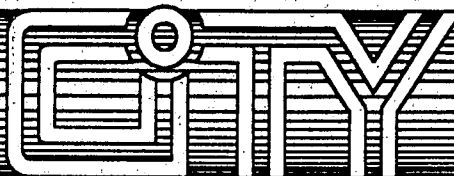


CONTINGENCY/EMERGENCY RESPONSE PLAN

UNIVERSAL WASTE & TRANSIT, INC.
2002 NORTH ORIENT ROAD
TAMPA, FLORIDA 33619

DECEMBER 1991

PREPARED AND SUBMITTED BY:



CITY ENVIRONMENTAL, INC. • 1923 FREDERICK STREET • DETROIT • MICHIGAN • 48211 • (313) 923-0080 •

© COPYRIGHT CITY ENVIRONMENTAL, INC. 1991

HAZARDOUS WASTE CONTINGENCY/EMERGENCY RESPONSE PLAN

Universal Waste & Transit, Inc.

2002 North Orient Road
Tampa, Florida 33619

FLD 981 932 494

RECEIVED

FEB 17 1994

Department of Environmental Protection
SOUTHWEST DISTRICT

BY _____

TABLE OF CONTENTS

	<u>Page</u>
General Facility Information	3
Introduction	4
Chapter I. Organization and Communications	5
Chapter II. Hazardous Waste and Emergency Procedures	12
Chapter III. Emergency Equipment and Communications System	21
Chapter IV. Care for the Injured	24
Chapter V. Emergency Waste Movement Coordination	26
Chapter VI. Emergency Waste Movement Flood/Hurricane Situation	28
Appendix 1 Personnel Protective Equipment	30
Appendix 2 Decontamination Procedure	32
Attachment 1 Space Utilization	33
Attachment 2 Discharge Log	35
Attachment 3 Facility Evacuation Routes	37
Attachment 4 Routes to Hospitals	39
Attachment 5 Signed Contingency Plan Receipts	41

Universal Waste & Transit, Inc. (UWT) operates a hazardous waste storage and treatment facility at:

2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

The facility is located on approximately 2 acres of land on Orient Road. The actual storage and treatment area is located within a 5,866 square foot building. The building is divided into three bays. Each of the three bays has front and rear exits, spill containment sumps, safety and fire alarms and equipment. The equipment and systems are described in Chapter 3.

The facility is designed to minimize the potential for any environmental contamination. Vehicles are able to load and unload directly to and from the warehouse. Virtually any potential release would be contained by the warehouse and its sumps, or within the vehicle. The vehicle transfer area is sloped and diked for containment. Waste materials are segregated by hazard class to insure that no incompatible wastes are stored together. All flammable materials are stored in a separate bay designed solely for that purpose. The building is fully sprinkled. The flammable storage area has an automatic foam fire suppression system. The building has both smoke and flame detectors which are continuously monitored. A lower explosion limit (LED) system is located in the flammable area. An automatic ventilation system is activated at 20% of the LED.

Fire extinguishers and fire hoses are located throughout the facility. Safety equipment, proximity suits, SCBA and material handling equipment are located at the site. Hazardous materials potentially on-site may include: acids; alkalis; poisons; flammables; combustibles; oxidizers; reactives; and other regulated solids or liquids which do not fall into these classifications. Most will be present in small quantities or in diluted concentrations when compared to the original raw material. No radioactive, pathological, TSCA PCB, or explosive materials will be located at this facility. A daily inventory of all materials stored at this facility is readily available.

All personnel at this site are trained in emergency response, hazardous waste operations, fire fighting procedures, emergency first aid, and CPR.

Introduction

The purpose of this plan is to provide UWT employees and responding agencies with an organized procedure for responding to unusual occurrences or emergencies involving hazardous chemicals and/or wastes when such releases could cause potential harm to human health or the environment. This plan is designed to present as simply as possible the necessary steps required in an emergency.

Emergencies covered under this procedure are fires, explosions, floods, hurricanes or unplanned sudden and non-sudden release into the environment of hazardous waste including liquids, vapors and particulates.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER I

ORGANIZATION AND COMMUNICATIONS

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Scope

The purpose of this section is to establish the organizational structure which will be in force during a response to a chemical emergency and what procedures will be utilized to notify corporate officials, outside response teams, local government authorities, and State and Federal Regulatory Agencies.

Emergency Response Notifications

In the event of an emergency situation involving hazardous chemicals or wastes, the personnel listed below shall be responsible for coordinating the necessary response and/or cleanup.

UWT management is to be notified immediately upon discovery of an emergency situation involving hazardous chemicals or wastes.

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
(813) 623-5302 or (813) 623-5341

Management will notify, via telephone, radio, mobil telephone or pager, the required UWT personnel for response to the scene. UWT emergency response vehicles are equipped with necessary cleanup/safety materials and first aid supplies. Trailers, sheds, and lockers on site also contain safety equipment and supplies.

After normal working hours, contact the following:

Universal Waste & Transit Emergency Coordinators:

1. Dave Streng
2720 Bayside Drive South
St. Petersburg, FL 33705
813/821-5884
Pager: 813/271-4012

Alternates:

1. Larry Sinatra
6816 Thomas Circle
Tampa, FL 33619
813/623-6567
Pager: 813/271-4015
2. Matt Edson
124 North Kings Avenue
Brandon, Florida 33510
813/651-1127
Pager: 813/271-4013
3. Jay Haaf
5112 17th Avenue
Tampa, Florida 33619
813/623-6298
Pager: 813/271-4014

All Emergency Coordinators have the authority to commit corporate funds during an emergency incident.

Fire Department and Outside Contractor Notifications

In any emergency situation, contact the following:

1. Tampa Fire Department (911). Indicate the extent and type of emergency which exists (fire, spill, etc.).
2. In the event of emergencies involving chemical spills, leaks, or explosions, (which may require additional assistance) at the direction of the Universal Waste & Transit Emergency Coordinator/Alternate one of the following spill response contractors should be notified:

Inland Waters Pollution Control, Inc.
4809 North Cortez
Tampa, Florida 33614
(813) 878-1083

OHM
1340 Mohawk Road
Clermont, Florida 34711
(904) 394-8601
Fax: (904) 394-7722

Government Agency Notification

In the event of an emergency where environmental contamination is eminent, in addition to notifying the Tampa Fire Department (911 emergencies), the following governmental agencies will be notified by the UWT Emergency Coordinator/Alternate.

1. Florida Department of Environmental Response
(904) 488-0190 (normal working hours)
(904) 488-1320 (24 hour)
2. U. S. Coast Guard National Response Center
(800) 424-8802
3. Florida DEP
Southwest District
Tampa, Florida Office
(813) 744-6100 (normal working hours)
4. U. S. Coast Guard
Tampa Marine Safety Division
(813) 228-2189
5. Hillsborough County
Solid Waste Department
(813) 272-6655
6. Florida Marine Patrol
(813) 272-2516
7. City of Tampa HAZMAT Team
(813) 227-7015
911 Emergencies

In addition to the NRC, you must contact the government official designated as the On-Scene Coordinator (OSC). This can be accomplished by calling (904) 488-1320.

The following information will be communicated to the governmental agencies contacted.

1. Name and telephone number of the reporter.
2. Name and address of the facility.
3. Time of the incident.
4. Type of incident (whether fire, explosion, or release).
5. Name of the material released.
6. Quantity of the material released.
7. Additional information such as liquid, vapor, or solid.
8. Type of incident (release from drum, tank, truck, or warehouse).
9. Extent of injury or injuries, if any.
10. Possible hazards to human health or the environment, outside the facility.
11. Weather conditions (wind direction, rain, etc.).
12. Potential for release or spill of material into surface waters.

Within 15 days of any incident the facility manager will notify, in writing, the Regional Administrator that the Contingency Plan has been implemented. All of the aforementioned items will be addressed as well as the quantity and disposition of all recovered materials resulting from the incident.

CONTINGENCY PLAN IMPLEMENTATION

The contingency plan will be implemented whenever the emergency coordinator/alternate determines an imminent or actual hazard exists which could threaten human health or the environment. This section provides the criteria used by the emergency coordinator/alternate in making the decision to implement the contingency plan.

Fire or Explosion

For incidents involving a fire or explosion, the following situations will result in contingency plan implementation:

- a. A fire which could cause the release of toxic fumes.
- b. A fire which could spread and possibly ignite other materials or which could cause heat-induced explosions.
- c. A fire which could spread to off-site areas.
- d. The use of water or chemical fire suppressants which could result in contaminated runoff.
- e. The imminent danger of an explosion which could result in a safety hazard due to flying fragments or shock waves.
- f. The imminent danger of an explosion which could result in the release of toxic materials.
- g. The occurrence of any explosion.

Unplanned Material Release

The contingency plan will be implemented for any release to the environment which results in one or more of the following conditions:

- a. A spill which could result in the release of flammable liquids or vapors, thereby causing a fire or explosion hazard.
- b. A spill which could cause the release of toxic liquids or fumes.
- c. A spill which could be contained on the site, but which could potentially result in groundwater contamination.
- d. A spill which cannot be contained on the site resulting in off-site soil, groundwater, or surface water contamination.
- e. Any flooding of the site which could result in surface water contamination.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER II

HAZARDOUS WASTE EMERGENCY PROCEDURES

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Purpose

The purpose of this section is to alert all emergency response groups, regulatory agencies and affected parties, as to the location of the hazardous waste storage areas within the facility and the procedures to be followed in response to emergencies in these areas. IT MUST BE UNDERSTOOD THAT POTENTIALLY TOXIC GASES AND VAPORS MAY BE PRESENT IN ANY INCIDENT INVOLVING HAZARDOUS MATERIALS.

Employee Response

1. Notification to evacuate the UWT facility in an emergency would be handled by one of several methods. These are:
 - a. Emergency air horns are located throughout the facility and are sounded when evacuation is necessitated.
 - b. An intercom system is also located throughout the facility and can also be used for notifying employees to evacuate the building. Verbal commands will be given should the intercom system be inoperative.
 - c. Pull alarms are located throughout the facility.
 - d. Phones are available throughout the facility.
 - e. Two-way radios are available at the facility.
 - f. All hazardous waste operations employees have pagers.
 - g. A mobile phone is available at the facility.
2. In the event of an emergency situation (spill, fire, explosion) the first employee to notice the emergency is to immediately sound the emergency air horns and/or alarms located throughout the building.
3. All employees are to don the necessary protective equipment including self-contained breathing apparatus (SCBA). This equipment is located in the safety equipment cabinets in Bay 3 of the facility and in the storage room in the office. Additional safety equipment is located in the equipment trailer. A complete outline of required safety equipment for various situations is included in Chapter III and Appendix 1.

4. Fire fighting or spill containment should begin immediately under the direction of the facility manager/supervisor until the UWT Emergency Coordinator/Alternate arrives on-site. Procedures are identified later in this chapter. Refer to the CHRIS Manual for additional information.
5. The facility supervisor is to contact the UWT Emergency Coordinator/Alternate immediately (telephone numbers are listed in Chapter I).
6. In the event of a fire or explosion, the sprinkler and foam systems will be automatically activated. Both the alarm and sprinkler system are monitored on a 24-hour basis. When the alarm or sprinklers are activated, the Tampa Fire Department will be notified immediately and automatically.
7. Electric service to the building should be shut off in the event of a fire or explosion. The main electric shut off is located on the outside south wall of the container storage building. No additional process systems, valves, gauges or equipment are required to be monitored or shut down since no potentially dangerous processes are employed at the facility.
8. All waste handling or processing in the affected area will be stopped immediately.
9. All waste feed lines and waste processing equipment will be shut down when this can be done safely. There are no continuous treatment processes. All treatment is on a batch basis. Power outages will simply make these processes inoperable.
10. In situations immediately dangerous to life and health (IDLH), evacuation of the facility may be necessary. This decision will be made by the Emergency Coordinator/Alternate or facility supervisor. If the evacuation occurs, the primary evacuation route should be used unless blocked or impassable. In that situation, the secondary evacuation route should be employed. Both routes are prominently outlined at the facility and are included with this plan.

Entrance Procedures

The following procedures are to be followed by all response personnel before entering the hazardous waste storage areas in emergency situations:

1. Consult the attached facility drawing which indicates both types and locations of materials which would be stored in the area to be entered. A general description of these areas is included in the next section.
2. Assume toxic/hazardous materials present in the area. A complete inventory is kept in the office area. Keys to the office area are located on a lock box at the main gate.
3. Select proper protective gear, including SCBA.
4. Consult DOT P 5800.2 Hazardous Materials Emergency Response Guide Book which is in the office area.

Remember, the primary responsibility during initial emergency response efforts is to save lives and protect the environment.

Facility Locations of Hazardous Waste

1. Warehouse Bay 1 (North Bay)
 1. Acids
 2. Toxic Metals
 3. Non-flammable solvents and halogens
 4. Filter Press
2. Warehouse Bay 2 (Center)
 1. Flammable liquids and solids
 2. Reactive cyanides, sulfides, and metals
3. Warehouse Bay 3 (South Bay)
 1. Poisons
 2. Oxidizers
 3. Caustics
4. Office/Lab
Satellite accumulation (5 gallon or less) of flammable, corrosive, chemical rags, and battery wastes.
5. Transfer Facility Vehicles (Located in the vehicle loading and unloading areas)
 1. Trailers
 2. Box Trucks
 3. Vans
 4. Tankers
 5. Roll-Offs

All vehicles containing hazardous waste are placarded and manifested per DOT and RCRA requirements.

Waste Storage Considerations

1. Approximately 1/3 of the waste managed at the facility is non-hazardous or non-regulated. These containers and vehicles can be identified by a blue "Non-Regulated Waste" DOT label.

The material presents no hazard (such as poison, flammable, corrosive, reactive, oxidizer). However, any release must be contained to prevent a release which may potentially contaminate waters or soils.

2. Several trailers may be at the facility which do not contain hazardous or non-hazardous wastes. These trailers may be empty, contain new empty drums, contain used empty drums for recycling, or contain safety equipment and supplies.

Spill or Release Response Procedures

In the event of a spill, certain procedures must be instituted immediately. The facility is designed so that the rupture of containers would result in no release of contaminants outside of the facility.

The storage area for acidic and alkaline wastes are segregated to insure that no comingling of these materials will results.

All flammable/combustible materials are stored in a separate bay.

All incompatible materials have separate containments.

Immediately contact all required individuals/agencies indicated on Chapter 1 of this document. These telephone numbers are posted at all facility telephones.

Should a spill or release occur, the following steps are to be taken:

1. Sound an alarm to notify an emergency.
2. Don protective equipment located in safety cabinets.
3. Contact UWT Emergency Coordinator/Alternate.
4. The source of the spill/release will be determined and corrected.
5. Waste handling or processing in the affected area will be stopped immediately.
6. All waste feed lines and waste processing equipment will be shut down as soon as this can be done safely.
7. All non-response personnel will leave the area immediately.
8. All injured persons will be removed from the area and treated by qualified medical personnel.
9. Contain the spill with either sorbent boom, sorbent pillows, or bulk sorbent material. All sorbents and booms are stored in the spill control storage area.
10. In the event of an acid spill, use calcium carbonate or lime to neutralize the spill.
11. Use citric acid to neutralize alkaline spills.
12. Once the spill has been contained, begin cleanup.
13. Contact the response contractors listed in Chapter 1 and request mobilization of personnel or equipment, if necessary.
14. The emergency coordinator/alternate will contact all required agencies.
15. Complete the discharge log shown in Attachment 2.
16. A complete list of response action for specific chemical spills is included in Appendix 2.
17. If immediate evacuation of the building is required, two-5 min egress bottles are attached to the supplied air system. Additional respiratory and personal protective clothing are located in the safety equipment cabinet located in Bay 3 of the facility.
18. In the event that a release outside the facility leads to surface water, groundwater or soil contamination, UWT will contact the contractors listed in Chapter 1 or other suitable contractor for all required remediation efforts.

Fire Fighting Procedures

The UWT facility is equipped with both smoke and flame detectors. Both are monitored on a twenty-four hour per day basis. If either are activated, the sprinkler and/or foam systems will automatically engage. The Tampa Fire Department will be notified by the alarm monitoring company.

Also included in the monitoring system is a lower explosive limit (LED) detector within the flammable storage area. There are two detectors. One is mounted in the spill sump to detect vapors which are denser than air. The second is mounted on the ceiling to detect vapors less dense than air. If vapors in the flammable area exceed 20% of the lower explosive limit, the ventilation system will automatically engage. If the LED reaches 30%, the sprinkler and foam systems will be activated automatically..

Located throughout the facility are fire extinguishers for Class A, B or C fires. Located in the flammable area are Halon extinguishers (or equivalent). Fire hoses are located throughout the building.

In the event of a fire, you should perform the following:

1. Notify other employees. If evacuation is necessary, sound the air horns and alarms.
2. Notify the Tampa Fire Department (911).
3. Move all transport vehicles away from the loading or unloading areas.
4. Use the extinguishers to control the fire if you are sure it can be done without endangering your life.
5. The facility is designed for minimal manual fire suppression.
6. Notify necessary agencies as indicated in Chapter I.

Re-Entry Monitoring

Before employees are allowed to return to the area after an emergency, the on-site Emergency Coordinator/Alternate will confirm the area is safe for re-entry. This will be accomplished by physical inspection of the area, the use of detection equipment, followed by decontamination as necessary. Chemical detection equipment available to the Emergency Coordinator/Alternate is as follows:

1. Chemical detector tubes - Draeger, MSA.
2. Explosion meter.
3. Portable hydrocarbon monitors.
4. Portable gas chromatograph.
5. Portable pH/specific ion meter.
6. A fully equipped environmental laboratory is located nearby. Any wet chemical or instrumental analyses can be performed as required.

Items 1, 2 and 5 are located in the office area. Items 3 and 4 are available through the spill response contractors listed in Chapter 1.

Decontamination Procedure

After an emergency incident, decontamination of equipment is required. All expendable items, such as sorbent, booms and so on are to be placed into 55 gallon drums, analyzed, and disposed as required by state and federal law. Non-expendable items such as tools, chemical suites and material handling equipment are to be cleaned in an appropriate solvent and placed back in their normal location. The suitable solvent will be determined by UWT's senior chemist. Disposal of the spent solvent will comply with applicable regulations.

All tanks and containerized waste will be thoroughly inspected for leaks, pressure build-up and structural integrity by the site supervisor. Any deficiencies will be immediately corrected.

Air monitoring will be performed as required to insure the facility is safe to resume normal operations.

A complete list of all available emergency equipment is included in Chapter 3. Specific decontamination solutions are included as Appendix 2.

Operations at the facility will not commence until such time as all emergency equipment has been cleaned, replaced and restored to its original location. All emergency equipment will be tested to determine its effectiveness prior to resuming operation after an emergency incident.

Local Agency Response Plan Familiarity

The City of Tampa Fire Department, Tampa HAZMAT Team, Tampa Police Department, Emergency Medical Services, U.S. Coast Guard, Florida DEP and outside spill response contractors have been notified as to the operation of this facility. All agencies have been invited to inspect the site and become aware of waste locations, access, on-site emergency equipment, and available fire protection items. A copy of the contingency plan has been sent to the agencies listed in Attachment 5.

Hazardous Materials Emergency Response References

The following is a list of references available at UWT:

1. CHRIS - Hazardous Chemical Data, Department of Transportation/U.S. Coast Guard.
2. Hazardous Materials Emergency Response Guidebook, Department of Transportation/DOT P 5800.2.
3. Merck Index.
4. Handbook of Hazardous Materials, Sax.
5. Florida Fire Code.
6. Cancer Causing Chemicals, Sax.
7. Toxic Organic Chemicals, E. Ellsworth Hackman III.
8. NIOSH Registry of Toxic Effects of Chemical Substances.
9. Emergency First Aid, American Red Cross.
10. Condensed Chemical Dictionary, Hawley.
11. Hazardous Materials, Substances, & Wastes Compliance Guide.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER III

EMERGENCY EQUIPMENT
AND
COMMUNICATIONS SYSTEMS

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Purpose

This chapter describes the emergency equipment and alarm systems at the UWT facility.

Emergency Equipment Located at Storage Area

All equipment listed below is stored in the spill control storage areas:

1. **Fire extinguishers** located throughout the building and prominently identified by signs and red markings. All are ABC extinguishers which can be used in any fire which may occur. Several halon extinguishers (or equivalent) are located in the flammable storage area.
2. **Hazorb sorbent** used to absorb any chemical spill and located in bags identified by the word Hazorb.
3. **Oil-Dri** and **Vermiculite** are used for solvent and oil spills. Located in bags identified with the words Oil-Dri or Vermiculite.
4. **Calcium carbonate** and **lime** are used to neutralize acids. Located in bags identified by the words Calcium Carbonate or Lime.
5. **Citric Acid** is used to neutralize alkalines. Bags are identified by the words Citric Acid.
6. **Spill control/sorbent booms** used to contain any spill. Spill control booms are available in various lengths.
7. **Protective Clothing** including PVC suits and polyethylene splash suits. PVC suits are rubberized suits while the splash suits are polyethylene coated paper clothing. Suits are available in Tyvek and Levels A through D.
8. **Full-face respirators, air-line respirators** and **SCBA** are available for respiratory protection.
9. **Gloves, boots, face shields, goggles** and **hard hats** may be used as protective equipment.
10. **Plug and dike sealant** used to seal leaking drums and tanks are located in five gallon buckets marked Plug & Dike.
11. Air powered **pumps with hose** for removal of liquids or water. Identified by lack of electrical connection.
12. Two inch **Patay pump** for removal of any flammable liquids and a manual floor pump.

13. **Drum pumps** for removal of any containerized liquids. Pumps are capable of fitting inside of a drum bung.
14. Compressed air cylinders to be used in conjunction with air supplied respirators. Cylinders marked with the words Breathing Air.
15. **Shovels, brooms, buckets, mops, tools, bung wrenches, etc.**
16. **Telephones** located on the north and south walls of the main storage area and in the office area.
17. Empty **55 gallon DOT 17H and 17E containers**.
18. Empty **85 and 110 gallon overpack drums** for recontainerizing damaged or leaking 55 gallon drums.
19. **Emergency showers** are located in the processing and storage areas. **Eye wash systems** are located throughout the building.
20. **Flame and smoke detectors** are located in the flammable storage area. **Lower explosive limit (LED)** monitors are located in the flammable storage area and smoke detectors are available in the general storage area.

Empty drums, oil dri, vermiculite and sorbent boom are located in the raw materials storage trailers. The fire extinguishers are on the walls and identified by red markings and the sign "Fire Extinguisher".

Communications Systems

1. **Air horns** are located throughout the hazardous waste storage area. In case of a spill, explosion, or other emergency, these can be used to alert all employees that evacuation is necessary.
2. An **intercom system** for verbal notification is located throughout the building. Non-evacuation commands are to be given over the intercom.
3. Rechargeable **two-way radios** are available at the facility.
4. Twenty-four hour **monitored alarms** are located throughout the facility.
5. **Mobile phones** are available at the facility.
6. **Telephones** are available at the facility.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER IV

CARE FOR THE INJURED

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Scope and Policy

The objective is to provide first aid or immediate care for a person who has been injured, or has been suddenly taken ill, in the event of an emergency.

All facility employees of UWT shall have been trained in standard first aid and cardiopulmonary resuscitation programs offered and presented by the American Red Cross.

First aid kits will be located in the office area.

Plan

In the event of an emergency, the UWT facility manager shall be in charge until the arrival of the Emergency Coordinator/Alternate.

All injured shall be taken to Brandon Humana Hospital or Tampa General Hospital by the local ambulance service. These hospitals will have been notified as to the type of injuries which may result at our facility. Routes to the hospitals are included in Attachment 4.

The nearest life squad is the City of Tampa. They can be contacted by dialing 911.

Contact Tampa General or Brandon Humana Hospital. Inform them of the extent of the emergency and what injuries to expect.

Implement emergency first aid as required.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER V

EMERGENCY WASTE MOVEMENT COORDINATION

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Emergency Waste Movement Coordination

In the event of an emergency situation where the movement of waste materials is required on a short-term basis, the following procedures are to be employed:

1. Contact the emergency response coordinator or alternate.
2. Contact UWT and/or subcontract drivers. All trucks are kept at the site.
3. Contact additional transportation firms, if required.
4. All containers would temporarily be held on storage trailers in compliance with the Florida transfer facility regulations.
5. Contact Florida DEP- Emergency Response Group, and the District Office in Tampa to inform them of the emergency waste movement. Telephone numbers for these groups are listed in Chapter I.
6. After all notifications have been performed, begin placing all drums onto the storage trailers in the following order:
 - ° reactives
 - ° corrosives
 - ° oxidizers
 - ° flammable solids
 - ° poisons
 - ° flammable liquids
 - ° ORM-E
 - ° consumer commoditiesHazard classes will be segregated as per DOT requirements when required. If possible, hazard classes will be loaded on separate trailers.
7. Complete all shipping documents as required.
8. Upon arrival of the drivers or contractor vehicles, begin moving the various trailers to a secondary approved location. Keep accurate records as to the quantity of material placed on each and their hazard class. Continue this operation until all drums have been removed.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER VI

EMERGENCY WASTE MOVEMENT - FLOOD OR
HURRICANE SITUATION

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

Emergency Waste Movement - Flood or Hurricane Situation

The facility is not located within the 100 year flood plain. In the event of an unexpected or rapid rise of flood waters or hurricane situations, certain actions must be taken immediately.

1. Contact the UWT Emergency Coordinator/Alternate immediately.
2. Contact DEP Emergency Response and the District Office in Tampa (telephone numbers for these groups are indicated in Chapter I).
3. Contact all UWT drivers and the contract transportation firms.
4. If rising waters are sufficient to warrant concern (possible entry into the facility) the UWT Emergency Coordinator/Alternate or his alternate will contact the contractors listed in Chapter 1 for mobilization of the portable water treatment system.
5. If rising waters pose a potential hazard, the following should be performed immediately:
 - a. Immediately implement the "Emergency Waste Movement Plan" detailed in Chapter V.
 - b. All personnel are to remain at the facility until evacuation is required by local authorities.

UWT will stay apprised of all potential flood or hurricane situations by monitoring existing weather related agencies.

Federal Aviation Authority	(813) 870-8700
National Weather Service	(813) 645-2506
U. S. Coast Guard	(813) 228-2189

UWT will also monitor all weather bulletins through radio transmissions. This should give sufficient warning of any potentially approaching flood or hurricane.

APPENDIX 1

PERSONAL PROTECTIVE EQUIPMENT

In order to adequately protect yourself from hazardous exposures, personal protective equipment must be used. Appendix 1 indicates various hazardous situations and the personnel protective equipment which is required.

Personal Protective Equipment Required for Hazardous Situations Level A Protection

Hazard Involved

- ° Situations immediately dangerous to life and health.
- ° Oxygen deficient atmospheres.
- ° Unknown hazardous materials.
- ° Chemicals which can be absorbed through the skin.
- ° Materials which cannot be removed with an air purifying respirator.

Required Personal Protective Equipment

- ° SCBA or air line respirator with SCBA escape air system.
- ° Full body encapsulation suit

All listed personal protective equipment is required for any hazard situation indicated.

Personal Protective Equipment Required for Hazardous Situations Level B Protection

Hazard Involved

- ° Oxygen deficient atmosphere where chemical composition of the material is known and falls into the classification of an irritant.

Required Personal Protective Equipment

- ° SCBA or air line respirator with SCBA for emergency use.
- ° PVC splash suit with hood.
- ° Neoprene/nitrile/butyl rubber arm length gloves.
- ° Steel toed rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

Personal Protective Equipment Required for Hazardous Situations
Level C Protection

Hazard Involved

- Situations not immediately dangerous to life and health.
- Sufficient oxygen present to support life.
- Irritant or corrosive chemicals.
- Contaminated soils.
- Liquid/solvents not immediately dangerous to life and health.

Required Personal Protective Equipment

- Full face mask with air purifying (cartridge) respirator; or, half face (cartridge) respirator with goggles and face shield.
- PVC splash suit.
- Protective gloves (type dependent on chemical being handled).
- Steel toed rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

Personal Protective Equipment Required for Hazardous Situations
Level D Protection

Hazard Involved

- Situations which contain no immediate hazard but where there is the potential for accidental release of a hazardous substance.

Required Personal Protective Equipment

- Half face air purifying (cartridge) respirator.
- Safety goggles.
- Disposable coveralls.
- Surgical rubber gloves or suitable hand protection. Rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

APPENDIX 2

DECONTAMINATION PROCEDURES

Inorganic/Organic Acids

Prepare mixture of 10% sodium carbonate or 10% hydrated lime or 10% trisodium phosphate in water; clean items/area with mop or cloth. Wear protective equipment.

Alkalai (Caustics)

Prepare mixture of 5% acetic acid (vinegar) or 5% citric acid in water; clean items/area with mop or cloth. Wear protective equipment.

Oils and PCB

Methylene chloride or isooctane applied directly to the contaminated area. Remove solvent and contaminant with sorbent or absorbent cloths. Wear protective equipment.

Alkalai and Alkaline Earth

Metals (sodium, potassium, phosphorus)

Cover immediately with dry soda ash (sodium-carbonate) and remove with broom and shovel. Keep dry; do not contact with water. Wear protective equipment.

Solvents

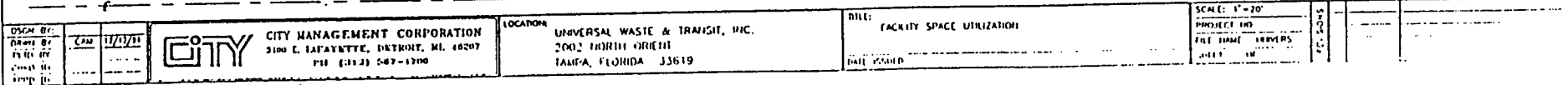
Cover with absorbent material as quickly as possible. Remove with broom and shovel. Wear protective equipment.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

Attachment 1

SPACE AND UTILIZATION

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494



HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

Attachment 2

DISCHARGE LOG

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

ATTACHMENT 2

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619

Discharge Log

<u>Date</u>	<u>Inspection Area</u>	<u>Material Discharged</u>	<u>Response Action</u>
	<u>Drums</u>	ORM-E _____	
		Poison _____	
		Corrosive _____	
		Flammable Liquid _____	
		Flammable Solid _____	
		Oxidizer _____	
		Reactive _____	
		Aerosols _____	

Treatment Areas

Solidification Area _____

Agencies Notified:

_____ Fire Department	(813) 223-4211
_____ Ambulance Service	(813) 223-4211
_____ Police Department	(813) 223-4211
_____ Florida DEP	(904) 488-1900
_____ U. S. Coast Guard	(813) 228-2189
_____ National Response Center	(800) 424-8802
_____ Tampa Sewer Dist.	(813) 254-1805

Discharge identified by:

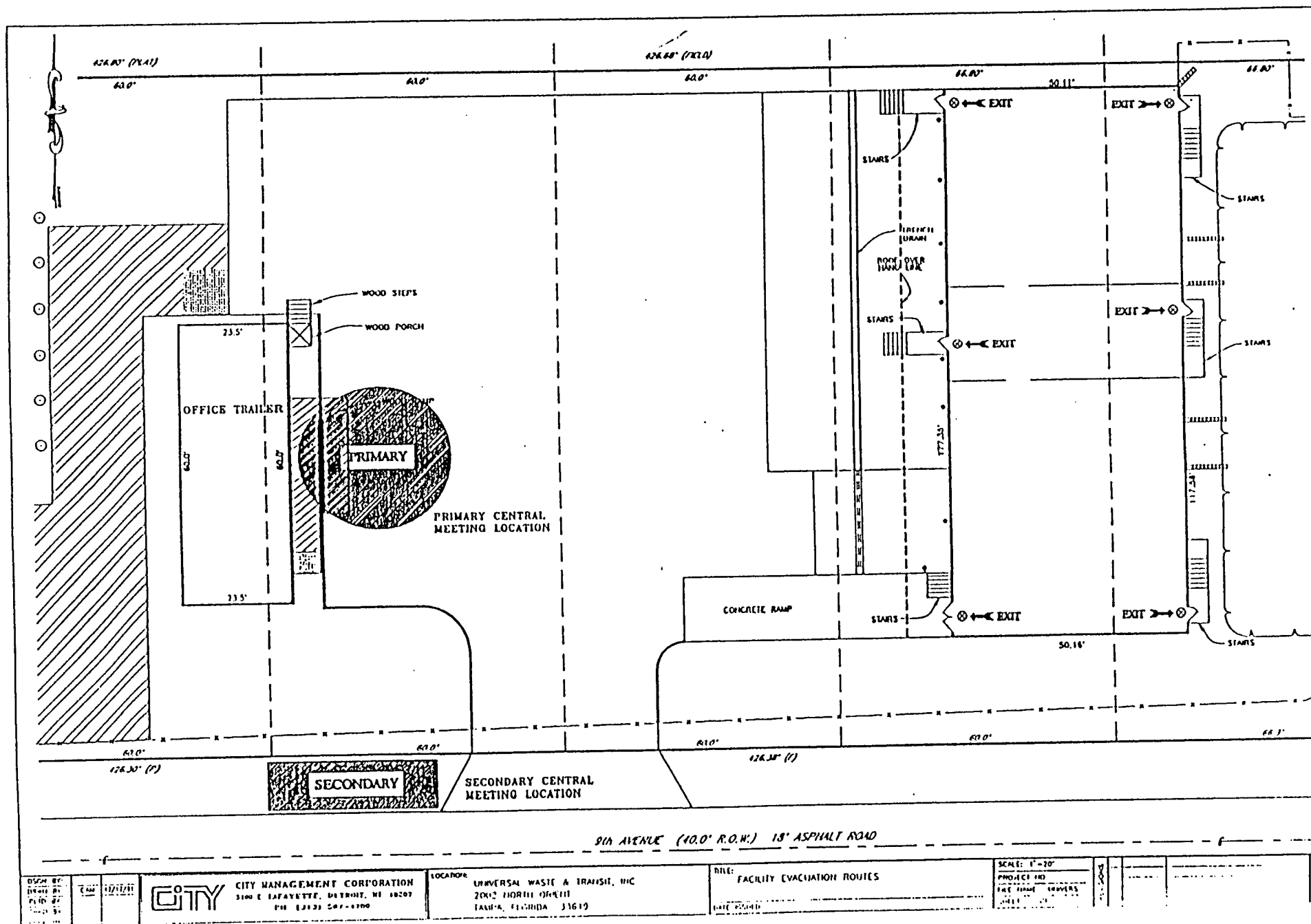
NAME	DATE	TIME

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

Attachment 3

FACILITY EVACUATION ROUTES

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

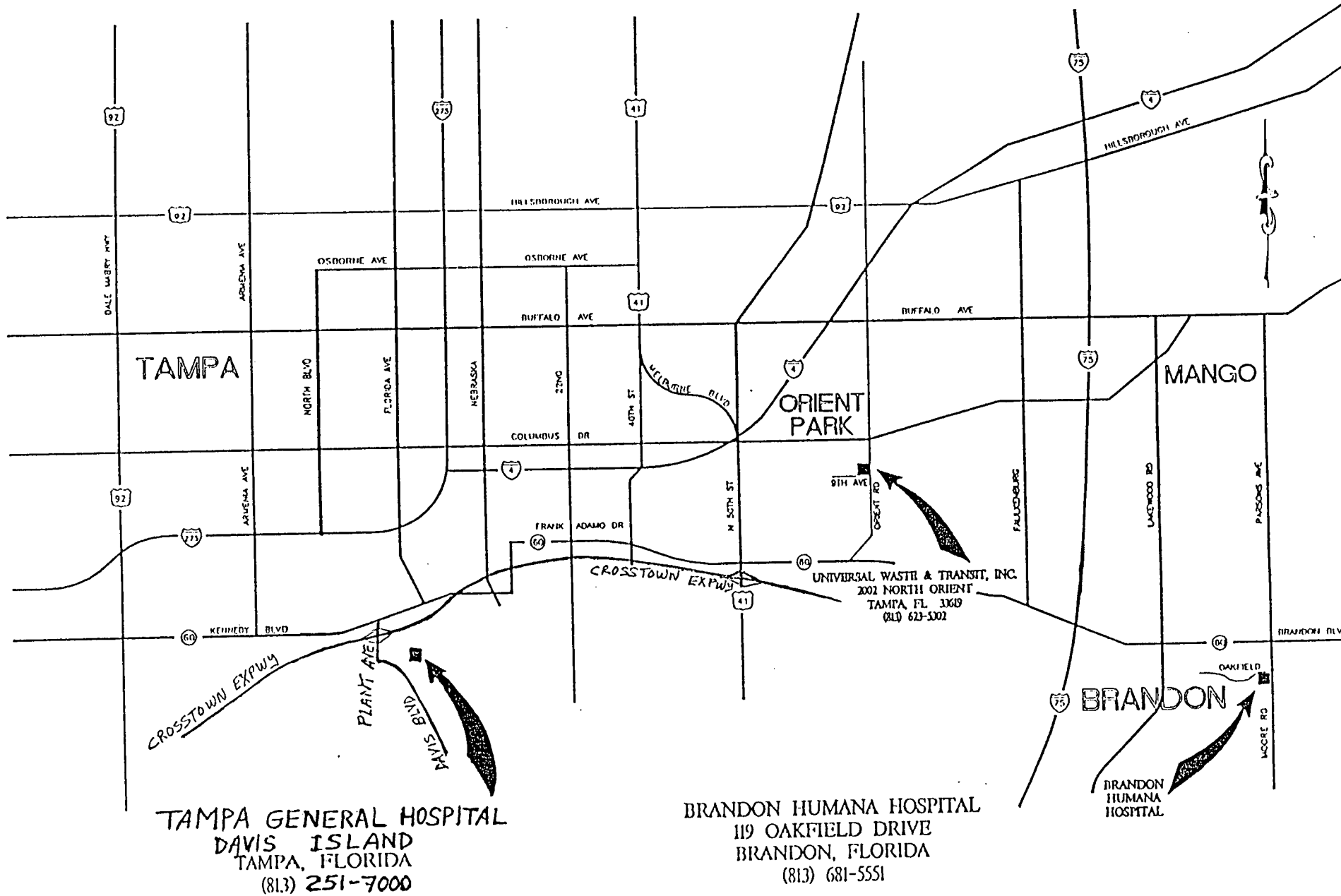


HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

Attachment 4

ROUTES TO HOSPITALS

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494



HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

Attachment 5

SIGNED CONTINGENCY PLAN RECEIPTS

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494

CONTINGENCY/EMERGENCY RESPONSE PLAN

UNIVERSAL WASTE & TRANSIT, INC.

2002 NORTH ORIENT ROAD

TAMPA, FLORIDA 33619

D. E. R.

DEC 27 1991

SOUTHWEST DISTRICT
TAMPA

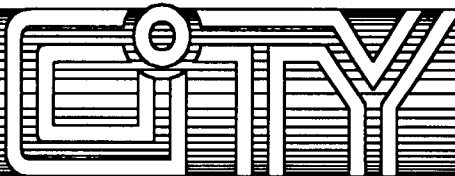
D. E. R.

DEC 20 1991

SOUTHWEST DISTRICT
TAMPA

DECEMBER 1991

PREPARED AND SUBMITTED BY:



• CITY ENVIRONMENTAL, INC. • 1923 FREDERICK STREET • DETROIT • MICHIGAN • 48211 • (313) 923-0080 •

TABLE OF CONTENTS

General Facility Information	1
Introduction	1
Chapter I. Organization and Communications	2-5
Chapter II. Hazardous Waste and Emergency Procedures	6-11
Chapter III. Emergency Equipment and Communications System	12-13
Chapter IV. Care for the Injured	14
Chapter V. Emergency Waste Movement Coordination	15
Chapter IV. Emergency Waste Movement Flood/Hurricane Situation	16-20
Appendix 1 Personnel Protective Equipment	
Appendix 2 Dermal Toxicity Data	
Appendix 3 Decontamination Procedure	
Attachment 1 Space Utilization	
Attachment 2 Discharge Log	
Attachment 3 Facility Evacuation Routes	
Attachment 4 Routes to Hospitals	
Attachment 5 Common Solvent	
Attachment 6 Incompatible Materials	
Attachment 7 Explosives List	
Attachment 8 Peroxides	
Attachment 9 Signed Contingency Plan Receipts	

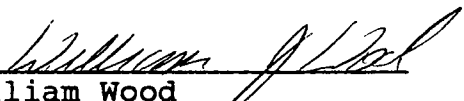
Revised
November, 1991

Certifications

The following statements are offered as certification of the aforerepresented plan by an authorized representative of Universal Waste & Transit, Inc.


The undersigned have reviewed the Contingency/Emergency Response Plan for the Universal Waste & Transit, Inc. facility. The undersigned are familiar with the facility and its operations. The undersigned hereby certify this plan has been prepared in accordance with good engineering practices and, to the best of my knowledge and belief, the information contained herein is true and accurate.

I certify the information provided in this document is, to the best of my knowledge, true, that accidental spill measures described in this document will be implemented immediately, as described, and they shall provide adequate protection when used properly.


William Wood
Vice President
Universal Waste & Transit, Inc.

Dec 16, 1991
Date

I certify the following spill prevention and control plan has been prepared in accordance with good engineering practices.


Paul T. Sgriccia, P.E.
Vice President
Universal Waste & Transit, Inc.
State of Michigan
Professional Engineer
Registration Number 30648

Dec 12, 1991
Seal/Date



General Facility Information

Universal Waste & Transit, Inc. (UWT) operates a hazardous waste storage and treatment facility at:

2002 North Orient Road, Tampa, Florida 33619

The facility is located on approximately 2 acres of land on Orient Road. The actual storage and treatment area is located within a 5,866 square foot building.

The facility is designed to minimize the potential for any environmental contamination. Waste materials are segregated by hazard class to insure that no incompatible wastes are stored together. All flammable materials are stored in a separate bay designed solely for that purpose. The building is fully sprinkled. The flammable storage area has both deluge sprinklers and a secondary foam fire suppression system. The building has both smoke and flame detectors which are continuously monitored. A lower explosion limit (LEL) system is located in the flammable area. An automatic ventilation system is activated at 20% of the LEL.

Fire extinguishers and fire hoses are located throughout the facility. Safety equipment, proximity suits, SCBA and material handling equipment are located at the site. Material potentially on-site may include: acids; alkalis; poisons; flammables; combustibles; and other regulated solids or liquids which do not fall into these classifications. Most will be present in small quantities or in diluted concentrations when compared to the original raw material. No radioactive or pathological materials will be located at this facility. A daily inventory of all materials stored at this facility is readily available.

All personnel at this site are trained in emergency response; fire fighting procedures and emergency first aid.

Introduction

The purpose of this plan is to provide UWT employees with an organized procedure for responding to unusual occurrences or emergencies involving hazardous chemicals and/or wastes when such releases could cause potential harm to human health or the environment. This plan is designed to present as simply as possible the necessary steps required in an emergency.

Emergencies covered under this procedure are fires, explosions, floods, hurricanes or unplanned sudden and non-sudden release into the environment of hazardous waste including liquids, vapors and particulates.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

**CHAPTER I
ORGANIZATION AND COMMUNICATIONS**

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Scope

The purpose of this section is to establish the organizational structure which will be in force during a response to a chemical emergency and what procedures will be utilized to notify corporate officials, outside response teams, local government authorities, and State and Federal Regulatory Agencies.

Emergency Response Notifications

In the event of an emergency situation involving hazardous chemicals or wastes, the personnel listed below shall be responsible for coordinating the necessary response and/or cleanup.

During normal working hours (Monday - Friday: 7:30 a.m. to 5:00 p.m.) UWT management is to be notified immediately upon discovery of an emergency situation involving hazardous chemicals or wastes.

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
(813) 623-5302

Management will notify, via mobil telephone or pager, the required UWT personnel for response to the scene. UWT emergency response vehicles are equipped with necessary cleanup/safety materials and first aid supplies

After normal working hours, contact the following:

Universal Waste & Transit Emergency Coordinators:

David Brown
10428 121st Avenue North
Largo, Florida 34643
(813) 398-5624

Jay Haaf
6819 Spencer Circle
Tampa, Florida 33610
(813) 626-0825

All Emergency Coordinators have the authority to commit corporate funds during an emergency incident.

Fire Department and Outside Contractor Notifications

In any emergency situation, contact the following:

1. Tampa Fire Department (911). Indicate the extent and type of emergency which exists (fire, spill, etc.).

2. In the event of emergencies involving chemical spills, leaks, or explosions, at the direction of the Universal Waste & Transit Emergency Coordinator/Alternate one of the following spill response contractors should be notified:

Westinghouse Remediation Services, Inc.
111 Kelsey Lane, Suite B-H
Tampa, Florida 33619
(813) 620-1432

Inland Waters Pollution Control, Inc.
4919 S. West Shore Boulevard
Tampa, Florida 33611
(813) 837-8000

Government Agency Notification

In the event of an emergency where environmental contamination is eminent, in addition to notifying the Tampa Fire Department, the following governmental agencies will be notified by the UWT Emergency Coordinator/Alternate.

1. Florida Department of Environmental Response
(904) 488-0190 (normal working hours)
(904) 488-1320 (24 hour)
2. U. S. Coast Guard National Response Center
(800) 424-8802
3. Florida DER
Southwest District
Tampa, Florida Office
(813) 623-5561 (normal working hours)
4. U. S. Coast Guard
Tampa Marine Safety Division
(813) 228-2189
5. Hillsborough County
Solid Waste Department
(813) 272-6655
6. Florida Marine Patrol
(813) 272-2516
7. Hillsborough County HAZMAT Team
(813) 681-9927

In addition to the NRC, you must contact the government official designated as the On-Scene Coordinator (OSC). This can be accomplished by calling (904) 488-1320.

These telephone numbers are correct as of October 23, 1991.

The following information will be communicated to the governmental agencies contacted.

1. Name and telephone number of the reporter.
2. Name and address of the facility.
3. Time of the incident.
4. Type of incident (whether fire, explosion, or release).
5. Name of the material released.
6. Quantity of the material released.
7. Extent of injury or injuries, if any.
8. Possible hazards to human health or the environment, outside the facility.
9. Weather conditions.
10. Potential for release or spill of material into surface waters.

Within 15 days of any incident the facility manager will notify, in writing, the Regional Administrator that the Contingency Plan has been implemented. All of the aforementioned items will be addressed as well as the quantity and disposition of all recovered materials resulting from the incident.

CONTINGENCY PLAN IMPLEMENTATION

The contingency plan will be implemented whenever the emergency coordinator/alternate determines an imminent or actual hazard exists which could threaten human health or the environment. This section provides the criteria used by the emergency coordinator/alternate in making the decision to implement the contingency plan.

Fire or Explosion

For incidents involving a fire or explosion, the following situations will result in contingency plan implementation:

- a. A fire which could cause the release of toxic fumes.
- b. A fire which could spread and possibly ignite other materials or which could cause heat-induced explosions.
- c. A fire which could spread to off-site areas.
- d. The use of water or chemical fire suppressants which could result in contaminated runoff.
- e. The imminent danger of an explosion which could result in a safety hazard due to flying fragments or shock waves.
- f. The imminent danger of an explosion which could result in the release of toxic materials.
- g. The occurrence of any explosion.

Unplanned Material Release

The contingency plan will be implemented for any release to the environment which results in one or more of the following conditions:

- a. A spill which could result in the release of flammable liquids or vapors, thereby causing a fire or explosion hazard.
- b. A spill which could cause the release of toxic liquids or fumes.
- c. A spill which could be contained on the site, but which could potentially result in groundwater contamination.
- d. A spill which cannot be contained on the site resulting in off-site soil, groundwater, or surface water contamination.
- e. Any flooding of the site which could result in surface water contamination.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

**CHAPTER II
HAZARDOUS WASTE EMERGENCY PROCEDURES**

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Purpose

The purpose of this section is to alert all emergency response groups, regulatory agencies and affected parties, as to the location of the hazardous waste storage areas within the facility and the procedures to be followed in response to emergencies in these areas. IT MUST BE UNDERSTOOD THAT POTENTIALLY TOXIC GASES AND VAPORS MAY BE PRESENT IN ANY FIRE INVOLVING HAZARDOUS MATERIALS.

Communication

The following people must be notified in the event of an emergency involving hazardous waste:

1. **Primary Emergency Coordinator**
David Brown
10428 121st Avenue North
Largo, Florida 34643
(813) 398-5624
2. **Alternate Emergency Coordinator**
Jay Haaf
6819 Spencer Circle
Tampa, Florida 33610
(813) 626-0825

All other notifications are included in Chapter I.

Employee Response

1. Notification to evacuate the UWT facility in an emergency would be handled by one of two methods. These are:
 - a. Emergency air horns are located throughout the facility and are sounded when evacuation is necessitated.
 - b. An intercom system is also located throughout the facility and can also be used for notifying employees to evacuate the building. Verbal commands will be given should the intercom system be inoperative.
2. In the event of an emergency situation (spill, fire, explosion) the first employee to notice the emergency is to immediately sound the emergency air horns located throughout the building.
3. All employees are to don the necessary protective clothing including self-contained breathing apparatus (SCBA). This equipment is located in the safety equipment cabinets in Bay 3 of the facility and in the storage room in the office. Additional safety equipment is located in the equipment trailer. A complete outline of required safety equipment for various situations is included as Appendix 1.

4. Fire fighting or spill containment should begin immediately under the direction of the facility manager/supervisor until the UWT Emergency Coordinator/Alternate arrives on-site. Procedures are identified later in this chapter. Particular response actions are indicated in Appendix 2. Refer to the CHRIS Manual for additional information.
5. The facility supervisor is to contact the UWT Emergency Coordinator/Alternate immediately (telephone numbers are listed in Chapter I).
6. In the event of a fire or explosion, the sprinkler system will be automatically activated. Both the alarm and sprinkler system are monitored on a 24-hour basis. When the alarm or sprinklers are activated, the Tampa Fire Department will be immediately notified.
7. Electric service to the building should be shut off in the event of a fire or explosion. The main electric shut off is located on the outside south wall of the container storage building. No additional process systems, valves, gauges or equipment are required to be monitored or shut down since no potentially dangerous processes are employed at the facility.
8. All waste handling or processing in the affected area will be stopped immediately.
9. All waste feed lines and waste processing equipment will be shut down when this can be done safely. There are no continuous treatment processes. All treatment is on a batch basis. Power outages will simply make these processes inoperable.
10. In situations immediately dangerous to life and health (IDLH), evacuation of the facility may be necessary. This decision will be made by the Emergency Coordinator/Alternate or facility supervisor. If the evacuation occurs, the primary evacuation route should be used unless blocked or impassable. In that situation, the secondary evacuation route should be employed. Both routes are prominently outlined at the facility and are included with this plan.

Entrance Procedures

The following procedures are to be followed by all response personnel before entering the hazardous waste storage areas in emergency situations:

1. Consult the attached facility drawing which indicates both types and locations of materials which would be stored in the area to be entered. A general description of these areas is included in the next section.

2. Assume toxic/hazardous materials present in the area. A complete inventory is kept in the office area. Keys to the office area located on a lock box at the main gate.
3. Select proper protective gear, includes SCBA.
4. Consult DOT P 5800.2 Hazardous Materials Emergency Response Guide Book which is in the office area.

Remember, the primary responsibility during initial emergency response efforts is to save lives and protect the environment.

Facility Locations of Hazardous Waste

(Reference Attachment I)

1. Main Storage Room
 - a. Emergency Response/Safety Equipment
 - b. Foam tank
 - c. General storage area for non-flammable waste
2. Secondary Storage Area (trailers)
 - a. Non-flammable waste awaiting transport
 - b. Emergency Response/Safety Equipment
3. Processing Area
 - a. Filter press
 - b. Emergency Response/Safety Equipment
4. Flammable Storage (explosion-proof room)
 - a. Drummed flammable liquids
 - b. Emergency Response/Safety Equipment
5. Office/Lab Area

Spill or Release Response Procedures

In the event of a spill, certain procedures must be instituted immediately. The facility is designed so that the rupture of containers would result in no release of contaminants outside of the facility.

The storage area for acidic and alkaline wastes are segregated to insure that no co-mingling of these materials will results.

All flammable/combustible materials are stored in a separate bay.

Immediately contact all required individuals/agencies indicated on Page 3 of this document. These telephone numbers are posted at all facility telephones.

Should a spill or release occur, the following steps are to be taken:

1. Don protective equipment located in safety cabinets.
2. Contact UWT Emergency Coordinator/Alternate by telephone.
3. The source of the spill/release will be determined and corrected.
4. Waste handling or processing in the affected area will be stopped immediately.
5. All waste feed lines and waste processing equipment will be shut down as soon as this can be done safely.
6. All non-response personnel will leave the area immediately.
7. All injured persons will be removed from the area and treated by qualified medical personnel.
8. Contain the spill with either sorbent boom, sorbent pillows, or bulk sorbent material. All sorbents and booms are stored in the spill control storage area.
9. In the event of an acid/alkaline spill, use calcium carbonate to neutralize the spill.
10. Once the spill has been contained, begin cleanup.
11. Contact Westinghouse Remediation Services (813) 620-1432 or Inland Waters Pollution Control (813) 837-8000, and request mobilization of a portable treatment system, if necessary.
12. The emergency coordinator/alternate will contact all required agencies.
13. Complete the discharge log shown in Attachment 2.
14. A complete list of response action for specific chemical spills is included in Appendix 2.
15. If immediate evacuation of the building is required, two-5 min egress bottles are attached to the supplied air system. Additional respiratory and personal protective clothing are located in the safety equipment cabinet located in Bay 3 of the facility.
16. In the event that a release outside the facility leads to surface water, groundwater or soil contamination, UWT will contact Westinghouse Remediation Services or other suitable contractor for all required remediation efforts.

Fire Fighting Procedures

The UWT facility is equipped with both smoke and flame detectors. Both are monitored on a twenty-four hour per day basis. If either are activated, the sprinkler system will automatically engage. The Tampa Fire Department will be notified by the alarm monitoring company.

Also included in the monitoring system is a lower explosive limit (LEL) detector within the flammable storage area. If vapors in the flammable area exceed 20% of the lower explosive limit, the ventilation system will automatically engage. If the LEL reaches 30%, the sprinkler system will be activated.

Also located in the flammable area is a foam secondary fire suppression system. This will activate automatically with the sprinkler system.

Located throughout the facility are fire extinguishers for Class A, B or C fires. Located in the flammable area are Halon extinguishers. Fire hoses are located throughout the building.

In the event of a fire, you should perform the following:

1. Notify other employees via the intercom system . If evacuation is necessary, sound the air horns.
2. Notify the Tampa Fire Department (911).
3. Move all transport vehicles away from the loading or unloading areas.
4. Use the extinguishers to control the fire without endangering your life.
5. The facility is designed for minimal manual fire suppression.
6. Notify necessary agencies as indicated on Page 3.

Re-Entry Monitoring

Before employees are allowed to return to the area after an emergency, the on-site Emergency Coordinator/Alternate will confirm the area is safe for re-entry. This will be accomplished by physical inspection of the area, the use of detection equipment, followed by decontamination as necessary. Chemical detection equipment available to the Emergency Coordinator/Alternate is as follows:

1. Chemical detector tubes - Draeger, MSA.
2. Explosion meter.
3. Portable hydrocarbon monitors.
4. Portable gas chromatograph.
5. Portable pH/specific ion meter.
6. A fully equipped environmental laboratory is located nearby. Any wet chemical or instrumental analyses can be performed as required.

Items 1, 2 and 5 are located in the office area. Items 3 and 4 are available through the spill response contractor (Page 3).

Decontamination Procedure

After an emergency incident, decontamination of equipment is required. All expendable items, such as sorbent, booms and so on are to be placed into 55 gallon drums, analyzed, and disposed as required by state and federal law. Non-expendable items such as tools, chemical suites and material handling equipment are to be cleaned in an appropriate solvent and placed back in their normal location. The suitable solvent will be determined by UWT's senior chemist.

All tanks and containerized waste will be thoroughly inspected for leaks, pressure build-up and structural integrity by the site supervisor. Any deficiencies will be immediately corrected.

Air monitoring will be performed as required to insure the facility is safe to resume normal operations.

A complete list of all available emergency equipment is included in Chapter III. Specific decontamination solutions are included as Appendix 3.

Operations at the facility will not commence until such time as all emergency equipment has been cleaned, replaced and restored to its original location. All emergency equipment will be tested to determine its effectiveness prior to resuming operation after an emergency incident.

Local Agency Response Plan Familiarity

The City of Tampa Fire Department, Hillsborough County HAZMAT Team, Tampa Police Department, U.S. Coast Guard, Florida DER and an outside spill response contractor have been notified as to the operation of this facility. All agencies have been invited to inspect the site and become aware of waste locations, access, on-site emergency equipment, and available fire protection items. A copy of the contingency plan has been sent to the Tampa Fire Department, Hillsborough County HAZMAT Team, U. S. Coast Guard, Westinghouse Remediation Services, Inland Waters Pollution Control, and the Tampa Police Department.

Original notifications were made to Humana Hospital, Brandon and Doctor's Hospital in June, 1989, relative to the materials handled, potential exposures and possible accidents which may occur.

Hazardous Materials Emergency Response References

The following is a list of references available at UWT:

1. CHRIS - Hazardous Chemical Data, Department of Transportation/U.S. Coast Guard.
2. Hazardous Materials Emergency Response Guidebook, Department of Transportation/DOT P 5800.2.
3. Merck Index.
4. Handbook of Hazardous Materials, Sax.
5. Florida Fire Code.
6. Cancer Causing Chemicals, Sax.
7. Toxic Organic Chemicals, E. Ellsworth Hackman III.
8. NIOSH Registry of Toxic Effects of Chemical Substances.
9. Emergency First Aid, American Red Cross.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

**CHAPTER III
EMERGENCY EQUIPMENT AND COMMUNICATIONS SYSTEMS**

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Purpose

This chapter describes the emergency equipment and alarm systems at the UWT facility.

Emergency Equipment Located at Storage Area

All equipment listed below is stored in the spill control storage areas:

1. Fire extinguishers located throughout the building and prominently identified by signs and red markings. All are ABC extinguishers which can be used in any fire which may occur. Several halon extinguishers are located in the flammable storage area.
2. Hazorb sorbent used to absorb any chemical spill and located in bags identified by the work Hazorb.
3. Oil-Dri and sawdust used for solvent and oil spills. Located in bags identified with the words Oil-Dri or Sawdust.
4. Calcium carbonate used to neutralize acids and alkalies. Located in bags identified by the words Calcium Carbonate.
5. Spill control/sorbent booms used to contain any spill. Spill control booms in 10 foot lengths. Sorbent booms in 20 foot lengths.
6. Protective Clothing including PVC suits and polyethylene splash suits. PVC suits are rubberized suits while the splash suits are polyethylene coated paper clothing.
7. Full-face respirators, half-face respirators, air-line respirators and SCBA for respiratory protection. Respirator description is self-explanatory.
8. Gloves, boots, face shields, goggles and hard hats to be used as protective equipment. These items are self-descriptive.
9. Plug and dike sealant used to seal leaking drums and tanks. Located in five gallon buckets marked Plug & Dike.
10. Air powered pumps with hose for removal of liquids or water. Identified by lack of electrical connection.
11. Two inch Patay pump for removal of any flammable liquids and a manual floor pump.
12. Drum pumps for removal of any containerized liquids. Pump capable of fitting inside of a drum bung.
13. Compressed air cylinders to be used in conjunction with air supplied respirators. Cylinders marked with the words Breathing Air.
14. Shovel, brooms, buckets, mops, tools, bung wrenches, etc. No description necessary.
15. Telephones located on the north and south walls of the main storage area and in the office area.
16. Empty 55 gallon DOT 17H and 17E containers.
17. Empty 85 and 110 gallon overpack drums for recontainerizing damaged or leaking 55 gallon drums. No description necessary.

Empty drums, oil dri, vermiculite and sorbent boom are located in the raw materials storage trailer. The fire extinguishers are on the walls and identified by red markings and the sign "Fire Extinguisher".

Communications Systems

1. Air horns are located throughout the hazardous waste storage area. In case of a spill, explosion, or other emergency, these can be used to alert all employees that evacuation is necessary.
2. An intercom system for verbal notification is located throughout the building. Non-evacuation commands are to be given over the intercom.
3. Emergency showers are located in the processing and storage areas. Eye wash systems are located throughout the building.
4. Flame and smoke detectors are located in the flammable storage area. Lower explosive limit monitors are located in the flammable storage area and smoke detectors are available in the general storage area.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

**CHAPTER IV
CARE FOR THE INJURED**

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Scope and Policy

The objective is to provide first aid or immediate care for a person who has been injured, or has been suddenly taken ill, in the event of an emergency.

All facility employees of UWT shall have been trained in standard first aid and cardiopulmonary resuscitation programs offered and presented by the American Red Cross.

First aid kits will be located in the safety equipment lockers and in the office area.

Plan

In the event of an emergency, the UWT facility manager shall be in charge until the arrival of the Emergency Coordinator/Alternate/Alternate.

All injured shall be taken to Humana Hospital or Doctor's Hospital of Tampa by the local ambulance service. This hospital will have been notified as to the type of injuries which may result at our facility. Routes to Humana and Doctor's Hospitals are included in Attachment 4.

The nearest life squad is the City of Tampa. They can be contacted by dialing 911.

Contact Humana Hospital at (813) 681-5551 or Doctor's Hospital of Tampa at (813) 879-1550. Inform them of the extent of the emergency and what injuries to expect.

Implement emergency first aid as required.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

**CHAPTER V
EMERGENCY WASTE MOVEMENT COORDINATION**

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Emergency Waste Movement Coordination

In the event of an emergency situation where the movement of waste materials is required on a short-term basis, the following procedures are to be employed:

1. Contact David Brown at (813) 398-5624 or Jay Haaf at (813) 626-0825.
2. Contact all UWT drivers. All trucks are kept at the site.
3. Contact additional transportation firms, if required:

Inland Water Pollution Control (813) 837-8000

A. R. Paquette (904) 736-1978

4. All containers would temporarily be held on storage trailers in compliance with the Florida transfer facility regulations.
5. Contact Florida DER - Emergency Response Group, to inform them of the emergency waste movement. The number for Florida DER - Emergency Response is (904) 488-1900. Contact Florida DER District Office in Tampa at (813) 623-5561 and notify them of same.
6. After all notifications have been performed, begin placing all drums onto the storage trailers in the following order:
 - reactives
 - corrosives
 - oxidizers
 - flammable solids
 - poisons
 - flammable liquids
 - ORM-E
 - consumer commodities
7. Upon arrival of the drivers or contractor vehicles, begin moving the various trailers to a secondary approved location. Keep accurate records as to the quantity of material placed on each and their hazard class. Continue this operation until all drums have been removed.
8. Complete all shipping documents as required.

HAZARDOUS WASTE CONTINGENCY AND EMERGENCY RESPONSE PLAN

CHAPTER VI

EMERGENCY WASTE MOVEMENT - FLOOD OR HURRICANE SITUATION

**Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619
FLD 981 932 494**

**Revised
November, 1991**

Emergency Waste Movement - Flood or Hurricane Situation

The facility is not located within the 100 year flood plain. In the event of an unexpected or rapid rise of flood waters or hurricane situations, certain actions must be taken immediately.

1. Contact the UWT Emergency Coordinator/Alternate immediately.
2. Contact DER Emergency Response and the District Office in Tampa (telephone numbers for these groups are indicated in Chapter I).
3. Contact all UWT drivers and the contract transportation firm listed in Chapter V.
4. If rising waters are sufficient to warrant concern (possible entry into the facility) the UWT Emergency Coordinator/Alternate or his alternate will contact Westinghouse Remediation Services for mobilization of the portable water treatment system.
5. If rising waters pose a potential hazard, the following should be performed immediately:
 - a. Immediately implement the "Emergency Waste Movement Plan" detailed in Chapter V.
 - b. All personnel are to remain at the facility.

UWT will stay apprised of all potential flood or hurricane situations by monitoring existing weather related agencies.

Federal Aviation Administration	(813) 223-2358
National Weather Service	(813) 645-2506
U. S. Coast Guard	(813) 228-2189

UWT will also monitor all weather bulletins through radio transmissions. This should give sufficient warning of any potentially approaching flood or hurricane.

APPENDIX 1

PERSONAL PROTECTIVE EQUIPMENT

In order to adequately protect yourself from hazardous exposures, personal protective equipment must be used. Appendix 1 indicates various hazardous situations and the personnel protective equipment which is required.

PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR HAZARDOUS SITUATIONS

Level A Protection

Hazard Involved

- ° Situations immediately dangerous to life and health.
- ° Oxygen deficient atmospheres.
- ° Unknown hazardous materials.
- ° Chemicals which can be absorbed through the skin.
- ° Materials which cannot be removed with an air purifying respirator.

Required Personal Protective Equipment

- ° SCBA or air line respirator with SCBA escape air system.
- ° Full body encapsulation suit

All listed personal protective equipment is required for any hazard situation indicated.

Revised
November, 1991

PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR HAZARDOUS SITUATIONS
Level B Protection

Hazard Involved

- ° Oxygen deficient atmosphere where chemical composition of the material is known and falls into the classification of an irritant.

Required Personal Protective Equipment

- ° SCBA or air line respirator with SCBA for emergency use.
- ° PVC splash suit with hood.
- ° Neoprene/nitrile/butyl rubber arm length gloves.
- ° Steel toed rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

Revised
November, 1991

PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR HAZARDOUS SITUATIONS
Level C Protection

Hazard Involved

- ° Situations not immediately dangerous to life and health.
- ° Sufficient oxygen present to support life.
- ° Irritant or corrosive chemicals.
- ° Contaminated soils.
- ° Liquid/solvents not immediately dangerous to life and health.

Required Personal Protective Equipment

- ° Full face mask with air purifying (cartridge) respirator; or, half face (cartridge) respirator with goggles and face shield.
- ° PVC splash suit.
- ° Protective gloves (type dependent on chemical being handled).
- ° Steel toed rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

Revised
November, 1991

PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR HAZARDOUS SITUATIONS
Level D Protection

Hazard Involved

- ° Situations which contain no immediate hazard but where there is the potential for accidental release of a hazardous substance.

Required Personal Protective Equipment

- ° Half face air purifying (cartridge) respirator.
- ° Safety goggles.
- ° Disposable coveralls.
- ° Surgical rubber gloves or suitable hand protection. Rubber boots.

All listed personal protective equipment is required for any hazard situation indicated.

Revised
November, 1991

APPENDIX II

DERMAL TOXICITY DATA

I. SELECTION OF CHEMICALS

The approximately 350 chemicals listed in Table III-1, at the end of this appendix, are identified in the Oil and Hazardous Materials Technical Assistance System (OHMTADS) as being dermally active. Since OHMTADS contains only about 1200 chemicals, or may not indicate a listed chemical as a skin hazard, other reference sources should also be consulted.

The data in Table III-1 were compiled by a toxicologist through a special project with the U.S. Environmental Protection Agency. As with any source of information, the data should be cross-checked against other standard references.

II. USE OF TABLES

A. Categories

Table III-1 divides chemicals into two categories:

Category 1 (more serious), which includes:

- Gases having a systemic dermal toxicity rating of moderate to extremely hazardous and a skin penetration ranking of moderate to high.
- Liquids and solids having a systemic dermal toxicity rating of extremely hazardous and a skin penetration ranking of moderate to high.
- Gases having a local dermal toxicity rating of moderate to extremely hazardous.
- Liquids and solids having a local dermal toxicity rating of extremely hazardous.

Category 2 (less serious), which includes:

- Gases having a systemic dermal toxicity rating of slightly hazardous and a skin penetration ranking of slight.
- Liquids and solids having a systemic dermal toxicity rating of slightly hazardous and a skin penetration ranking of moderate to slight.

- Gases having a local dermal toxicity rating of slightly hazardous.
- Liquids and solids having a local dermal toxicity rating of moderate to slightly hazardous.

B. Physical State

The physical state of the chemicals listed is their normal state. In a fire, some listed as solids or liquids could vaporize and represent a greater hazard to the skin. The chemicals listed may also be found mixed with other substances, which could change how they affect the skin.

C. Skin Penetration

- Negligible Penetration (solid - polar)
- + Slight Penetration (solid - nonpolar)
- ++ Moderate Penetration (liquid/solid - nonpolar)
- +++ High Penetration (gas/liquid - nonpolar)

D. Potency (Systemic)

Lethal amount to
a 70-kilogram man

- | | | |
|-----|--|----------------------------------|
| +++ | Extreme Hazard (LD ₅₀ : 1 mg/kg-50 mg/kg) | drops to 20 ml |
| ++ | Moderate Hazard (LD ₅₀ : 50-500 mg/kg) | 1 ounce - 1 pint
(1 pound) |
| + | Slight Hazard (LD ₅₀ : 500-15,000 mg/kg) | 1 pint - 1 quart
(2.2 pounds) |

E. Potency (Local)

- +++ Extreme - Tissue destruction/necrosis
- ++ Moderate - Irritation/inflammation of skin
- + Slight - Reddening of skin

III. RELATION OF TABLE III-1 AND LEVELS OF PROTECTION

The purpose of Table III-1 is to provide data that a qualified person can use in conjunction with other site-specific knowledge to select protective clothing. The data relate to skin toxicity only and should not be used to select respiratory protection equipment.

The known or suspected presence and/or measured concentration of Category 1 chemicals at or above the listed concentrations warrants wearing a fully encapsulating suit (Level A). The known or suspected presence and/or measured concentration of Category 2 chemicals at or above the listed concentrations suggests that a lesser level of skin protection (Level B or C) is needed.

There is no decision-logic for choosing protective clothing as there is for choosing respiratory protective equipment. The use of a fully encapsulating suit over other types of chemical-resistant clothing is generally a judgment made by a qualified individual based on an evaluation of all pertinent information available about the specific incident. Other guidance and criteria for selecting personnel protection equipment are contained in Part 5, Site Entry - Levels of Protection and in Appendix II.

IV. OTHER REFERENCES

Table III-1 does not include all substances affecting the skin. Other standard references should be consulted, in particular:

- Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment With Intended Changes for 1982, American Conference of Governmental Industrial Hygienists, 6500 Glenway Ave., Building D-5, Cincinnati, OH 45211 (1982).
- NIOSH/OSHA Pocket Guide to Chemical Hazards, U.S. Government Printing Office, Washington, DC 20402 (August 1981).
- Registry of Toxic Effects of Chemical Substances, U.S. Government Printing Office, Washington, DC 20402 (1980).

Whenever possible, data in one reference should be cross-checked with other references.

TABLE II-1
DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
2,2 Dichloropropionic acid	solid	+	local	++	-	2
2,4,5 - T Acid	solid	+	systemic local	+ ++	10 mg/m ³ /8h	2
2,4,5 - T Amines	solid	+	systemic local	+ ++	10 mg/m ³ /8h	2
2,4,5 - T Esters	solid	+	systemic local	+ +	10 mg/m ³ /8h	2
2,4,5 - TP Acid	solid	+	systemic local	+ ++	10 mg/m ³ /8h	2
2,4,5 - TP Acid Esters	liquid	++	systemic local	+ +	10 mg/m ³ /8h	2
2,4,5 - T Salts	solid	+	systemic local	+ +	10 mg/m ³ /8h	2
2,4 - D Acid	solid	+	systemic local	+ ++	10 mg/m ³ /8h	2
2,4 - Dichlorophenol	solid	+	systemic local	+ ++	-	2
2,4 - D - Esters	liquid	++	systemic local	+ +	10 mg/m ³ /8h	2
2 - Ethylhexyl Acrylate	liquid	++	local	+++	-	2
2 - Methyl - 5 - ethyl pyridine	liquid	++	local	+	-	2

TABLE 11-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
2 - Naphthol	solid	+	local	++	-	2
3,5 - Xylenol	solid	+	systemic local	++ +	-	2
Acetaldehyde	liquid	+	local systemic	++ +	200 ppm/8h 360 mg/m ³ /8h	2
Acetic Anhydride	liquid	+	local systemic	++ +	5 ppm/8h 20 mg/m ³ /8h	2
Acetone	liquid	+++	local	++	1,000 ppm/8h 2,400 mg/m ³ /8h	2
Acetone Cyanohydrin	liquid	++	systemic	+++	10 ppm/8h	1
Acetoacetone	liquid	++	local	++	-	2
Acetyl Bromide	fuming liquid	+++	local	+++	5 ppm/15 min	1
Acetyl Chloride	fuming liquid	+++	local	+++	5 ppm/15 min	1
Acridine	solid	+	local sensitizer	+++	-	2
Acrolein	liquid	+	local sensitizer	+++	0.1 ppm/8h .25 mg/m ³ /8h	2
Acrylonitrile	liquid	+++	systemic local	+++ ++	2 ppm/8h	1

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Adipic Acid	solid	+	local	+	-	2
Adiponitrile	liquid	+++	systemic	+++	18 mg/m ³ /8h	1
Alkyldimethyl 3,4 - Dichlorobenzyl ammonium Chloride	liquid	+	local	+	-	2
Allyl Alcohol	liquid	++	systemic local	++ ++	2 ppm/8h 5 mg/m ³ /8h	2
Allyl Chloride	liquid	++	local	++	1 ppm/8h 3 mg/m ³ /8h	2
Ammonia	gas	+	local	+++	25 ppm/8h 18 mg/m ³ /8h	1
Ammonium Bicarbonate	solid	+	local	++	-	2
Ammonium Bichromate	solid	+	local	++	-	2
Ammonium Bifluoride	solid	+	local	++	-	2
Ammonium Bisulfite	solid	+	local	+++	-	2
Ammonium Carbamate	solid	+	local	+	-	2
Ammonium Carbonate	solid	+	local	++	-	2

TABLE I-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Ammonium Citrate (Dibasic)	solid	+	local	+++	-	2
Ammonium Ferrocyanide	solid	+	local	+	-	2
Ammonium Hydroxide	liquid	++	local	+++	-	1
Ammonium Phosphate (Dibasic)	solid	+	local	++	-	2
Ammonium Sulfamate	solid	+	local	++	10 mg/m ³ /8h	2
Ammonium Sulfide	solid	+	local	++	-	2
Ammonium Sulfite	solid	+	local	++	-	2
Ammonium Tartrate	solid	+	local	++	-	2
Ammonium Thiocyanate	solid	++	local systemic	+++ ++	-	2
Ammonium Thiosulfate	solid	+	local	++	-	2
Aniline	liquid	++	local	++	5 ppm/8h	2
Antimony	solid	+	systemic local	++ ++	0.5 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Antimony Pentachloride	liquid	++	local	+++	-	2
Argon - 37 (radioactive)	gas	+++	systemic	+++	-	1
Arsine	gas	+++	systemic	+++	0.05 mg/m ³ /8h	1
Arsenic	solid	++	local systemic	+++ +++	.25 mg/m ³ /8h	1
Arsenic-74 (radioactive)	solid	++	systemic	+++	-	1
Arsenic-76 (radioactive)	solid	++	systemic	+++	-	1
Arsenic-77 (radioactive)	solid	++	systemic	+++	-	1
Arsenic Acid	solid	++	local systemic	+++ +++	0.5 mg/m ³ /8h	1
Arsenic Disulfide	solid	++	local systemic	+++ +++	-	1
Arsenic Pentoxide	solid	++	local systemic	+++ +++	-	1
Arsenic Tribromide	solid	++	local systemic	+++ +++	0.5 mg/m ³ /8h	1
Arsenic Trichloride	solid	++	local systemic	+++ +++	0.5 mg/m ³ /8h	1

TABLE 11-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Arsenic Trioxide	solid	++	local systemic	+++ +++	.25 mg/m ³ /8h	1
Arsenic Trisulfide	solid	++	local systemic	+++ +++	0.5 mg/m ³ /8h	1
Barium	solid	+	local	++	0.5 mg/m ³ /8h	2
Benzene	liquid	++	local systemic	++ +++	75 ppm/30 min	1
Benzophenone	solid	+	local	++	-	2
Benzoyl Chloride	liquid	++	local	+++	5 mg/m ³ /8h	1
Benzoyl Peroxide	solid	++	local	+++	5 mg/m ³ /8h	1
Benzyl Alcohol	liquid	++	local systemic	++ +	-	2
Benzyl Benzoate	liquid	++	local	++	-	2
Benzyl Bromide	liquid	++	local	++	-	2
Benzyl Chloride	liquid	++	local	+++	1 ppm/8h	2
Beryllium Nitrate	solid	+	local	++	0.25 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Brombenzylcyanide	liquid <77 F-solid	++	local systemic	++ +++	-	1
Calcium Hypochlorite	solid	+	local	++	-	1
Calcium Oxide	solid	+	local	++	10 mg/m ³ /30 min	2
Calcium Phosphide	solid	+	local	++	-	2
Camphor	solid	+	local systemic	++ ++	2 ppm/8h	2
Captan	solid	++	local systemic	++ ++	5 mg/m ³ /8h	2
Carbaryl	solid	++	local systemic	+ ++	5 mg/m ³ /8h	2
Carbofuran	liquid	++	local systemic	+++ +++	0.1 mg/m ³ /8h	1
Carbon Disulfide	liquid	++	local systemic	++ +++	20 ppm/8h 60 mg/m ³ /8h	1
Carbon Monoxide	gas	+++	systemic	+++	50 ppm/8h	1
Carbon Tetrachloride	liquid	+++	systemic local	+++ +	10 ppm/8h	1
Cetyldimethylbenzyl- ammonium Chloride	solid	+	local	+	-	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Chloracetophenone	solid	+	local systemic	++ ++	.05 ppm/8h	2
Chlordane	solid	+	local systemic	++ ++	.5 mg/m ³ /8h	2
Bromine	liquid (fuming)	++	local systemic	+++ ++	.1 ppm/8h	1
Butylamine	liquid	++	local	+++	5 ppm/8h	1
Butyl Mercaptan	liquid	++	local	++	.5 ppm/8h	2
Butyric Acid	liquid	++	local	++	-	2
Calcium Arsenate	solid	+	local systemic	++ +++	1 mg/m ³ /8h	1
Calcium Arsenite	solid	+	local systemic	++ +++	-	1
Calcium Carbide	solid	+	local	++	-	2
Calcium Cyanide	solid	++	systemic local	+++ ++	5 mg/m ³ /10 min	1
Chlorine	gas	+++	local	+++	1 ppm/8h 3 mg/m ³ /8h	1
Chlorine - 36 (radioactive)	gas	+++	local	+++	-	1

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Chloroacetic Acid	solid	++	local	++	-	2
Chlorobenzene	liquid	++	local systemic	++ ++	75 ppm/8h 350 mg/m ³ /8h	2
Chlorobutadiene	liquid	++	local	++	25 ppm/8h	2
Chloromethane	gas	+++	local systemic	+ ++	100 ppm/8h	1
Chloropicrin	liquid	++	local	+++	0.1 ppm/8h	1
Chlorosulfonic Acid	liquid	++	local	+++	5 ppm/8h	1
Chlorthion	liquid	++	local systemic	+++ +	-	2
Chromyl Chloride	liquid	++	local systemic	+++ ++	.1 mg/m ³ /8h	1
CMU	solid	+	local systemic	+ +	-	2
Copper Naphthenate	liquid	++	local systemic	++ ++	500 ppm	2
Coumaphos	solid	+	local systemic	++ +++	-	2
Cresyldiphenyl Phosphate	liquid	++	local	++	-	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Crotonaldehyde	liquid	++	local systemic	++ ++	2 ppm/8h	2
Cumene	liquid	++	local systemic	++ +	50 ppm/8h	2
Cupric Acetate	solid	+	local systemic	+++ ++	0.1 mg/m ³ /8h	2
Cupric Acetoarsenate	solid	+	local systemic	+++ ++	0.1 mg/m ³ /8h	2
Cupric Sulfate, Ammoniated	solid	+	local	++	2 mg/m ³ /8h	2
Cyanogen	gas	+++	systemic local	+++ ++	10 ppm/8h	1
Cyanogen Bromide	solid	++	local systemic	+++ ++	0.5 ppm/8h	1
Cyanogen Chloride	gas	+++	local systemic	++ ++	10 ppm/15 min 5 mg/m ³ /8h	1
Cyclohexanol	liquid	+	local systemic	++ +	50 ppm/8h	2
Cyclohexanone	liquid	+	local systemic	++ +	50 ppm/8h	2
Cyclohexylamine	liquid	++	local systemic	++ ++	10 ppm/8h	2
Decaborane	solid	+	local systemic	++ ++	.05 ppm/8h	2

TABLE 'I-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Decanal	liquid	++	local	++	-	
Diacetone Alcohol	liquid	++	local systemic	++ +	50 ppm/8h	2
Diamylamine	liquid	++	local systemic	++ ++	-	2
Diborane	gas	++	local systemic	++ ++	.1 ppm/8h	1
Dicamba	solid	+	local systemic	+ ++	-	2
Dichlobinil	solid	+	local systemic	+ +	-	2
Dichlone	solid	+	local	++	-	2
Dichlorodiflouromethane	gas	++	systemic	++	1,000 ppm/8h	2
Dichloroethyl Ether	liquid	++	local systemic	++ ++	5 ppm/8h	2
Dichloromethane	liquid	++	local systemic	++ ++	200 ppm/8h	2
Dichloropropane	liquid	++	local systemic	++ +	75 ppm/8h	2
Dichloropropene	liquid	++	local systemic	++ ++	-	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Dichloropropene Dichloropropane	liquid	++	local systemic	++ ++	-	2
Dichlorvos	liquid	++	systemic	++	.1 ppm/8h 1 mg/m ³ /8h	2
Dicyclopentadiene	liquid	++	local	+++	5 ppm/8h	2
Diethanolamine	solid	+	local	++	-	2
Diethylamine	liquid	++	local	++	25 ppm/8h	2
Diethylene Glycol	liquid	+	systemic	+	-	2
Diethylenetriamine	liquid	+	local	+++	1 ppm/8h	2
Diethyl Phthalate; Ethyl Formate	liquid	++	local	+	-	2
Dimethylamine	oily liquid	++	local	+++	10 ppm/8h 18 mg/m ³ /8h	2
N,N - dimethylaniline	oily liquid	+++	systemic local	++ +	5 ppm/8h 25 mg/m ³ /8h	2
Dimethylsulfate	liquid	++	local	+++	1 ppm/8h	2
Dioxane (p-dioxane)	liquid	++	local systemic	++ +	50 ppm/8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Diphosgene	gas	++	local	+++	-	1
Diquat		++	local systemic	++ ++	0.5 mg/m ³ /8h	2
Disulfotone	liquid	++	systemic	+++	.1 mg/m ³ /8h	1
Diuron		++	local systemic	++ ++	-	2
DNBP		++	systemic	+++	-	2
DNBP-NH ₄ -salt		++	systemic	+++	-	2
1-Dodecanol	solid	+	local	+	-	2
Endosulfan	solid	++	systemic	+++	0.1 mg/m ³ /8h	2
Endothal			local	++		
Epichlorohydrin	liquid	++	local systemic	+ ++	5 ppm/8h 19 mg/m ³ /8h	2
Ethion	liquid	++	systemic	++	-	2
Ethyl Acetate	liquid	++	local	++	400 ppm/8h 1400 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Ethyl Acrylate	liquid	++	local systemic	++ ++	25 ppm/8h 100 mg/m ³ /8h	2
Ethyl Benzene	liquid	++	local systemic	++ ++	100 ppm/8h	2
Ethyl Chloride	liquid	++	local frostbite	++	1,000 ppm/8h	2
Ethylene	gas	++	local frostbite	++	-	2
Ethylene Cyanohydrin	liquid	++	systemic	+	-	2
Ethylene Dibromide	liquid	++	local systemic	++ ++	20 ppm/8h 50 ppm/5 min	2
Ethylene Dichloride	liquid	++	local systemic	++ ++	10 ppm/8h 200 ppm/5 min	2
Ethylene Glycol Diacetate	liquid	++	systemic	+	-	2
Ethylene Glycol Monoethyl Ether Acetate	liquid	++	systemic local	+ +	100 ppm/8h	2
Ethylene Glycol Monoethyl Ether	liquid	++	systemic	+	25 ppm/8h	2
Ethylene Oxide	liquid	+	local	+++	50 ppm/8h	2
Ethyl Ether	liquid	+	local	+++	400 ppm/8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Ferbam	solid	+	local systemic	+ +	15 mg/m ³ /8h	2
Ferric Hydroxide	solid	-	local	++	-	2
Ferric Nitrate	solid	-	local	++	1 mg/m ³ /8h	2
Ferric Sulfate	solid	-	local	++	-	2
Ferrous Sulfate	solid	-	local	++ [~]	-	2
Ferrous Hydroxide [~]	solid	-	local	++	-	2
Ferrous Sulfite	solid	-	local	++	-	2
Fish Oil	liquid	++	local allergen	+	-	2
Fluorine	gas	+++	local	+++	.1 ppm	1
Formaldehyde	liquid	++	local systemic	+++ ++	3 ppm/8h	2
Formic acid	liquid	++	local	+++	5 ppm/8h	2
Furfural	liquid	++	local	+++	5 ppm/8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Gas oils	liquid	++	local	+	-	2
Glyoxal	liquid	+	local	+	-	2
Guthion	solid	++	systemic	++	-	2
Heptachlor	solid	+++	systemic local	++ +	.5 mg/m ³ /8h	2
Heptane	liquid	++	local systemic	++ +	500 ppm/8h	2
Heptanol	liquid	++	local systemic	++ +	-	2
HETP	liquid	+++	systemic	+++	-	1
Hexaborane	liquid	++	local systemic	++ ++	-	2
Hexamethylenediamine	solid	++	local systemic	+++ ++	-	2
Hexane	liquid	++	local systemic	++ +	500 ppm/8h	2
Hexanol	liquid	++	local	+++ ++	-	2
Hexylene Glycol	liquid	++	local systemic	++ +	25 ppm/8h 125 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Hydrazine	liquid	++	local systemic	+++ ++	1 ppm/8h	1
Hydrochloric Acid	liquid	++	local systemic	+++ +	5 ppm/8h	1
Hydrofluoric Acid	liquid	++	local systemic	+++ +	3 ppm/8h	1
³ H (Tritium) (Radioactive)	gas	+++	systemic	+++	-	1
Hydrogen Cyanide	gas	+++	systemic	+++	10 ppm/8h	1
Hydrogen Fluoride	gas	+++	local	+++	3 ppm/8h	1
Hydrogen Sulfide	gas	+++	systemic	+++	10 ppm/8h	1
Hydroquinone	solid	++	local systemic	++ ++	2 mg/m ³ /8h	2
Hypochlorous Acid	liquid	++	local	+++	-	2
Indole	solid	++	local	+++	-	2
Iron Dust	solid	-	local	++	-	2
Isobutyl Alcohol	liquid	++	local systemic	+ ++	100 ppm/8h	2

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Isobutyraldehyde	liquid	++	local systemic	+++ +	-	2
Isobutyric Acid	liquid	+	local systemic	+++ +	-	2
Isophorone	liquid	++	local systemic	++ ++	25 ppm/8h	2
Isophthaloyl Chloride	solid	+	local systemic	++ +	-	2
Isopropyl Acetate	liquid	++	local systemic	+ +	250 ppm/8h	2
Isopropylamine	liquid	++	local systemic	++ ++	5 ppm/8h	2
Isopropyl Ether	liquid	++	local systemic	++ +	250 ppm/8h	2
Kepone	liquid	++	local systemic	+ ++	-	2
Krypton 85 (radioactive)	gas	+++	systemic	+++	-	1
Lead Arsenate	solid	+	local systemic	+ ++	.5 mg/m ³ /8h	2
Lead Fluoborate	solid	+	local systemic	++ ++	-	2
Lindane	solid	++	systemic	++	.5 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Malathion	liquid	++	systemic	+++	10 mg/m ³ /8h	2
MCP	liquid	++	local systemic	+++ ++	-	2
Mercaptodimethur			systemic	++	-	2
Mercuric Cyanide	solid	+	local systemic	++ +++	.01 mg/m ³ /8h	2
Mercuric Nitrate	solid	+	local systemic	++ +++	.05 mg/m ³ /8h	2
Methacrylonitrile	liquid	++	local systemic	+ ++	1 ppm/8h	2
Methyl Acrylate	liquid	++	local systemic	+++ ++	10 ppm/8h	2
Methyl Amyl Acetate	liquid	++	local systemic	+ ++	50 ppm/8h	2
Methyl Amyl Alcohol	liquid	++	local systemic	++ +	25 ppm/8h	2
Methyl Bromide	liquid or gas	+	local	+++	20 ppm/8h	1
Methyl Chloride	liquid	+	local	+++	100 ppm/8h	2
Methylene Chloride	liquid	++	local systemic	++ ++	500 ppm/8h	2

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Methyl Ethyl Ketone	liquid	++	local systemic	+ ++	590 mg/m ³ /8h	2
Methyl Isobutyl Ketone	liquid	++	local systemic	+ +	100 ppm/8h	2
Methyl Mercaptan	gas	+++	local systemic	++ ++	10 ppm/8h	2
Methyl Methacrylate	liquid	++	local	+++	100 ppm/8h	2
Methyl Parathion	liquid	+++	systemic	+++	200 ug/m ³	1
Mexacarbate	solid	++	local systemic	+ +++	-	2
Monochloroacetone	liquid	++	local systemic	++ ++	-	2
Monochlorodifluoromethane	liquid	++	local (frostbite) systemic	+++ ++	1,000 ppm/8h	2
Monoethylamine	gas	+++	local	+++	10 ppm/8h	1
Monoisopropanolamine	liquid	++	local	++	-	2
Monomethylamine	gas	+++	local	+++	10 ppm/8h	1
Morpholine	liquid	++	local systemic	++ ++	20 ppm/8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Mustard Gas	gas	++	local	+++	-	1
m-xylene	liquid	++	local systemic	++ +	100 ppm/8h	2
m-xylol Bromide	liquid	++	local systemic	++ ++	-	2
Nabam	solid	++	local systemic	++ ++	-	2
Naled	liquid	++	local systemic	+ ++	3 mg/m ³ /8h	2
n-amyl Acetate	liquid	++	local	++	100 ppm/8h	2
Naphthalene	solid	+	local systemic	++ ++	10 ppm/8h 50 mg/m ³ /8h	2
Naphthenic Acid	solid	+	local	++	-	2
n-butyl Acetate	liquid	++	local	+	150 ppm/8h 710 mg/m ³ /8h	2
n-butyl Acrylate	liquid	++	local	+++	-	2
n-butyl Alcohol	liquid	++	local systemic	++ +	50 ppm/8h	2
n-butyraldehyde	liquid	++	local	+++	-	2

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Nickel Ammonium Sulfate	solid	+	local	++	1 mg/m ³ /8h	2
Nickel Carbonyl	liquid	++	local systemic	++ ++	.05 ppm/8h	2
Nitric Acid	liquid	+	local	+++	2 ppm/8h	1
Nitric Oxide	gas	++	local	+++	25 ppm/8h	1
Nitrilotriacetic Acid	solid	+	local	++	-	2
Nitrogen Dioxide	gas	++	local	++	5 ppm/15 min	1
Nitrobenzene	liquid	++	local systemic	++ ++	1 ppm/8h 5 mg/m ³ /8h	2
Nitrogen Chloride	liquid	++	local	++	-	2
Nitroglycerine	liquid	++	local systemic	++ ++	2 mg/m ³ /8h	2
Ozone	gas	+	local systemic	++ ++	.1 ppm/8h	2
Nitrous Oxide	gas	++	local	+++	25 ppm/8h	2
Nonane	liquid	++	local	++	-	2

TABLE 1-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Nonyl Phenol	liquid	++	local	+++	-	2
n-propyl Alcohol	liquid	++	local systemic	+ +	200 ppm/8h	2
Omazene	solid	+	local systemic	++ ++	-	2
o-nitrophenol	solid	++	local systemic	+++ +	-	2
o-nitroaniline	solid	+	local systemic	+ +++	-	2
Oxydipropionitrile	liquid	++	systemic local	++ +	-	2
o-xylene	liquid	++	local systemic	+ +	100 ppm/8h	2
para-nitroaniline	solid	+	local systemic	++ ++	1 ppm/8h	2
Pentanal	liquid	++	local systemic	++ +	-	2
Perchloromethyl mercaptan	liquid	+++	local systemic	++ ++	.1 ppm/8h	2
Phenolcarbylamine Chloride	liquid	++	local	++	-	2
Phenolmercuric Acetate	solid	+	local systemic	+ +++	-	2

11-26

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Phosgene	gas	+	local	+++	.1 ppm/8h	1
White Phosphorous (yellow)	solid	+	local systemic	+++ ++	-	1
Phosphorous Oxychloride	liquid	++	local systemic	+++ ++	-	2
Phosphorous Pentasulfide	solid	+	local systemic	+++ ++	1 mg/m ³ /8h	2
Phosphorous Trichloride	liquid	++	local systemic	+++ ++	.5 ppm/8h 3 mg/m ³ /8h	2
Phthalic-Acid-Diethyl-Ester	liquid	++	local	+	-	2
Phthalic Anhydride	solid	+	local systemic	++ +	1 ppm/8h	2
p-nitrophenol	solid	+	local systemic	++ ++	-	2
Potassium Arsenate	solid	+	local systemic	++ +++	.5 mg/m ³ /8h	2
Potassium Arsenite	solid	+	local systemic	++ +++	-	2
Potassium Permanganate	solid	+	local	+++	-	2
Propane	gas	++	local frostbite	+++	1,000 ppm/8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Propargite			systemic	++	-	2
Propionaldehyde	liquid	++	local	+++	-	2
Propionic Acid	liquid	++	local	++	10 ppm/8h	2
Propionic Anhydride	liquid	++	local	+++	-	2
Propyl Acetate	liquid	++	local	++	200 ppm/8h	2
Propylamine	liquid	++	local systemic	+++ ++	-	2
Propylene	gas	+++	local	+	4,000 ppm/8h	2
Propylene Oxide	liquid	++	local	++	100 ppm/8h	2
p-xylene	liquid	++	local systemic	++ +	100 ppm/8h	2
Pyrethrin I	liquid	++	local (allergen) systemic	++ +	-	2
Pyrethrin II	liquid	++	local (allergen) systemic	++ +	-	2
Pyrethrum	solid	+	local (allergen) systemic	++ ++	5 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Pyridine	liquid	++	local systemic	++ +	5 ppm/8h	2
Pyrocatechol	solid	+	local systemic	++ +	1 ppm/8h	2
Quinhydrone	solid	+	local systemic	++ +	-	2
Quinine	solid	+	local systemic	+ +	-	2
Quinolene	liquid	++	local systemic	++ ++	-	2
Quinone	solid	+	local systemic	++ ++	.1 ppm/8h	2
Resorcinol	solid	+	local systemic	+++ ++	10 ppm/8h	2
Salicylaldehyde	liquid	++	local systemic	++ +	-	2
sec-Butylamine	liquid	+	local systemic	+++ ++	15 mg/m ³ /8h	2
Selenium	solid	+	local systemic	++ ++	-	2
Selenium 75 (Radioactive)	solid	+	local systemic	++ +++	-	2
Sesone	solid	+	local systemic	++	-	2

TABLE 11-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Silver Nitrate	solid	+	local systemic	++ ++	-	2
Simazine	liquid	++	local systemic	+ +	-	2
Sodium Anthraquinone Sulfonate	solid	+	local	++	-	2
Sodium Arsenate	solid	+	local systemic	++ +++	.5 mg/m ³ /8h	2
Sodium Arsenite	solid	+	local systemic	++ +++	.5 mg/m ³ /8h	2
Sodium Bisulfite	solid	+	local	++	-	2
Sodium Borate	solid	+	local systemic	++ +	-	2
Sodium Butyldiphenyl Sulfonate	liquid	++	local	++	-	2
Sodium Decylbenzene Sulfonate		+	local systemic	+ ++	-	2
Sodium Fluoride	solid	+	local	++ +++	2.5 mg/m ³ /8h	2
Sodium Fluorosilicate	solid	+	local	++	2.5 mg/m ³ /8h	2
Sodium Hydrosulfite	liquid	++	local	+++	-	2

TABLE 11-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Sodium Hypochlorite	liquid	++	local	+++	-	2
Sodium Lauryl Sulfate	solid	+	local	++	-	2
Sodium Methylate	solid	+	local	++	-	2
Sodium Naphthalene Sulfate		+	local systemic	+ ++	-	2
Sodium Nitrite	solid	+	local systemic	++ ++	-	2
Sodium Octylsulfate	solid	+	local	+	-	2
Sodium Selenite	solid	+	local systemic	++ ++	.2 mg/m ³ /8h	2
Strychnine	solid	+	local systemic	++ +++	.15 mg/m ³ /8h .45 mg/m ³ /15 min	2
Styrene	liquid	++	local systemic	++ ++	100 ppm/8h 125 ppm/8h	2 2
Sulfoxide	solid	+	local	+	-	2
Sulfur	solid	+	local	++	-	2
Sulfur Dioxide	gas	+++	local	+++	5 ppm/8h	1

TABLE 11-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Silver Nitrate	solid	+	local systemic	++ ++	-	2
Simazine	liquid	++	local systemic	+ +	-	2
Sodium Anthraquinone Sulfonate	solid	+	local	++	-	2
Sodium Arsenate	solid	+	local systemic	++ +++	.5 mg/m ³ /8h	2
Sodium Arsenite	solid	+	local systemic	++ +++	.5 mg/m ³ /8h	2
Sodium Bisulfite	solid	+	local	++	-	2
Sodium Borate	solid	+	local systemic	++ +	-	2
Sodium Butyldiphenyl Sulfonate	liquid	++	local	++	-	2
Sodium Decylbenzene Sulfonate		+	local systemic	+ ++	-	2
Sodium Fluoride	solid	+	local	++ +++	2.5 mg/m ³ /8h	2
Sodium Fluorosilicate	solid	+	local	++	2.5 mg/m ³ /8h	2
Sodium Hydrosulfite	liquid	++	local	+++	-	2

TABLE 1-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Sodium Hypochlorite	liquid	++	local	+++	-	2
Sodium Lauryl Sulfate	solid	+	local	++	-	2
Sodium Methylate	solid	+	local	++	-	2
Sodium Naphthalene Sulfate		+	local systemic	+ ++	-	2
Sodium Nitrite	solid	+	local systemic	++ ++	-	2
Sodium Octylsulfate	solid	+	local	+	-	2
Sodium Selenite	solid	+	local systemic	++ ++	.2 mg/m ³ /8h	2
Strychnine	solid	+	local systemic	++ +++	.15 mg/m ³ /8h .45 mg/m ³ /15 min	2
Styrene	liquid	++	local systemic	++ ++	100 ppm/8h 125 ppm/8h	2 2
Sulfoxide	solid	+	local	+	-	2
Sulfur	solid	+	local	++	-	2
Sulfur Dioxide	gas	+++	local	+++	5 ppm/8h	1

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Sulfuric Acid	liquid	++	local	+++	1 mg/m ³ /8h	1
Sulfur Monochloride	liquid	++	local	+++	1 ppm/8h	2
TBA	solid	+	local systemic	+ ++	-	2
T-Butylhydroperoxide	liquid	+	local systemic	+ ++	-	2
TCA	solid	+	local systemic	++ ++	-	2
TDE	solid	++	systemic	+	-	2
Tert-butylamide	solid	+	local systemic	+ +	-	2
Tetraborane	liquid	++	local systemic	+++ +++	-	2
Tetradecanol	solid	+	local systemic	+ +	-	2
Tetraethylene Pentamine	liquid	+	local systemic	++ ++	-	2
Tetraethyl Pyrophosphate	liquid	++	local systemic	+ +++	-	2
Thallium	solid	+	systemic	+++	0.1 mg/m ³ /8h	2

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Thallous Nitrate	solid	+	systemic	+++	0.1 mg/m ³ /8h	2
Thiophosgene	liquid	+	local	+++	-	2
Thiram	solid	++	local systemic	++ ++	5 mg/m ³ /8h	2
Titanium 44	solid	+	local	+	-	2
Titanium Chloride	solid	+	local	++	-	2
Toluene	liquid	+	local systemic	+ +	100 ppm/8h 375 mg/m ³ /8h	2
Toluene diisocyanate	liquid	+	local systemic	++ ++	.02 ppm/8h .14 mg/m ³ /8h	2
Toxaphene	solid	++	local systemic	+ ++	.5 mg/m ³ /8h	2
Trichlorfon	solid	++	systemic	++	-	2
Trichloroethane	liquid	++	local systemic	++ ++	10 ppm/8h 45 mg/m ³ /8h	2
Tricresyl Phosphate	liquid	++	local systemic	+ ++	-	2
Triethylaluminum	liquid	+	local	+++	-	1

TABLE II-1 (CONTINUED)

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Triethylene Glycol	liquid	++	local systemic	+ ++	-	2
Triethylenetetramine	liquid	++	local	+++	-	2
Trimethylamine Gas	gas	++	local	+++	25 ppm/8h	1
Trimethylamine Solution	liquid	++	local	+++	25 ppm/8h	2
Trinitrotoluene	solid	++	local systemic	++ +	1.5 mg/m ³ /8h	2
Uranyl Nitrate	solid	+	local systemic	++ ++	.25 mg/m ³ /8h	2
Vanadium Oxytrichloride	liquid	++	local systemic	+++ ++	5 ppm/15 min	2
Vapam	liquid	++	local systemic	++ +	-	2
Vinyl Acetate	liquid	++	local	++	10 ppm/8h 30 mg/m ³ /8h	2
Vinyl Bromide	gas	+++	local systemic	+++ +++	200 ppm/8h	1
Vinyl Chloride	gas	+++	local systemic	+++ +++	200 ppm/8h	1
Vinyl Ether	liquid	++	local systemic	++ ++	-	2

DERMAL TOXICITY

Chemical	Physical State	Skin Penetration	Dermal Toxicity	Potency	Permissible Concentration	Category
Xenon 133 (radioactive)	gas	+++	systemic	+++	-	1
Zinc Borate	solid	+	local	++	10 mg/m ³ /8h	2
Zinc Chloride	solid	+	local	++	1 ppm/8h	2
Zinc Cyanide	solid	+	local systemic	+ +++	-	1
Zinc Hydrosulfite	solid	+	local	+++	-	2
Zinc Phenolsulfonate	solid	+	local	+++	-	2
Zinc Phosphide	solid	+	local systemic	++ ++	-	2

II-35

APPENDIX 3 DECONTAMINATION PROCEDURES

Inorganic/Organic Acids

Prepare mixture of 10% sodium carbonate and 10% trisodium phosphate in water; clean items/area with mop or cloth. Wear protective equipment.

Alkalai (Caustics)

Prepare mixture of 5% acetic acid (vinegar) in water; clean items/area with mop or cloth. Wear protective equipment.

Oils and PCB

Methylene chloride or isooctane applied directly to the contaminated area. Remove solvent and contaminant with sorbent or absorbent cloths. Wear protective equipment.

Alkalai and Alkaline Earth

Metals (sodium, potassium, phosphorus)

Cover immediately with dry soda ash (sodium-carbonate) and remove with broom and shovel. Keep dry; do not contact with water. Wear protective equipment.

Solvents

Cover with absorbent material as quickly as possible. Remove with broom and shovel. Wear protective equipment.

Revised
November, 1991

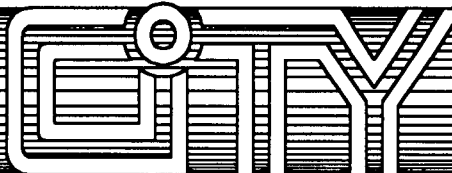
CONTINGENCY/EMERGENCY RESPONSE PLAN

ATTACHMENT 1

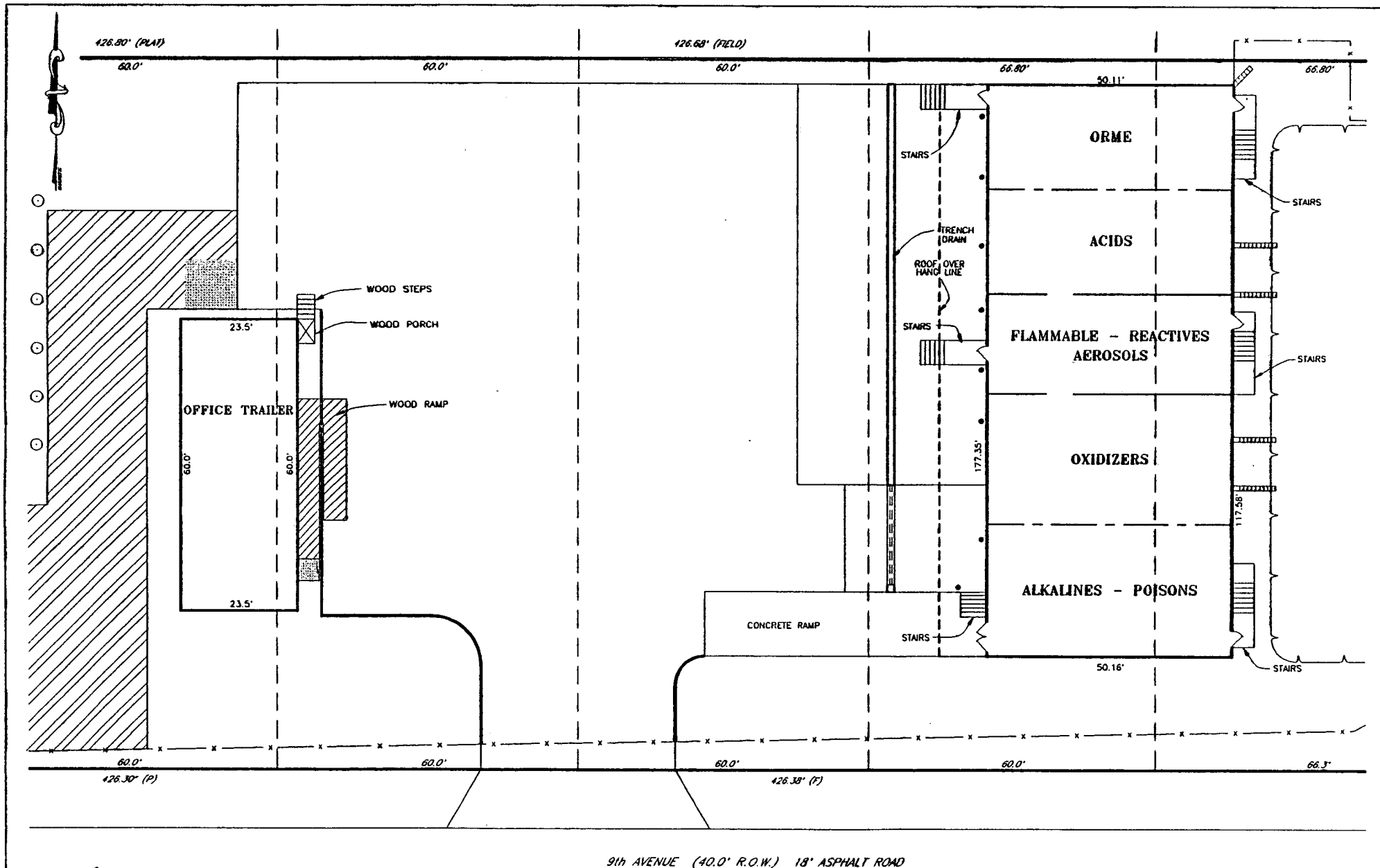
SPACE UTILIZATION

DECEMBER 1991

PREPARED AND SUBMITTED BY:



• CITY ENVIRONMENTAL, INC. • 1923 FREDERICK STREET • DETROIT • MICHIGAN • 48211 • (313) 923-0080 •



DESIGN BY:	CAM	12/12/91	CITY	CITY MANAGEMENT CORPORATION	LOCATION:	UNIVERSAL WASTE & TRANSIT, INC.	TITLE:	FACILITY SPACE UTILIZATION	SCALE:	1" = 20'	REVISIONS	PEV.
DRAWN BY:				3400 E. LAFAYETTE, DETROIT, MI. 48207		2002 NORTH ORIENT				PROJECT NO.		
PLTD BY:				PH (313) 567-4700		TAMPA, FLORIDA 33619				FILE NAME: UNIVERS		
CHECKED BY:										SHEET	OF	
APPROVED BY:							DATE ISSUED:					

ATTACHMENT 2

Universal Waste & Transit, Inc.
2002 North Orient Road
Tampa, Florida 33619

Discharge Log

<u>Date</u>	<u>Inspection Area</u>	<u>Material Discharged</u>	<u>Response Action</u>
-------------	------------------------	----------------------------	------------------------

Drums

ORM-E

Poison

Corrosive

Flammable Liquid

Flammable Solid

Oxidizer

Reactive

Aerosols

Treatment Areas

Solidification Area

Agencies Notified:

Fire Department	(813)	223-4211
Ambulance Service	(813)	223-4211
Police Department	(813)	223-4211
Florida DER	(904)	488-1900
U. S. Coast Guard	(813)	228-2189
National Response Center	(800)	424-8802
Tampa Sewer Dist.	(813)	254-1805

Discharge identified by:

NAME

DATE

TIME

Revised
November, 1991

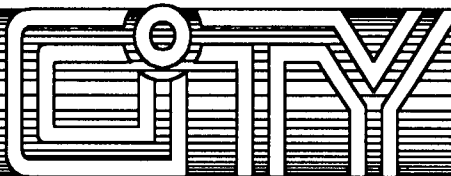
CONTINGENCY/EMERGENCY RESPONSE PLAN

ATTACHMENT 3

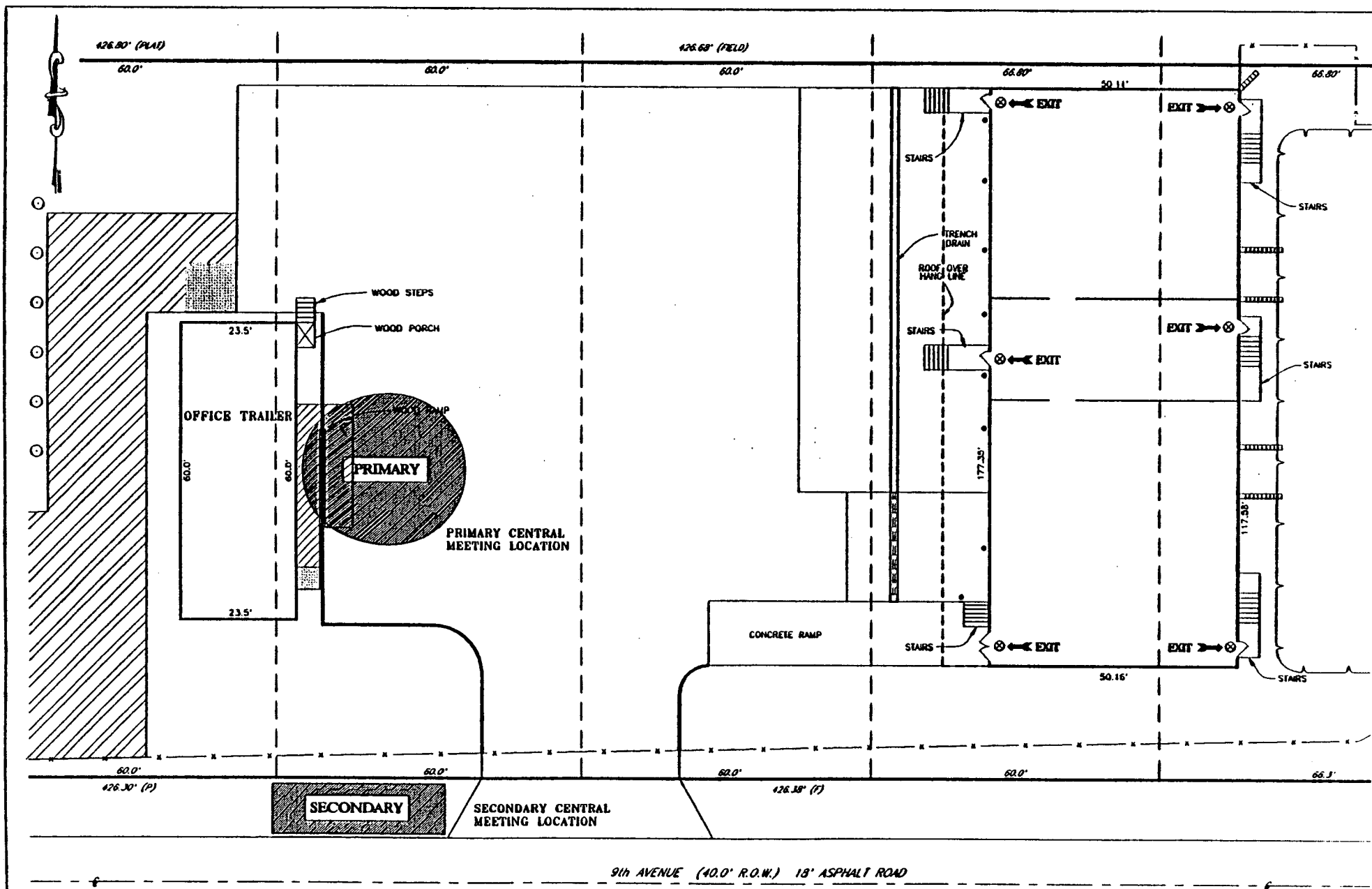
FACILITY EVACUATION ROUTES

DECEMBER 1991

PREPARED AND SUBMITTED BY:



· CITY ENVIRONMENTAL, INC. · 1923 FREDERICK STREET · DETROIT · MICHIGAN · 48211 · (313) 923-0080 ·



DSCH BY:
 DRAW BY:
 PLOT BY:
 DATE:



CITY MANAGEMENT CORPORATION
 3100 E LAFAYETTE, DETROIT, MI 48207
 PH (313) 587-4700

LOCATION: UNIVERSAL WASTE & TRANSIT, INC.
 2002 NORTH ORIENT
 TAMPA, FLORIDA 33619

TITLE: FACILITY EVACUATION ROUTES

DATE ISSUED:

SCALE: 1"=20'
PROJECT NO:
FILE NAME: UNWERS
DATE:

REVISIONS	DATE	BY	DESCRIPTION

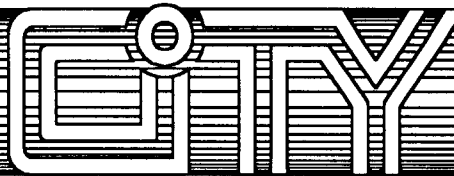
CONTINGENCY/EMERGENCY RESPONSE PLAN

ATTACHMENT 4

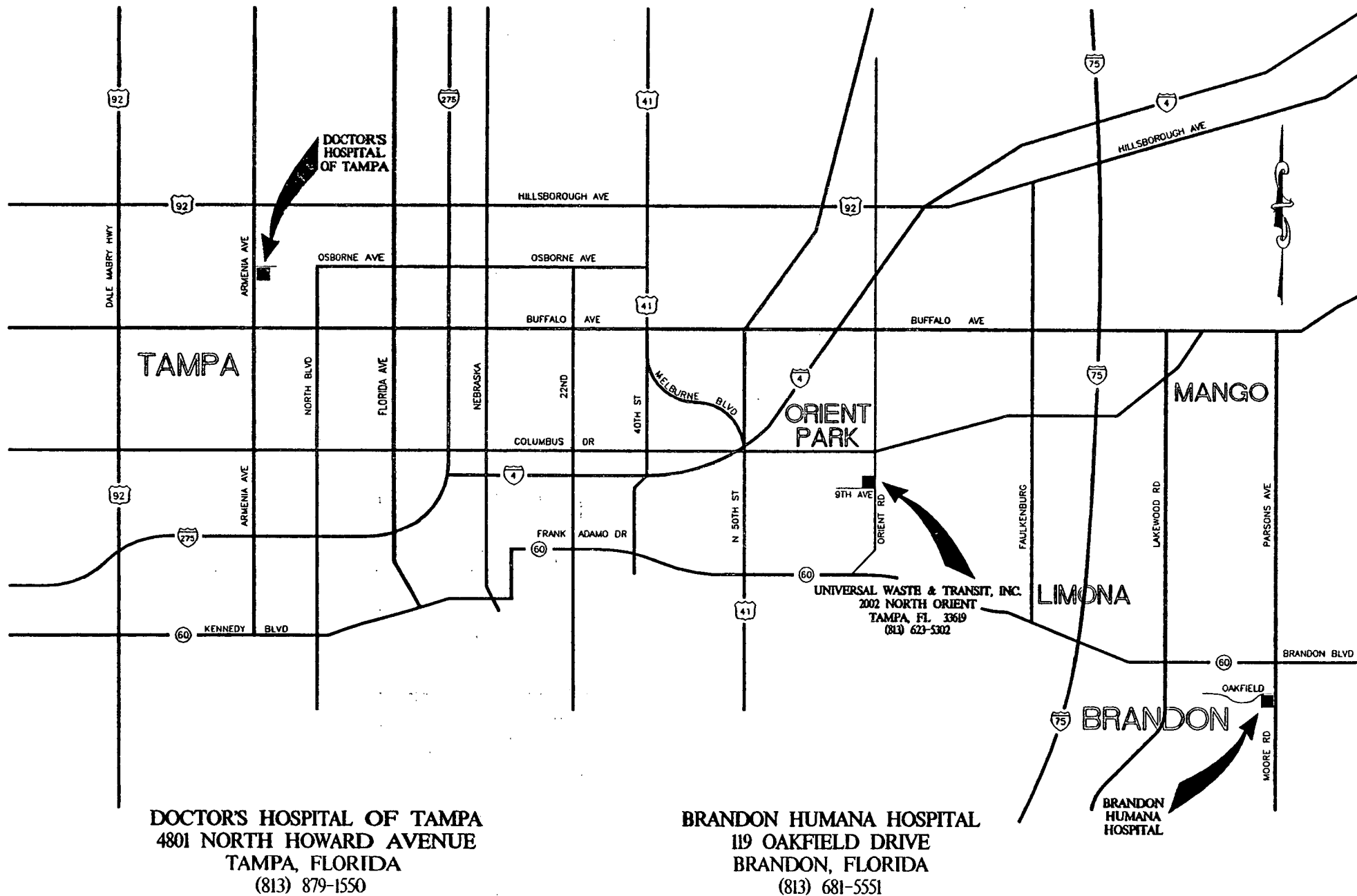
ROUTES TO HOSPITALS

DECEMBER 1991

PREPARED AND SUBMITTED BY:



• CITY ENVIRONMENTAL, INC. • 1923 FREDERICK STREET • DETROIT • MICHIGAN • 48211 • (313) 923-0080 •





COMMON SOLVENTS AND THEIR HAZARDS

	OSHA TLV	Proposed† TLV	Health Hazards	Fire/Explosion Hazard
ALCOHOLS				
methanol (wood alcohol)	200 ppm		skin, brain, liver, irritation, causes blindness when ingested	high
ethanol	1000		skin, brain, irritation	high
n-propyl alcohol	200		skin, brain, irritation	high
isopropyl alcohol	400		skin, brain, irritation	high
isobutyl alcohol	100	50	skin, brain, irritation	high
isoamyl alcohol	100		skin, brain, irritation	moderate
ALIPHATIC HYDROCARBONS				
pentane(s)	1000	120	skin, brain	extreme
hexane(s)	500	50	skin, brain, peripheral nervous system	high
heptane(s)	500	85	skin, brain	high
petroleum naphtha	500		skin, brain, this mixture of aliphatic hydrocarbons may contain benzene.	high
Stoddard solvent	500	100	skin, brain, this mixture of aliphatic hydrocarbons may contain benzene.	high
gasoline		300	skin, brain, this mixture may contain benzene, lead, and ethylene dibromide, a carcinogen. Since mixtures vary, no TLV is set. Heart attack.	high
kerosene			skin, brain	high
jet fuel			skin, brain, peripheral nervous system	high
AROMATIC HYDROCARBONS				
benzene	10*	1	skin, brain, liver, kidneys, blood, causes cancer. May cause genetic damage	high
toluene	200*	100 s	skin, brain, irritation, heart attack	high
xylene	100		skin, brain, blood, irritation, causes menstrual problems, may increase the risk of heart attack.	high
coal-tar naphtha	100		skin, brain, liver, kidneys, blood, this mixture of aromatic hydrocarbons usually contains benzene.	moderate
nitrobenzene	1 s		skin, brain, liver, kidneys, blood	moderate
CHLORINATED HYDROCARBONS				
carbon tetrachloride	10*	5	skin, brain, liver, kidneys, causes cancer	none**
chloroform	50*	10	skin, brain, liver, kidneys, causes cancer	none**
methylene chloride	500*	75	skin, brain, blood, irritation, lungs	none**
tetrachloroethane	5 s	1	skin, brain, liver, kidneys, blood	none**
methyl chloroform (1, 1, 1 trichloroethane)	350	10	skin, brain, liver, heart attack	none**
ethylene dichloride	50*		skin, brain, liver, kidneys, irritation	high**
trichloroethylene	100	25	skin, brain, peripheral nervous system, liver, kidneys, causes cancer, heart attack	low**
perchloroethylene	100*	50 s	skin, brain, liver, kidneys, causes cancer	none**
KETONES				
acetone	1000	250	skin, brain, irritation	high
methyl ethyl ketone	200		skin, brain, irritation	high
methyl butyl ketone	100	5	skin, brain, peripheral nervous system, irritation	high
methyl isobutyl ketone	100	50	skin, brain, irritation	high
ETHERS				
ethyl ether	400		skin, brain, kidneys, irritation	extreme
isopropyl ether	500	250	skin, brain, irritation	extreme
ESTERS				
ethyl formate	100		skin, brain, irritation	high
methyl acetate	200		skin, brain, irritation	high
ethyl acetate	400	150	skin, brain, irritation	high
isopropyl acetate	250		skin, brain, irritation	high
amyl acetate	100		skin, brain, liver, blood	high
GLYCOLS				
ethylene glycol	200 s		skin, brain, kidneys, blood, irritation	low
cellosolve	200 s	5 s	skin, brain, kidneys, blood, irritation, lungs	moderate
methyl cellosolve	25 s	5 s	skin, brain, liver, kidneys, blood, irritation, lungs	moderate
OTHER				
turpentine	100		skin, brain, kidneys, irritation	high
carbon disulfide	20*	10 s	skin, brain, peripheral nervous system causes insanity and suicide, increases the risk of heart attack.	extreme
pyridine	5		skin, brain, liver, kidneys, blood, irritation	high
tetrahydrofuran	200		skin, brain, liver, kidneys	high
dioxane	100 s	1	skin, brain, liver, kidneys, irritation, lungs, causes cancer	high
nitromethane	100		skin, brain, irritation	high

† Proposals for new TLV's have been made by OSHA, NIOSH, or the ACGIH. NOTE: Italics indicate that the effect is weak, or only suspected.

* OSHA has additional regulations for these chemicals. See "air contaminants" in the General Industry standards.

s Known to be easily absorbed through the skin.

**Decomposes into phosgene by heat or ultraviolet light.

(Continued on Page 2)

The Hazards of Solvents

All solvents are poisonous. There is really no such thing as a "safety" solvent. Some solvents are worse than others, but every solvent should be treated with great suspicion.

Generally speaking, solvents can damage the body in four ways:

1. Skin Disease
2. Irritation of Eyes, Nose and Throat
3. Narcotic Effect on the Nervous System
4. Damage to Internal Organs

Skin Disease

All solvents can cause skin disease (dermatitis) by dissolving the natural protective barrier of oil on the skin. If the skin has enough direct contact with a solvent, it can turn dry and white and can develop cracks and flakes.

Some solvents can also penetrate the skin and enter the bloodstream. Some solvents are noticeably irritating on contact, but others cause no particular pain even while they are penetrating the skin or defatting the skin.

Irritation of Eyes, Nose and Throat

All solvents can irritate the sensitive membranes of the eyes, nose, and throat. The airborne concentration at which this occurs varies from solvent to solvent. It appears that mixtures of solvents can cause this irritating effect at very low levels. At high enough an exposure level it becomes nearly impossible to remain in the work area where the solvent is used.

Narcotic Effect on the Nervous System

All solvents can affect the nervous system through what is known in technical terms as "narcosis" or "depression of the Central Nervous System (CNS)." It is actually the brain itself which is affected by the solvent and causes a variety of symptoms. The symptoms caused by this are varied:

irritability	drunkenness
fatigue	nausea
headaches	staggering gait
dizziness	unconsciousness
sleepiness	death

Damage to Internal Organs

Many solvents have been known for years to cause damage to internal organs, primarily the kidney and liver. Recent medical research is showing that more organs are affected than previously thought. At present, however, there appears to be considerable variation in the organs damaged by different solvents.

Liver and Kidney

The liver and kidneys are often damaged in their attempt to detoxify and eliminate the solvent. For example, the use of carbon tetrachloride in industry has been mostly stopped because of its well known effect on the liver. However, a closely related solvent, trichloroethane, appears to not damage the kidney and only slightly damages the liver (if at all).

Cancer

Some solvents have been found to cause cancer. Benzene causes leukemia (although the very closely related solvent toluene apparently does not).

Some chlorinated solvents have been found to cause cancer in test animals and are thus presumed to cause cancer in people. These solvents are carbon tetrachloride, chloroform, trichloroethylene, and perchloroethylene. Some scientists now suspect that all chlorinated solvents might cause cancer,

although methyl chloroform has been found not to cause cancer in the animals tested so far.

Peripheral Nerve Damage

New studies have indicated that solvents may also damage the "peripheral nervous system" which is the system of nerves leading from the spinal cords to the arms and legs. The symptoms caused by this nerve damage are numbness, tingling sensations, weakness and paralysis in the arms and legs, which is a condition known as "peripheral neuropathy."

Sensitive tests can measure the speed of the impulse along these nerves. The speed of the nerve impulse has been found to be slowed in workers exposed to some solvents, which is considered to be an indication of peripheral nervous system damage.

An epidemic of peripheral neuropathy in a fabric coating plant in 1973 was believed to be caused by methyl butyl ketone (MBK).

Both hexane and jet fuel have also been linked with this sort of nerve damage.

The study in Finland of car spray painters exposed to a mixture of toluene, xylene, butylacetate, and naphtha was found to cause numbness in the hands and feet, slowed nerve impulse speed, and slowed dexterity (plus an impairment of intelligence and memory functions).

Trichloroethylene has also been found to slow the nerve impulse, although speed returned to normal several months after the exposure stopped.

Heart Attack

Several solvents have so far been found to contribute to a form of heart attack known as an "arrhythmia." It appears that these solvents make the heart muscle more sensitive to adrenaline in the body. In this sensitive state, the adrenaline causes the heart to beat rapidly and irregularly, which in some cases has caused death.

Methyl chloroform, trichloroethylene, toluene, and gasoline have all been found to cause this problem.

Psychological Problems

Since one of the actions of solvents is on the brain, it can be expected that more problems result than just headaches and dizziness. Investigations have shown that many solvents can cause a variety of problems in psychological behavior which are hard to distinguish from problems caused by everyday living. Problems like fatigue, apathy, irritability, depression, nervousness, insomnia, giddiness, and mental confusion have all been noted. Intelligence and memory can also be impaired.

Other Health Problems

Some solvents have been found to cause other problems such as damage to the bone marrow and the blood-forming mechanism, and damage to the lungs. Concern has also been raised that solvents might damage the reproductive system of both men and women.

Explosion and Fire Hazard

Another hazard of solvents is the explosion and fire hazard present when the vapors are present in the air. Some solvents evaporate more quickly than others (they have a higher "vapor pressure") and are thus more dangerous. Similarly, some solvents are more flammable than others (they have a low "flash point") and are more dangerous.

Regulations require that ventilation be provided in many solvent operations to control the fire and explosion hazard.

Incompatible Chemicals

(Sec. 8)

Substances in the right-hand column should be stored and handled so they will not come in contact with the corresponding substances in the left-hand column.

Alkaline and alkaline earth metals (such as sodium, potassium cesium, lithium, magnesium, calcium, and aluminum)	Carbon dioxide, carbon tetrachloride, and other chlorinated hydrocarbons Prohibit water, foam, and dry chemical on fires involving these metals.
Acetic acid	Chromic acid, nitric acid, hydroxyl containing compounds, ethylene glycol, perchloric acid, peroxides, and permanganates.
Acetone	Concentrated nitric and sulfuric acid mixtures.
Acetylene	Chlorine, bromine, copper, silver, fluorine, and mercury.
Ammonia (anhydrous)	Mercury, chlorine, calcium hypochlorite, iodine, bromide, and hydrogen fluoride.
Ammonium nitrate	Acids, metal powders, flammable liquids, chlorine, nitrites, sulfur, and finely divided organics or combustibles.
Aniline	Nitric acid and hydrogen peroxide.
Bromine	Ammonium, acetylene, butadiene, butane and other petroleum gases, sodium carbide, turpentine, benzene, and finely divided metals.
Calcium carbide	Water (see also acetylene).
Calcium oxide	Water.
Carbon, activated	Calcium hypochlorite.
Copper	Acetylene and hydrogen peroxide.

Incompatible Chemicals

Chlorates	Ammonium salts, acids, metal powders, sulfur, and finely divided organics or combustibles.
Chromic acid	Acetic acid, naphthalene, camphor, glycerine, turpentine, alcohol, and other flammable liquids.
Chlorine	Ammonia, acetylene, butadiene, butane and other petroleum gases, hydrogen, sodium carbide, turpentine, benzene, and finely divided metals.
Chlorine dioxide	Ammonia, methane, phosphine, and hydrogen sulfur.
Fluorine	Isolate from everything
Hydrocyanic acid	Nitric acid and alkalies.
Hydrogen peroxide	Copper, chromium, iron, most metals or their salts, any flammable liquid, combustible materials, aniline, nitromethane, caustic soda and other strong alkalies.
Hydrofluoric acid, anhyd. (Hydrogen fluoride)	Ammonia (aqueous or anhydrous)
Hydrogen sulfide	Fuming nitric acid and oxidizing gases.
Hydrocarbons (benzene, butane, propane, gasoline, turpentine, etc.)	Fluorine, chlorine, bromine, chromic acid, sodium peroxide.
Iodine	Acetylene, ammonia (anhydrous or aqueous).
Nitric acid (concentrated)	Acetic acid, aniline, chromic acid, hydrocyanic acid, hydrogen sulfide, flammable liquids, flammable gases, and nitritable substances.
Nitroparaffins	Inorganic bases.
Oxygen	Oils, grease, and hydrogen flammable liquids, solids or gases.

Oxalic acid	Silver and mercury.
Perchloric acid	Acetic anhydride, bismuth and its alloys, alcohol, paper, wood, grease, and oils.
Peroxides, organic friction.	Acids (organic or mineral) and avoid
Phosphorus (white)	Air, oxygen.
Potassium chlorate	Acids (see also chlorate).
Potassium perchlorates	Acids (see also perchloric acid).
Potassium permanganate	Glycerine, ethylene glycol, benzaldehyde, sulfuric acid.
Silver	Acetylene, oxalic acid, tartaric acid, ammonium compounds.
Sodium	See alkaline metals (above).
Sodium nitrate	Ammonium nitrate and other ammonium salts.
Sodium oxide	Water.
Sodium peroxide	Any oxidizable substance (such as ethanol, methanol, glacial acetic acid, acetic anhydride, benzaldehyde, carbon disulfide, glycerine, ethylene glycol, ethyl acetate, methyl acetate, and furfural)
Sulfuric acid	Chlorates, perchlorates and permanganates.
Zirconium	Prohibit water, carbon tetrachloride foam, and dry chemical on zirconium fires.

ATTACHMENT 7

The list is intended to also include any and all mixtures containing any of the materials in the list. Materials constituting blasting agents are marked by an asterisk. While the list is comprehensive, it is *not* all inclusive. The fact that an explosive material may not be on the list does not mean that it is not within the coverage of the law if it otherwise meets the statutory definitions in Section 841 of Title 18, United States Code. Explosive materials are listed alphabetically by their common names followed by chemical names and synonyms in brackets. This revised list supersedes the List of Explosive Materials dated August 8, 1990 (45 FR 52976).

List of Explosive Materials

A

Acetylides of heavy metals.
Aluminum containing polymeric propellant.
Aluminum ophorite explosive.
Amatex.
Amatol.
Ammonal.
Ammonium nitrate explosive mixtures (cap sensitive).
*Ammonium nitrate explosive mixtures (non cap sensitive).
Aromatic nitro-compound explosive mixtures.
Ammonium perchlorate having particle size less than 15 microns.
Ammonium perchlorate composite propellant.
Ammonium picrate [picrate of ammonia. Explosive D].
Ammonium salt lattice with isomorphously substituted inorganic salts.
*ANFO [ammonium nitrate-fuel oil].

B

Baratol.
Baronol.
BEAF [1,2-bis (2,2-difluoro-2-nitroacetoxyethane)].
Black powder.
Black powder based explosive mixtures.
*Blasting agents, nitro-carbo-nitrates, including non cap sensitive slurry and water-gel explosives.

Blasting caps.

Blasting gelatin.

Blasting powder.

BTNEC [bis (trinitroethyl) carbonate].

BTNEN [bis (trinitroethyl) nitramine].

BTTN [1,2,4 butanetriol trinitrate].

Butyl tetryl.

C

Calcium nitrate explosive mixture.
Cellulose hexanitrate explosive mixture.
Chlorate explosive mixtures.
Composition A and variations.
Composition B and variations.
Composition C and variations.
Copper acetylide.
Cyanuric triazide.

Cyclotrimethylenetrinitramine (RDX).
Cyclotetramethylenetetranitramine (HMX).
Cyclotol.

D

DATB [diaminotrinitrobenzene].
DDNP [diazodinitrophenol].
DEGDN [diethyleneglycol dinitrate].
Detonating cord.
Detonators.
Dimethylol dimethyl methane dinitrate composition.
Dinitroethyleneurea.
Dinitroglycerine [Glycerol dinitrate].
Dinitrophenol.
Dinitrophenolates.
Dinitrophenyl hydrazine.
Dinitroresorcinol.
Dinitrotoluene-sodium nitrate explosive mixtures.
DIPAM.
Dipicryl sulfone.
Dipicrylamine.
DNBP [dinitropentano nitrile].
DNPA [2,2-dinitropropyl acrylate].
Dynamite.

E

EDNA.
Ednatol.
EDNP [ethyl 4,4-dinitropentanoate].
Erythritol tetranitrate explosives.
Esters of nitro-substituted alcohols.
EGDN [ethylene glycol dinitrate].
Ethyl-tetryl.
Explosive conitrates.
Explosive getatins.
Explosive mixtures containing oxygen releasing inorganic salts and hydrocarbons.
Explosive mixtures containing oxygen releasing inorganic salts and nitro bodies.
Explosive mixtures containing oxygen releasing inorganic salts and water insoluble fuels.
Explosive mixtures containing oxygen releasing inorganic salts and water soluble fuels.
Explosive mixtures containing sensitized nitromethane.
Explosive mixtures containing tetranitromethane (nitro form).
Explosive nitro compounds of aromatic hydrocarbons.
Explosive organic nitrate mixtures.
Explosive liquids.
Explosive powders.

F

Fulminate of mercury.
Fulminate of silver.
Fulminating gold.
Fulminating mercury.
Fulminating platinum.
Fulminating silver.

G

Gelatinized nitrocellulose.
Gem-dinitro aliphatic explosive mixtures.
Guanyl nitrosamino guanyl tetrazene.

Guanyl nitrosamino guanylidene hydrazine.
Guncotton.

H

Heavy metal azides.
Hexanite.
Hexanitrodiphenylamine.
Hexanitrosilbene.
Hexogene or octogene and a nitrated N-methylaniline.
Hexolites.
HMX [cyclo-1,3,5,7-tetramethylene-2,4,6,8-tetranitramine; Octogen].
Hydrazinium nitrate/hydrazine/aluminum explosive system.
Hydrazoic acid.

I

Igniter cord.

Igniters.

K

KDNBF [potassium dinitrobenzofuroxane].

L

Lead azide.
Lead mannite.
Lead mononitroresorcinate.
Lead picrate.
Lead salts, explosive.
Lead styphnate [styphnate of lead, lead trinitroresorcinate].
Liquid nitrated polyol and trimethylolethane.
Liquid oxygen explosives.

M

Magnesium ophorite explosives.
Mannitol hexanitrate.
MDNP [methyl 4,4-dinitropentanoate].
Mercuric fulminate.
Mercury oxalate.
Mercury tartrate.
Minol-2 [40% TNT, 40% ammonium nitrate, 20% aluminum].
Mononitrotoluene-nitroglycerin mixture.
Monopropellants.

N

NIBTN [nitroisobutametrol trinitrate].
Nitrate sensitized with gelled nitroparaffin.
Nitrated carbohydrate explosive.
Nitrated glucoside explosive.
Nitrated polyhydric alcohol explosives.
Nitrates of soda explosive mixtures.
Nitric acid and a nitro aromatic compound explosive.
Nitric acid and carboxylic fuel explosive.
Nitric acid explosive mixtures.
Nitro aromatic explosive mixtures.
Nitro compounds of furane explosive mixtures.
Nitrocellulose explosive.
Nitroderivative of urea explosive mixture.
Nitrogelatin explosive.
Nitrogen trichloride.
Nitrogen tri-iodide.
Nitroglycerine [NG, RNC, nitro, glyceryl trinitrate, trinitroglycerine].

Nitroglycide.
Nitroglycol (ethylene glycol dinitrate.
ECDN)
Nitroguanidine explosives.
Nitroparaffins Explosive Grade and
ammonium nitrate mixtures.
Nitronium perchlorate propellant
mixtures.
Nitrostarch.
Nitro-substituted carboxylic acids.
Nitrourea.

O

Octogen [HMX].
Octol (75 percent HMX. 25 percent
TNT).
Organic amine nitrates.
Organic nitramines.

P

PBX [RDX and plasticizer].
Pellet powder
Penthrinite composition.
Pentolite.
Perchlorate explosive mixtures.
Peroxide based explosive mixtures.
PETN [nitropentaerythrite.
pentaerythrite tetranitrate.
pentaerythritol tetranitrate].
Picramic acid and its salts.
Picramide.
Picrate of potassium explosive mixtures.
Picratol.
Picric acid (explosive grade).
Picryl chloride.
Picryl fluoride.
PLX (95% nitromethane. 5%
ethylenediamine).
Polynitro aliphatic compounds.
Polyolpolynitrate-nitrocellulose
explosive gels.
Potassium chlorate and lead
sulfocyanate explosive.
Potassium nitrate explosive mixtures.
Potassium nitroaminotetrazole

R

RDX [cyclonite. hexogen. T4. cyclo-
1.3.5.-trimethylene-2.4.6.-trinitramine;
hexahydro-1.3.5-trinitro-S-triazine].

S

Safety fuse.
Salts of organic amino sulfonic acid
explosive mixture.
Silver acetylde.
Silver azide.
Silver fulminate.
Silver oxalate explosive mixtures.
Silver styphnate.
Silver tartrate explosive mixtures.
Silver tetrazene.
Slurried explosive mixtures of water.
inorganic oxidizing salt. gelling agent.
fuel and sensitizer (cap sensitive).
Smokeless powder.
Sodatol.
Sodium amatol.
Sodium dinitro-ortho-cresolate.
Sodium nitrate-potassium nitrate
explosive mixture.
Sodium picramate.
Squibs.
Styphinc acid.

T
Tacot (tetranitro-2,3,5,6-dibenzo-
1,3a,4,8a-tetrazapentalene).
TATB [triaminotrinitrobenzene].
TECDN [triethylene glycol dinitrate].
Tetrazene (tetracene, tetrazine, 1(5-
tetrazolyl)-4-guanyl tetrazene
hydrate).
Tetranitrocarbazole.
Tetryl [2,4,6 tetranitro-N-methylaniline].
Tetrytol.
Thickened inorganic oxidizer salt
slurried explosive mixture.
TMETN (trimethylolethane trinitrate).
TNEF [trinitroethyl formal].
TNEOC [trinitroethyl orthocarbonate].
TNEOF [trinitroethyl orthoformate].
TNT [trinitrotoluene, trotyl, trilita,
triton].
Torpex.
Tridite.
Trimethylol ethyl methane trinitrate
composition.
Trimethylolethane trinitrate-
nitrocellulose.
Trimonite.
Trinitroanisole.
Trinitrobenzene.
Trinitrobenzoic acid.
Trinitrocresol.
Trinitro-meta-cresol.
Trinitronaphthalene.
Trinitrophenetol.
Trinitrophloroglucinol.
Trinitroresorcinol.
Tritonal.
U
Urea nitrate.
W
Water bearing explosives having salts
of oxidizing acids and nitrogen bases,
sulfates, or sulfamates (cap sensitive).
X
Xanthamomas hydrophilic colloid
explosive mixture.
FOR FURTHER INFORMATION CONTACT:
Explosives Technology Branch, Bureau
of Alcohol, Tobacco and Firearms, 1200
Pennsylvania Avenue, NW, Washington,
DC 20228 (202-586-7087).

Signed: August 24, 1981.

G. R. Dickerson,
Director.
(FR Doc. 81-23399 Filed 6-21-81; 8:43 am)
BILLING CODE 4810-31-M

ATTACHMENT 8

PEROXIDES

I. Recognition

The presence of one of the compounds in Table I is a warning that peroxides can form and a hazard may exist. The readiness with which any of the peroxidizable structures form peroxide is highly dependent on the bonded (attached) chemical groups. For example, an ether with an attached alkyl group is much more hazardous than an ether with an attached aromatic group. Also, as the attached hydrocarbon group increases in size, the possibility of peroxide formation decreases. Ten or more carbon atoms at a peroxidizable site usually are low risk systems.

The most hazardous compounds - Those that form peroxides without being concentrated, which can accumulate a hazardous level of peroxides simply on storage after exposure to air - are in list A. Compounds forming peroxides that are hazardous only when concentrated, such as distillation or evaporation - are in list B. List C is made up of vinyl monomers that may form peroxides that can initiate explosive polymerization of the bulk monomers (quantities greater than 500 grams).

II. Detection of Peroxides

The iodide test is based on the oxidation of iodide to iodine in the presence of peroxides.

Method: Add 0-.5-1.0 ml of the material to be tested to an equal volume of glacial acetic acid to which has been added 0.1 g of sodium iodide or potassium iodide crystals. A yellow color indicates a low concentration of peroxide in the sample; a brown color indicates a high concentration. A blank determination should be made. Always prepare the iodide-acetic acid mixture at the time the test is made because air oxidation slowly turns the blank to a brown color.

III. Storage and Handling

All peroxidizable compounds should be stored away from heat and light. Sunlight is an especially good promoter of peroxidation. When handling, use explosive handling procedures. Remove to a remote area where it can be safely destroyed, preferably by burning. It is of the utmost importance that container not be opened. The act of opening the container could detonate peroxide crystals around the container cap or other closure. Containers which show signs of iron oxide or copper oxide should be handled with extra

Revised
November, 1991

precaution since many metal oxides promote peroxide formations.

IV. Removal of Peroxides

Peroxide impurities in water-insoluble solvents (ether, hydrocarbons, etc.) are easily removed by shaking with a concentrated solution of ferrous salt solution can be prepared either from 60 g of ferrous sulfate, 6 ml of concentrated sulfuric acid, and 110 ml of water, or from 100 g of ferrous sulfate, 42 ml of concentrated hydrochloric acid, and 85 ml of water.

Among the many other methods reported for peroxide removal are treatment with amines, aqueous sodium metabisulfite and stannous chloride, sodium hydroxide, and cerous hydroxide.

COMPOUNDS PRONE TO FORM PEROXIDES

1. Ethers - C-1 through C-5
2. Olefins, chloroolefins, fluoroolefins
3. Vinyl esthers and ethers
4. Dienes
5. Vinylacetylenes
6. Alkylacetylenes
7. Alkanes and cycloalkanes with tertiary H atoms

Formation of peroxides is generally brought about by three processes - storage, concentration and polymerization. Heat and light promote peroxidation during storage. The following lists group chemicals by the type of peroxidation anticipated:

COMMON COMPOUNDS THAT FORM PEROXIDES DURING STORAGE

Revised
November, 1991



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 12, 1991

Hillsborough County Hazardous Materials Response Team
3210 S. 78th Street
Tampa, Florida 33619

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary emergency services.
- Immediate response.
- Primary fire fighting services.
- Rescue and emergency transport services.
- Communications support.

Hillsborough County Hazardous Materials Response Team

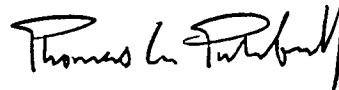
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is written in a cursive style with a large, prominent "T" and "A".

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Hillsborough County Hazardous
Materials Response Team
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Chief of Police
Tampa Police Department
1710 N. Tampa Street
Tampa, Florida 33602

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

Dear Commander:

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary emergency authority
- Immediate response.
- Emergency transport services.
- Crowd control support.
- Communications support.
- Security to affected area.
- Evacuation of surrounding areas, if required.

Chief of Police
Tampa Police Department

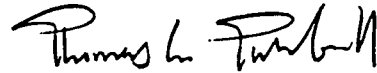
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" and last name "Turnbull" clearly distinguishable.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Chief of Police
Tampa Police Department
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

William Austin
Tampa Fire Department
808 Zack Street
Tampa, Florida 33602

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary emergency services.
- Immediate response.
- Primary fire fighting services.
- Rescue and emergency transport services.
- Communications support.

William Austin
Tampa Fire Department

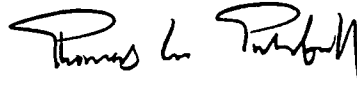
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in black ink, appearing to read "Thomas A. Turnbull". The signature is stylized with a large, looped initial 'T' and a cursive 'Turnbull'.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

William Austin
Tampa Fire Department
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Commanding Officer
U. S. Coast Guard
Marine Safety Office
155 Columbia Drive
Tampa, Florida 33606

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

Dear Commander:

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Technical support.
- Communications support.

U. S. Coast Guard


December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is stylized with a large, looped initial "T" and a cursive "Turnbull".

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

U. S. Coast Guard
Marine Safety Office
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Westinghouse Remediation Services, Inc.
111 Kelsey Lane, Suite B-H
Tampa, Florida 33619

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your company provide the following services in the event of an emergency regarding waste storage at our facility:

- Interim response services.
- Remedial action services.

Westinghouse Remediation Services, Inc.

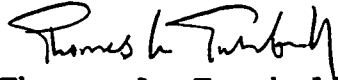
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.


Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Westinghouse Remediation
Services, Inc.
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Humana Hospital
119 Oakfield Drive
Brandon, Florida

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your hospital provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary medical services.
- Rescue services.

Humana Hospital

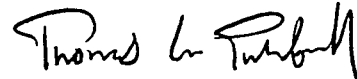
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" being more legible than the last name "Turnbull".

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our hospital agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Humana Hospital
Brandon, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Doctor's Hospital
4801 N. Howard Avenue
Tampa, Florida

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your hospital provide the following services in the event of an emergency regarding waste storage at our facility:

- ° Primary medical services.
- ° Rescue services.

Doctor's Hospital

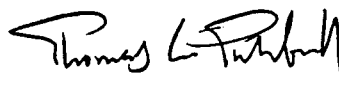
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" and last name "Turnbull" clearly distinguishable.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Doctor's Hospital
Tampa, Florida

Date

/mys

June 13, 1989

Hillsborough County Hazardous Materials Response Team
3210 S 78th St.
Tampa, Florida 33619

This is to certify that the Hillsborough County Hazardous Materials
Response Team has received a copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

David Sherman, Chief
name

Public Works Dept. III
title

Enviro. Dept. + 10th
agency

6/13/89
date

June 13, 1989

Tampa Police Department
1710 N Tampa St.
Tampa, Florida 33602

This is to certify that the Tampa Police Department has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

B. A. Majewski
name

POLICE OFFICER
title

TAMPA P.D.
agency

15 JUN 89
date

June 13, 1989

Tampa Fire Department
3210 S 78th St.
Tampa, Florida 33619

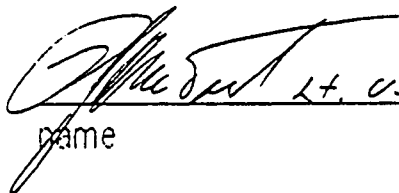
U.S.C.G. Marine Safety Office

This is to certify that the ~~Tampa Fire Department~~ has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

 LT. USCG
name

title

agency

date

June 13, 1989

This is to certify that the Tampa Fire Department has received a copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Marshanna G. GFL
name

Ch. Typ. II
title

Tampa Fire Dept. 1146
agency

6/15/89
date

June 15, 1989

Westinghouse/HazTech
7820 Professional Place
Tampa, Florida 33637

This is to certify that the Westinghouse/HazTech has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Dwight D. Clark
name

Branch Secretary
title

W HAZTECH, INC.
agency

6/15/89
date

June 13, 1989

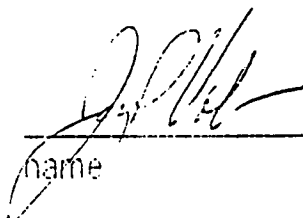
Humana Hospital
119 Oakfield Drive
Brandon Florida

This is to certify that the Humana Hospital has received a
copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan



name

Assoc. Exec. Director

title

Humana Hospital Brandon

agency

6/27/89

date

June 13, 1989

Centro Español Memorial Hospital
4801 N Howard Avenue
Tampa, Florida 33603

This is to certify that the Centro Español Memorial Hospital has received a
copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Pamela H. Michiel by Marilyn Blanchard
name

Administrative Exp. Secretary
title

Centro Español Memorial Hospital
agency

June 15, 1989
date



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Hillsborough County Hazardous Materilas Response Team
3210 S. 78th Street
Tampa, Florida 33619

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- ° Primary emergency services.
- ° Immediate response.
- ° Primary fire fighting services.
- ° Rescue and emergency transport services.
- ° Communications support.

Hillsborough County Hazardous Materials Response Team

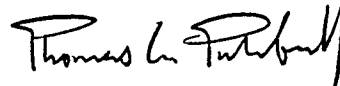
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in black ink, appearing to read "Thomas A. Turnbull". The signature is written in a cursive, flowing style.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Hillsborough County Hazardous
Materials Response Team
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Chief of Police
Tampa Police Department
1710 N. Tampa Street
Tampa, Florida 33602

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

Dear Commander:

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary emergency authority
- Immediate response.
- Emergency transport services.
- Crowd control support.
- Communications support.
- Security to affected area.
- Evacuation of surrounding areas, if required.

Chief of Police
Tampa Police Department

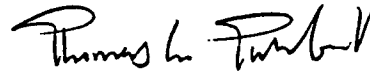
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" and last name "Turnbull" clearly distinguishable.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Chief of Police
Tampa Police Department
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

William Austin
Tampa Fire Department
808 Zack Street
Tampa, Florida 33602

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary emergency services.
- Immediate response.
- Primary fire fighting services.
- Rescue and emergency transport services.
- Communications support.

William Austin
Tampa Fire Department

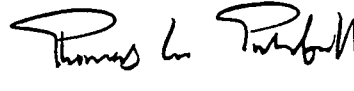
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in black ink, appearing to read "Thomas A. Turnbull". The signature is stylized with a large, looped initial "T" and a cursive "Turnbull".

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

William Austin
Tampa Fire Department
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Commanding Officer
U. S. Coast Guard
Marine Safety Office
155 Columbia Drive
Tampa, Florida 33606

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

Dear Commander:

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your department provide the following services in the event of an emergency regarding waste storage at our facility:

- ° Technical support.
- ° Communications support.

U. S. Coast Guard

December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is stylized with a large, looped initial "T" and a cursive "A".

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

U. S. Coast Guard
Marine Safety Office
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Westinghouse Remediation Services, Inc.
111 Kelsey Lane, Suite B-H
Tampa, Florida 33619

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your company provide the following services in the event of an emergency regarding waste storage at our facility:

- Interim response services.
- Remedial action services.

Westinghouse Remediation Services, Inc.

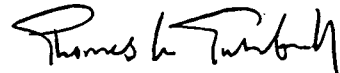
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" and last name "Turnbull" clearly distinguishable.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Westinghouse Remediation
Services, Inc.
Tampa, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Humana Hospital
119 Oakfield Drive
Brandon, Florida

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your hospital provide the following services in the event of an emergency regarding waste storage at our facility:

- Primary medical services.
- Rescue services.

Humana Hospital


December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is fluid and cursive, with the first name "Thomas" being more prominent.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our hospital agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Humana Hospital
Brandon, Florida

Date

/mys



UNIVERSAL WASTE & TRANSIT, INC.

2002 N. Orient Rd.
Tampa, Florida 33619
813-623-5302

December 11, 1991

Doctor's Hospital
4801 N. Howard Avenue
Tampa, Florida

SUBJECT: Contingency/Emergency Response Plan
Universal Waste & Transit, Inc.

As you may be aware, Universal Waste & Transit, Inc. (UWT) operates a waste transfer facility at 2002 N. Orient Avenue, Tampa, Florida. Non-hazardous and hazardous waste are stored at the facility in containers (i.e. drums) prior to transport for ultimate disposal. All wastes shipped off-site from UWT are disposed of in accordance with U.S. EPA and Florida Department of Environmental Regulation rules and regulations.

In accordance with these state and federal regulations, I am providing your hospital with a revised copy of our Contingency/Emergency Response Plan which describes the following:

1. The actions our personnel will take in response to emergencies (e.g. fires or spills of hazardous waste).
2. Arrangements we would like your hospital to agree to in the event of an emergency.
3. A layout of our plant (showing where personnel normally work, hazardous waste storage areas, safety equipment, entrances to the plant and evacuation routes).
4. A description of the properties and associated hazards of the hazardous wastes handled at our plant.

We are requesting your hospital provide the following services in the event of an emergency regarding waste storage at our facility:

- ° Primary medical services.
- ° Rescue services.

Doctor's Hospital

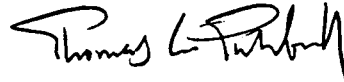
December 11, 1991 - 2

Please review our Contingency/Emergency Response Plan which is enclosed. If you agree to the arrangements, complete and return the enclosed form letter.

If you have any questions, please contact me at (813) 623-5302.

Sincerely,

UNIVERSAL WASTE & TRANSIT, INC.

A handwritten signature in dark ink, appearing to read "Thomas A. Turnbull". The signature is stylized with a large, looped initial "T" and a cursive-style name.

Thomas A. Turnbull
Environmental Engineer

/mys
Encs.

Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Attention: Thomas Turnbull

SUBJECT: Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida

Dear Mr. Turnbull:

I have reviewed the revised Contingency/Emergency Response Plan submitted by Universal Waste & Transit, Inc. concerning hazardous wastes stored at your facility. Our department agrees, and is ready, to provide the services indicated in this plan. I am also aware of the types of hazardous wastes stored at your facility and the possible hazards associated with such materials, as described in this plan.

Sincerely,

Doctor's Hospital
Tampa, Florida

Date

/mys

June 13, 1989

Hillsborough County Hazardous Materials Response Team
3210 S 78th St.
Tampa, Florida 33619

This is to certify that the Hillsborough County Hazardous Materials
Response Team has received a copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

David Sherman
name

Senior Tech II
title

Env. Dept. + 1012
agency

6/13/89
date

June 13, 1989

Tampa Police Department
1710 N Tampa St.
Tampa, Florida 33602

This is to certify that the Tampa Police Department has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

B. A. Majewski
name

POLICE OFFICER
title

TAMPA P.D.
agency

15 JUN 89
date

June 13, 1989

Tampa Fire Department
3210 S 78th St.
Tampa, Florida 33619

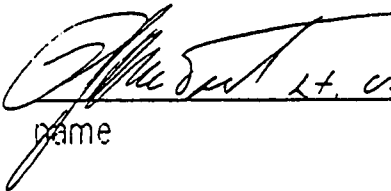
U.S.C.G. Marine Safety Office

This is to certify that the ~~Tampa Fire Department~~ has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

 LT. USCG
name

title

agency

date

June 13, 1989

This is to certify that the Tampa Fire Department has received a copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Marshanna G. GFL
name

Civil Typ. II
title

Tampa Fire Dept. 1146
agency

6/15/89
date

June 15, 1989

Westinghouse/HazTech
7820 Professional Place
Tampa, Florida 33637

This is to certify that the Westinghouse/HazTech has received a copy of
the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Dwight D. Clark
name

Branch Secretary
title

W HAZTECH, INC.
agency

6/15/89
date

June 13, 1989

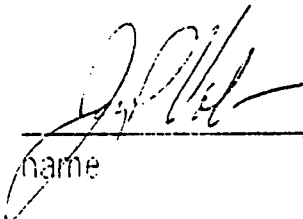
Humana Hospital
119 Oakfield Drive
Brandon Florida

This is to certify that the Humana Hospital has received a
copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan


name

Assoc. Exec. Director
title

Humana Hospital Brandon
agency

6/27/89
date

June 13, 1989

Centro Español Memorial Hospital
4801 N Howard Avenue
Tampa, Florida 33603

This is to certify that the Centro Español Memorial Hospital has received a
copy of the following:

Universal Waste & Transit, Inc. Contingency Plan

Universal Waste & Transit, Inc. Site Plan

Universal Waste & Transit, Inc. Container Storage Plan

Pamela H. Michiel by Marilyn Blanchard
name

Administrative by Exec. Secretary
title

Centro Español Memorial Hospital
agency

June 15, 1989
date

UNIVERSAL WASTE AND TRANSIT, INC.

GOVERNMENT AGENCIES

TAMPA FIRE DEPARTMENT

911

Florida Department of Environmental Response

(904) 488-0190
(normal working hours)
(904) 488-1320
(24 hours)

U.S. Coast Guard National Response Center

(800) 424-8802

Florida DER
Southwest District
Tampa, Florida Office

(813) 623-5561
(normal working hours)

U.S. Coast Guard
Tampa Marine Safety Division

(813) 228-2189

Hillsborough Counth
Solid Waste Department

(813) 272-6655

Florida Marine Patrol

(813) 272-2516

Hillsborough County HAZMAT Team

(814) 681-9927

EMERGENCY COORDINATORS

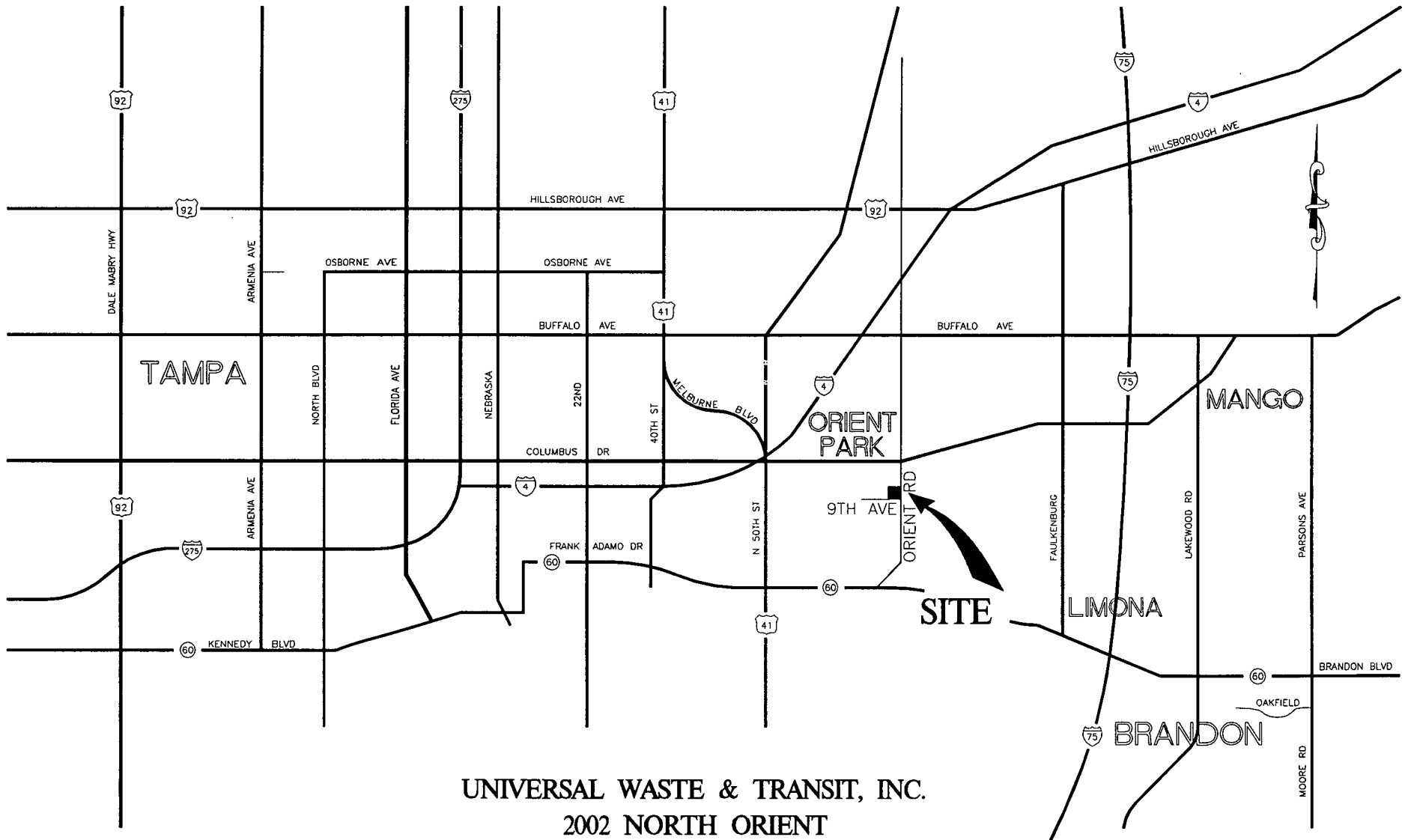
David Brown

(813) 398-5624

Jay Haaf

(813) 626-0825

LOCATION MAP



UNIVERSAL WASTE & TRANSIT, INC.
2002 NORTH ORIENT
TAMPA, FL 33619
(813) 623-5302

DSGN BY:	CAM
DRWN BY:	CAM
PLTD BY:	12/13/91
CHKD BY:	
APPD BY:	



CITY MANAGEMENT CORPORATION
3400 E. LAFAYETTE, DETROIT, MI. 48207
PH. (313) 597-4700

LOCATION: UNIVERSAL WASTE AND TRANSIT, INC.
2002 NORTH ORIENT
TAMPA, FLORIDA 33619

TITLE: SITE LOCATION MAP
DATE ISSUED: _____

SCALE: N.T.S.
PROJECT NO.
FILE NAME: UNTLOMAP
SHEET ____ OF ____

REVISIONS					REV.