Oxidizers - Heat and flammable gas generation.

8. 1,1,1-Trichloroethane

Toxicity:

TLV = 350 ppm

Moderate via oral route.

Fire Hazard:

Non-flammable.

When heated to decomposition can emit highly toxic fumes of phosgene.

Explosion Hazard:

Not applicable.

Potential Incompatibilities:

Non-oxidizing mineral acids - Heat and toxic gas generation.

Caustics - Heat and flammable gas generation.

9. Xylenes

Estimated quantity:

< 0.5 liters per week

Toxicity:

TLV(skin) = 100 ppm

Potential Incompatibilities:

Non-oxidizing mineral acids - Heat, innocuous and non-flammable gas generation.

Organic acids - Heat, and innocuous and non-flammable gas generation.

Alcohols - Heat, and innocuous and non-flammable gas generation.

Aldehydes - Heat generation.

11. Monomethyl hydrazine

Toxicity:

TLV(skin) = 0.2 ppm

High via inhalation and dermal route. SCBA's and dermal protection required.

Fire Hazard:

Flash point = 80° F

Vapor density = 1.6

LEL = 2.5%

UEL = 97%

Dangerous when exposed to heat, flame or oxidizers.

Explosion Hazard:

Severe when exposed to heat or flame or by chemical reaction.

Potential Incompatibilities:

Non-oxidizing mineral acids - Heat, innocuous and non-flammable gas generation.

Organic acids - Heat, and innocuous and non-flammable gas generation.

Alcohols - Heat, and innocuous and non-flammable gas generation.

Aldehydes - Heat generation.

Noncombustible but supports combustion.

Explosion Hazard:

Powerful oxidizing agent. can explode when in contact with reducing agents.

Potential Incompatibilities:

Reducing agents - Heat, explosions.

Bases - Heat generation.

14. Tetraflourohydrazine

Toxicity:

Irritant

Fire Hazard:

Explosion Hazard:

Powerful oxidizing agent. can explode when in contact with reducing agents.

Potential Incompatibilities:

Alkalines - Heat generation.

Reducing agent - Heat explosion.

**TABLE D-3
(continued)**

**EMERGENCY EQUIPMENT AT THE BURNING GROUND AND
THE OPEN DETONATION PADS, TAs 14, 15, 16, 36, AND 39**

Fire Control Equipment

Fire Extinguisher in each vehicle used to transport HE material
Fire Extinguisher in each control bunker

Description of General Capabilities

These are portable units of approximately 9 to 15 pounds capacity used in wet chemical laboratory applications. May be used by any employee in case of fire. Fire extinguishers are never used to put out controlled fires at the burning grounds.

Communication Equipment

Telephones
Two-way radios

Description of General Capabilities

Telephones for internal communication at the Laboratory and off-site communication with federal, state, county, and other agencies are available. A Centrex telephone system and a private telephone line (if Centrex fails) are available for use by all employees.

Located in each control bunker, in the control building at the burning ground, and at the waste water treatment facility at the burning ground. Radios allow communication between each vehicle.



TABLE D-3

**EMERGENCY EQUIPMENT AT THE TA-50 CHEMICAL WASTE INCINERATOR AND
ROOM 117 STORAGE AREA**

Fire Control Equipment

13 fire extinguishers (9C-CO; 4 A-water)

Description of General Capabilities

These are portable units of approximately 9 to 15 pounds capacity used in wet chemical laboratory applications. May be used by any employee in the event of fire.

Manually operated fire alarm may be activated by any employee in the event of fire to notify Central Alarm Station.

The sprinkler system is an automatic system which delivers a maximum of 200 psi of water spray through shower heads placed at locations which maximize fire suppression range capability. In the event of fire, this system should function automatically, requiring no manual assistance.

Halon Extinguishing Systems are indicated to supplement automatic sprinkler systems which protect high value equipment, or suppress special hazardous operations or occupancies.

Location:

- 1 Mechanical Equipment Room 111
- 2 High Bay Room 112
- 2 High Bay Room 114
- 1 South of Library and Conference Room
- 1 Chemistry Laboratory Room 107
- 1 Process Engineering Laboratory Room 209
- 1 Office Area Room 202
- 1 Room 21
- 1 Room 117

11 Fire Alarm Pull Boxes connected to the CAS

Location:

- 1 Mechanical Equipment Room 111
- 1 High Bay Room 112
- 2 South of Library and Conference Room
- 2 High Bay Room 114
- 1 East of women's changing room
- 1 Process Engineering Laboratory
- 1 Office Area Room 202
- 2 Room 21

Automatic thermal alarm on inlet and exhaust of ventilation system

Automatic thermal sprinkler system throughout offices

4 Fire Hydrants

Location:

- 1 Northeast corner of Building 84
- 1 West of Building 69
- 1 Northeast of Building 37

Halon Extinguishing System, manual and ultraviolet in Room 115

Communication Equipment

Telephones throughout building with building-wide paging system

Description of General Capabilities

Telephones for internal communication at the Laboratory and off-site communication with federal, state, county and other agencies are available. A Centrex telephone system and a private telephone line (if Centrex fails) are available for use by all employees.

Radio located in Room 202

Spill Control Equipment

Absorbent kept onsite

PCB room is bermed to handle all liquids stored

Have Spill Prevention and Containment Plan

Description of General Capabilities

Containment is designed to handle all liquids stored. Absorbent is used in the event of a small spill.

Decontamination Equipment

Showers

Emergency eye wash

Description of General Capabilities

Safety showers and eye washes are used by personnel who receive a chemical splash to skin or eyes. Specific material safety data sheets for the chemical should be obtained prior to working with the chemical to determine if the application of water is indicated for decontamination.