

**HAZARDOUS WASTE CONTINGENCY PLAN**

**PREPARED FOR:**

**MOBRO Marine, Inc.  
State Road 16  
Green Cove Springs, Florida**

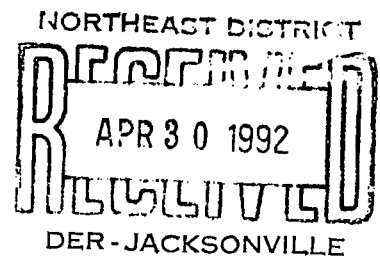
**PREPARED BY:**

**Missimer & Associates, Inc.  
8130 Baymeadows Way West, Suite 104  
Jacksonville, Florida 32256**

April 30, 1992

M&A Project Number JE1-559

Control Number 1061



**DOCKET #** 92-17

## TABLE OF CONTENTS

1.0	APPLICABILITY, PURPOSE AND IMPLEMENTATION (40 CFR 265.50,51)	1
1.1	CONTENT OF THE PLAN (40 CFR 265.52)	1
1.2	FACILITY DESCRIPTION	1
1.3	HAZARDOUS WASTE GENERATION	4
1.4	EMERGENCY COORDINATOR (40 CFR 265.55)	5
1.5	NOTIFICATION [40 CFR 265.56(a), 265.56(d)(1), 265.56(d)(2)]	8
1.6	IDENTIFICATION OF HAZARDOUS MATERIALS AND HAZARD ASSESSMENT [40 CFR 265.56(b)]	9
1.7	PLAN IMPLEMENTATION	10
1.8	EMERGENCY RESPONSE PROCEDURES (40 CFR 265.56)	12
1.9	GENERAL PROCEDURES (40 CFR 265.56)	15
1.10	EMERGENCY EQUIPMENT/SYSTEMS [40 CFR 265.52 (e)]	23
1.11	COORDINATION AGREEMENTS [(40 CFR 265.52 (c)]	24
1.12	EVACUATION PLAN [40 CFR 265.52 (f)]	25
1.13	COPIES OF CONTINGENCY PLAN (40 CFR 265.53)	26
1.14	AMENDMENTS TO THE CONTINGENCY PLAN (40 CFR 265.54)	26

## LIST OF TABLES

TABLE 1.1	EMERGENCY COMMUNICATIONS LIST	7
-----------	-------------------------------	---

## LIST OF FIGURES

FIGURE 1.1	SITE LOCATION MAP	3
------------	-------------------	---

## **1.0 APPLICABILITY, PURPOSE AND IMPLEMENTATION (40 CFR 265.50,51)**

The information has been prepared in accordance with the requirements for Contingency Plan and Emergency Procedures as outlined in the Code of Federal Regulations (CFR), Title 40, Part 265 Subpart D. The plan addresses the actions that are to be taken in the event of a fire, explosion of any unplanned sudden or non-sudden release of hazardous substances or constituents to air, soil, or surface water which could threaten human health or the environment.

### **1.1 CONTENT OF THE PLAN (40 CFR 265.52)**

The plan and the emergency response procedures (ERPs) provide direction for response to emergencies. These emergencies may vary in severity from minor personnel injuries to situations involving real or potential off-site chemical releases. In the event of an emergency, the procedures outlined in this Plan must be implemented.

### **1.2 FACILITY DESCRIPTION**

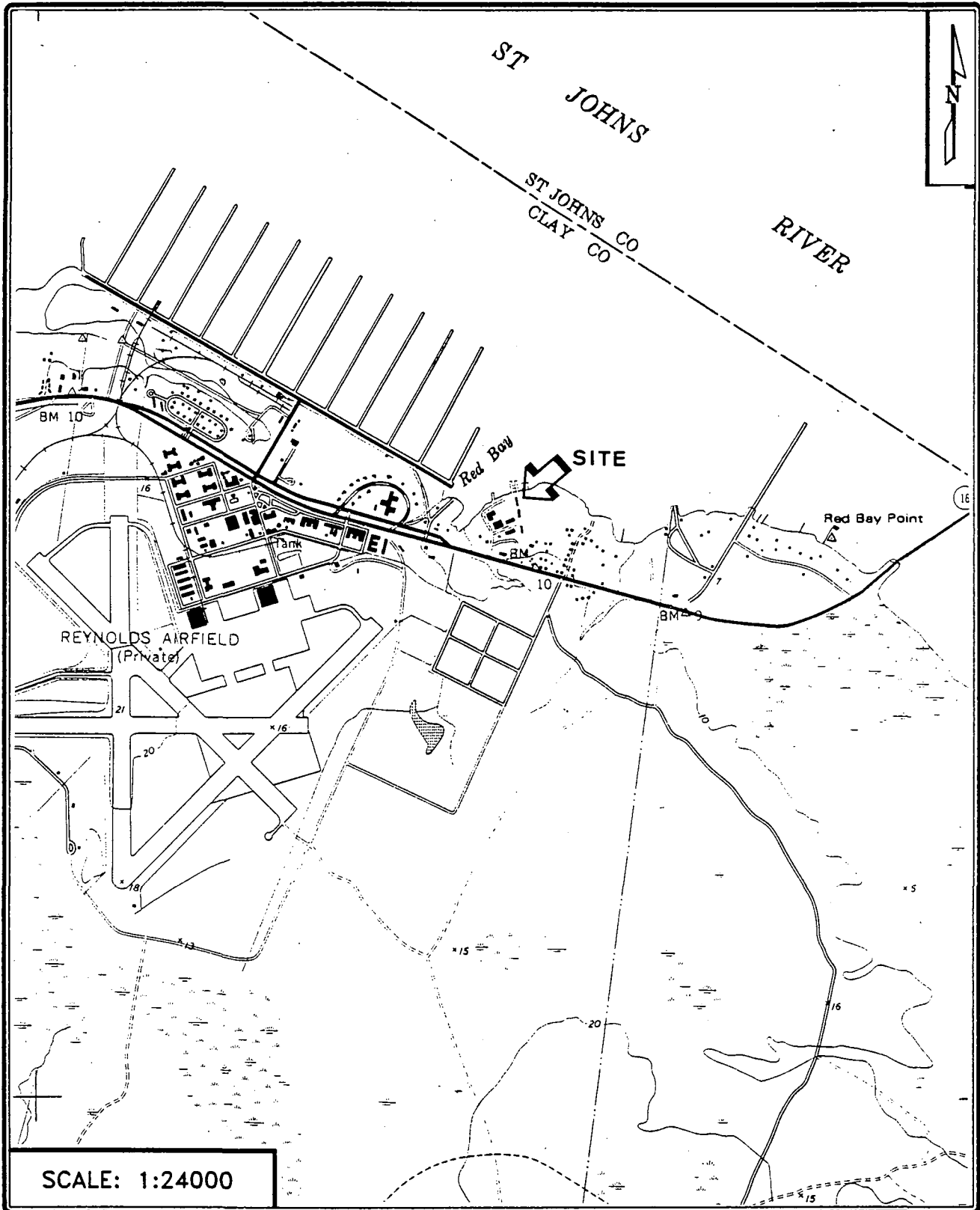
This contingency plan has been developed for:

**MOBRO Marine, Inc.  
State Road 16  
Green Cove Springs, Florida**

MOBRO Marine, Inc. is the "Owner" and "Operator" of the facility. This facility, in Clay County, Florida and is located north of State Road 16 in Green Cove Springs. See Figure 1.1.

This facility functions as both a marine repair and crane maintenance facility. The only hazardous waste constituents produced by on-site operations are spent paint and thinner

and their residues and minute quantities of diesel from gas freeing operations.



<b>M&amp;A</b>	<b>ENVIRONMENTAL AND GROUNDWATER SERVICES</b>		<b>Missimer &amp; Associates, Inc.</b>
	DRN. BY: CLP DWG NO. 91J1520	DATE: 4-30-92	
	PROJECT NAME: MOBRO MARINE, INC.	NUMBER: JE1-470	

FIGURE 1-1. SITE LOCATION MAP  
SOURCE: USGS GREEN COVE SPRINGS, FLORIDA QUADRANGLE

### 1.3 HAZARDOUS WASTE GENERATION

The MOBRO facility is classified as a small quantity generator. The limit is established in the 1984 amendments to the Resource Conservation and Recovery Act (RCRA). The facility is not a Treatment, Storage or Disposal (TSD) facility and is not subject to TSD regulations. Hazardous wastes are not stored longer than 90 days.

For identifying purposes, Florida Department of Environmental Regulation (FDER), through coordination with the U.S. Environmental Protection Agency (EPA), has assigned EPA I.D. No. FLD081946105. Implementation and modifications of current procedures will produce no more than 55-gallons of hazardous waste per month.

Hazardous Waste Tracking requirements are listed in Appendix G.

#### 1.4 EMERGENCY COORDINATOR (40 CFR 265.55)

In the event of an emergency, the Emergency Coordinator will be the Yard Superintendent (or, in his absence, a Relief Supervisor acting as Yard Superintendent), who will be notified immediately. An Emergency Coordinator will be onsite at all times. In the event of an emergency, the employee who discovers the emergency will immediately notify the Yard Superintendent.

In the event of an emergency or a reportable release, the Emergency Coordinator will notify the following:

Yard Superintendent, Harry Baxley, Ext. 9670  
3469 County Road 220  
Middleburg, Florida 32068  
Home Telephone Number 282-1338

The person listed above has been authorized by MOBRO to coordinate emergency response measures and to commit the resources necessary to implement the Plan as he is familiar with this Plan, with the operations and activities at the facility, with the location and characteristics of the hazardous substances handled, and with the layout of the facility.

If the emergency involves fire, explosion, and/or personal injury, the Yard Superintendent will immediately dial 911. Upon placing the initial call to 911 the following agencies will automatically be called on all hazardous materials incidents:

- a) Fire Department, Emergency Medical Services
- b) Police/Sheriff's Department
- c) Bio-Environmental Services Division
- d) U.S. Coast Guard

Additional support agencies will be notified, as necessary, by the initial responding agency. The Green Cove Springs Fire Department has the authority to assume command of any hazardous material incident. A communication reference list is provided in Table 1.1, however, the initial call for assistance need only be to 911. Notification to appropriate environmental agencies may be required; see Section 1.4.



**TABLE 1.1 EMERGENCY COMMUNICATIONS LIST**

<b>EMERGENCY</b>	<b>ORGANIZATION/AGENCY</b>	<b>TELEPHONE NUMBER</b>
INJURY	EMERGENCY MEDICAL SERVICES HUMAN HOSPITAL LIFE FLIGHT (JAX) POISON CONTROL (JAX)	911 276-8580 1-800-396-LIFE 387-7500
FIRE/EXPLOSION	GREEN COVE SPRINGS FIRE DEPT.	911 284-9073
OBTAIN ADDITIONAL FOAM, DRY CHEMICAL OTHER EQUIPMENT	JAX INTL. AIRPORT FIRE DEPT. U.S. NAVY-SEA BASE COMMAND ASW/LANT DUTY OFFICER	757-2219/757-2251 772-2746 (DAY) 772-2338 (EVE)
EXPLOSIVE DISPOSAL	FLORIDA AIR NATIONAL GUARD	757-1360
HAZARDOUS MATERIAL SPILL OR RELEASE	EPA NATIONAL RESPONSE CTR. FL DEPT. ENVIRON. REGULATION CHEMTREC LOCAL EMER. PLAN COMM (LEPC) STATE EMER. RESP. COMM (SERC) STATE WARNING POINT NUMBER	1-800-424-8802 448-4320 1-800-424-9300 730-6260 1-800-635-7179 1-488-1320
IF SPILL REACHES NAVIGABLE WATER, STREAMS	U.S. COAST GUARD U.S. COAST GUARD FLORIDA MARINE PATROL	791-2648 (DAY) 246-7341 (EVE) 241-7107
CIVIL DISTURBANCE	CLAY COUNTY SHERIFF'S OFFICE	284-7575

1.5 NOTIFICATION [40 CFR 265.56(a), 265.56(d)(1), 265.56(d)(2)]

If the Emergency Coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he or she will report findings as follows:

1. If the initial assessment indicates that evacuation of local areas may be advisable, the Emergency Coordinator will immediately notify appropriate local authorities at 911.
2. The Emergency Coordinator will immediately notify either the government official designated as the on-scene coordinator for that geographical area or the National Response Center [using its 24-hour toll free number 1-800/424-8802)]. The report will include:
  - a. Emergency Coordinator name and telephone number;
  - b. Name and address of facility;
  - c. Time and type of incident (e.g., release, fire);
  - d. Names and quantities of material(s) involved, to the extent known;
  - e. The extent of injuries, if any; and
  - f. The possible hazards to human health or the environment outside the facility.

Any emergency event (e.g., fire, explosion, spill, etc.) that requires implementation of the Contingency Plan and/or involves reportable quantities of hazardous materials shall be reported in writing to the Florida Department of Environmental Regulation and the EPA Regional Administrator by the Emergency Coordinator within 15 days after the incident. A copy of this form and the mailing address of the Regional Administrator is found in Appendix A. A telephone report to the National Response Center (NARC) is also required at the time of the incident. A copy of this form, found in Appendix A, must be completed and retained at MoBro when the NARC is notified. Appendix B contains the Federal list of reportable quantities (RQ) for hazardous substances.

## 1.6 IDENTIFICATION OF HAZARDOUS MATERIALS AND HAZARD ASSESSMENT [40 CFR 265.56(b)]

The Emergency Coordinator will be responsible for the assessment of possible hazards to human health or the environment. This assessment will be based on the nature of the emergency (e.g., spill, fire), the extent of the release, and the types and locations of the materials involved. The Emergency Coordinator will determine the effects of any toxic, irritating, or asphyxiating gases released or the effects of any surface runoff of water and chemicals used to control fire.

In order to provide adequate initial response to a spill, the collection and distribution of key information is essential. The following information must be obtained from the individual who first reports the incident in order to begin the assessment process and formulate the necessary response.

### Initial Hazard/Incident Assessment

1. Obtain the reporter's name and telephone number  
If the spill is of significant magnitude, maintain an open line to the site.
2. Identify the type and amount of the spill material  
If the spilled material has not been identified, solicit data from shipping labels, manifests, or product container labels. Alternatively, request information on container type, container description, size, etc. Estimate the volume of material released.
3. Determine the exact location and extent of the spill  
Identify the products if the spill extends to a water body or if the spill has the potential for escaping the facility. Note whether the spill has been contained or confined to an impermeable surface.

4. Establish the nature of the problem and the time of the spill event  
Supplemental notifications may be required if safety or security conditions indicate the presence of or potential for injuries, fire, etc.
  
5. Determine emergency response and cleanup procedures  
Provide for safety and containment. For first reference, see the Department of Transportation (DOT) Hazardous Materials Emergency Response Guidebook or Spill Control Plan. If necessary, contact ChemTrec.
  
6. Assess the need for assistance  
Coordinate requests for outside assistance with management and plant supervisory personnel.

#### 1.7 PLAN IMPLEMENTATION

The decision to activate the Contingency Plan has been assigned to the Emergency Coordinator. That decision shall be based upon an "imminent" or "actual" threat to the human health or environment. Imminent shall mean "likely to happen" in the Coordinator's judgment. Whenever there is an imminent or actual emergency situation, the Emergency Coordinator will immediately respond according to the Contingency Plan.

The following guidance is intended to facilitate the Emergency Coordinator's decision to initiate the Contingency Plan and Emergency Procedures. The Plan shall be implemented on occurrence of any of the following events:

Fire and/or Explosion:

- Fire cannot be extinguished with a single hand-held fire extinguisher.
- Release of toxic fumes. Potential to ignite materials at other locations on-site or could cause heat-induced explosions.
- Use of water or water and chemical fire suppressant could contaminate run-off.
- Imminent danger exists that an explosion could occur, causing a safety hazard because of flying fragments or shock waves.
- Imminent danger exists that an explosion could ignite other hazardous wastes at the facility.
- Imminent danger exists that an explosion could result in a release of toxic material(s).
- An explosion has occurred.

Bomb Threat

- Bomb threat called in or delivered to facility.
- Bomb threat called in or delivered to local fire or sheriff's department implicating the facility.

Spill or Materials Release:

- Release of flammable or explosive liquids or vapors.
- Release of toxic liquids or fumes.
- Potential for ground water contamination.
- Potential for soil contamination and/or ground or surface water pollution.

## Floods

- Potential for surface water contamination.
- Potential for ground water contamination.

### 1.8 EMERGENCY RESPONSE PROCEDURES (40 CFR 265.56)

The Emergency Coordinator will take all reasonable measures to ensure that the emergency, of whatever nature, does not spread and become more acute and to guard against the development of unforeseen dangerous conditions. He/she will ensure that the system is completely shut down and will help in coordinating any fire-fighting operations that are necessary. In the event of a spill, he/she will immediately shut down any equipment and take steps to contain the material and repair the leak or other source of spill.

If a fire caused by ignition or explosion is relatively small, it may be contained, controlled, or extinguished by the use of portable fire extinguisher, directing the extinguisher stream to the base of the flames. The City Fire Department must be called, (911), to respond to any plant fires that cannot be extinguished within the first few minutes. It is not the intent of plant personnel to fight major fires, but only to fight fires in the incipient stage and then to assist the city in any way possible.

## Bomb Threat

The Yard Superintendent shall implement the following measures to protect plant personnel and equipment:

- Sound the alarm
- Institute evacuation procedure as needed
- Notify local fire and sheriff's departments at 911

The Emergency Coordinator will determine the magnitude of the threat based on the following information:

- Imminent hazard to employees;
- Potential to cause spill or release of hazardous materials to the environment;
- Potential for spread to offsite areas.

### Spill or Materials Release

The Yard Superintendent shall implement the following measures to halt and/or contain the release:

- Controlling the leaking source;
- Applying oil absorbent sheets and/or pigs on the spill; and
- Blocking off nearby storm drains to prevent discharge to surface water.

The Emergency Coordinator will determine the magnitude of the incident based on the following information:

- Nature and characteristic of spill and/or release;
- Location and effective extent of incident;
- Quantity spilled and/or released;
- Direction in which the spill or release is migrating;
- Extent of personnel injuries; and
- Potential and/or intensity of the event.

Some of the hazardous substances are solid. A solid material, if spilled, may be returned to the same type of container in which it was originally contained, or in an emergency, any open-top steel drum.

Hazardous liquids, if spilled, may be returned to their original container or a similar container, unless contamination is a problem. Any contaminated released liquid material will be pumped or absorbed with granulated absorbent or booms. In general, any hazardous liquid may be recovered in a stainless steel tote tank, or open-top steel drum pending further disposition by supervisors trained in hazardous waste disposal.

WASTE INCOMPATIBILITY [40 CFR 265.56 (h)(1)]

No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.

POST EMERGENCY EQUIPMENT MAINTENANCE [40 CFR 265.56 (h)(2)]

Any equipment used in the control of a release will be cleaned and all contamination removed from the equipment before operations are resumed. Any contaminated materials which cannot readily be decontaminated will be disposed with the material from the release. The Emergency Coordinator will notify the appropriate state and local authorities that the cleanup is complete prior to the restart of operations.

CONTAINER SPILLS AND LEAKAGE (40 CFR 265.171)

Any materials released from the accumulation or storage of drums will be handled as described in Section 1.9. The material remaining in the container will be transferred to a structurally sound drum or to the emergency standby hazardous waste drum reserved for that purpose. The leaking container will be disposed in an appropriate manner.



## FLOOD RESPONSE

Should rising water become a problem, the Shift Superintendent shall implement the following measures:

- Instituting water diversion measures, i.e., trenching, berms, etc.
- Movement of equipment onto wooden pallets or away from floodwaters as appropriate.
- Shutting down exposed electrical equipment.
- Movement of chemicals and hazardous materials away from floodwaters.

### 1.9 GENERAL PROCEDURES (40 CFR 265.56)

In the event of an emergency, the Emergency Coordinator will assess the situation and determine the facility's emergency response capabilities. The Coordinator will deploy the necessary in-plant personnel and contact the outside agencies as required. Refer to Table 1.2 for the Emergency Communications List.

In case of fire, supervisors of unaffected areas will stay with their personnel and be ready to evacuate and account for the persons under their supervision. See Figure 1-2, Evacuation Routes, in Appendix C.

The Emergency Coordinator has the responsibility for determining when the fire has been extinguished or the emergency condition is declared under control and the safety of personnel is no longer jeopardized. He will consult with the local fire department responding team to determine that the emergency has passed before declaring the situation under control. All used emergency equipment must be cleaned and fit for use prior to resumption of plant operations in the affected areas. The Emergency Coordinator is responsible for coordinating all cleanup operations and restoring the affected areas.

## Fire and/or Explosion

The paint flammables storage on the northern portion of the site (near the river) can be easily accessed by fire fighting and other emergency vehicles and equipment. Roads must remain clear at all times. Access to the paint locker in the crane shop is more limited. Adequate storage and aisle space must be maintained to allow unobstructed movement of personnel and fire protection equipment. During an emergency, the Green Cove Springs Fire Department will be called to respond to any plant fire that cannot be extinguished within the first few minutes. It is not the intent of the facility personnel to fight major fires, but only fires in the initial stage and then to assist the city fire department.

During power failures or severe weather, fire response personnel will be assigned to protect personnel and property. In the event of a fire, the response team will focus on preventing the fire from spreading.

The following actions are required in affected areas:

- Immediately discontinue all hazardous work and cease pumping any flammable liquids in the area;
- De-energize all affected equipment;
- Contact the Emergency Coordinator;
- Clear the area of all non-essential personnel. These persons are to report to their designated rally points (Appendix E) for accountability.
- Do not move an injured person until an emergency medical team reaches the scene unless there is a significant risk of further injury related to the emergency; and
- Administer first aid while waiting for the emergency medical team. A current list of personnel trained in first aid, CPR, or both is posted in the main office.

Because fire is always a potential hazard in spills of flammable materials, possible sources of ignition must be eliminated. During any spill event, vehicular traffic and hazardous work in the area will cease until the spill is contained and a safe environment is restored.

If a highly flammable material is released (e.g., natural gas), the Clay County Sheriff's Department will be notified. The Sheriff's Department will then notify all persons within at least a quarter-mile radius of the release. All ignition sources within the release area will be eliminated. Electrical devices will be turned off. The use of motor vehicles in the vicinity of the release will be restricted or eliminated to avoid ignition of the vapor, and resulting flashback which could cause an explosion or fire of wide dimensions at the source. If the chances of an impending explosion are significant, the entire area within a 2,000-ft radius of the source will be evacuated.

If a fire is involved and is concentrated at the source, people will be evacuated up to a half-mile downwind.

Area or plant evacuation will be necessary in the event of a major fire or explosion. The telephone activated public address (P.A.) system will be used if it is functioning. If not, the response team will be responsible for coordinating communication via 2-way radios. All personnel have been trained in evacuation procedures and means of exit from their respective work areas (Appendix F). The procedures are routinely reviewed during fire drills which are conducted a minimum of two times a year.

Until evacuation is signaled, by fire alarm, P.A. system or voice, personnel who are not in an affected area will stay in their respective work areas. Contract personnel and visitors will immediately be cleared from the area at the first sign of an emergency or spill condition.

#### Bomb Threat

The procedures to be followed upon receipt of a bomb threat are similar to those followed for Fire and/or Explosion. Aisles and roadways must be kept clear at all times to facilitate movement by fire fighting and other emergency vehicles and equipment. Adequate storage and aisle space must be maintained at all times to allow unobstructed movement of personnel and fire protection equipment.

The following actions are required:

- Immediately discontinue all hazardous work and cease pumping any flammable liquids;
- De-energize all equipment;
- Contact the Emergency Coordinator;
- Clear the area of all non-essential personnel. These persons are to report to their designated rally points (Appendix E) for accountability.

Plant evacuation will be necessary in case of a bomb threat. The telephone activated public address (P.A.) system will be used if it is functioning. If not, the response Team will be responsible for coordinating communication via 2-way radios. All personnel have been trained in evacuation procedures and means of exit from their respective work areas (Appendix F). These procedures are routinely reviewed during fire drills which are conducted a minimum of two times a year.

### Spill or Materials Release

Anyone who discovers a chemical spill will immediately report it to the Shift Superintendent. Immediately following spill or leak detection, facility personnel will attempt to stop the leak or spill in progress. In the event toxic material is discovered migrating offsite, the Emergency Coordinator will notify, as necessary, the appropriate agencies listed in Table 1.2.

If a chemical spill is not contained within a dike or sump area, an area of isolation will be established around the spill. The size of the area will generally depend on the size of the spill and the materials involved. If the spill is large, an initial isolation of at least 100 feet in all directions is recommended to allow cleanup, repair and to prevent exposure. When any spill occurs, only those persons involved in overseeing or performing emergency operations will be allowed within the designated hazard area. If possible the area will be roped or otherwise blocked off.

If the control and cleanup of a spill, release, or fire is within the capabilities of company personnel and local response teams, the Florida Department of Environmental Regulations or the National Response Center will not be notified unless the quantity of hazardous material spilled is equal to or greater than the reportable quantity specified under 40 CFR Part 117.

If the Emergency Coordinator determines that the company is unable to handle the emergency, then local, state, and Federal Authorities will be notified of the situation.

Evacuation of potentially affected plant areas will begin as soon as possible.

For all large spills or serious leaks the following guidelines will be followed as closely as possible:

1. If a leak develops or a spill occurs the person discovering the discharge will leave the immediate area and contact the Emergency Coordinator. The Emergency Coordinator will obtain the following information:
  - a. Person(s) injured and seriousness of injury.
  - b. Location of the spill or leak, material involved, and source (tank, pipeline, etc.).
  - c. The approximate amount spilled, estimate of the liquid discharge rate, and the direction the liquid is moving.
  - d. Whether or not a fire is involved.
  
2. Next, the Emergency Coordinator will:
  - a. Evacuate the hazardous area as needed. For small spills or leaks, isolate at least 50 feet in all directions. For large spills, initially isolate at least 100 feet in all directions.
  - b. Obtain medical attention for any injured persons. It may be helpful to instruct the caller in the initial first aid procedures. Then call the hospital.
  - c. Call the fire department if a fire is involved that cannot be extinguished by plant personnel.
  - d. Dispatch emergency personnel to the site to take the appropriate action.
  - e. Contact the proper authorities (Table 1.2) if the spill or release is large. If a large spill occurs, the initial evacuation area downwind should be 1000 feet long by 500 feet wide.

3. Cleanup personnel will:

- a. Make sure all unnecessary persons are removed from the hazard area.
- b. Put on protective clothing and equipment.
- c. Remove all ignition sources, and use spark and explosion proof equipment and clothing in containment and cleanup.
- d. If possible try to stop the leak. Special materials will be kept on hand for temporary repairs.
- e. Remove all surrounding material that could be especially reactive with materials in the waste. Determine the major components in the waste at the time of the spill.
- f. Use absorbent pads, booms, earth, sand, and other inert materials to contain, divert, and clean up a spill if it has not been contained by a dike or sump. Most spills contained within the dike or sump can be pumped back into the appropriate storage tank or drum.
- g. In the event an oil spill occurs, the contents of the ditch will be pumped to the industrial waste water treatment facility for retention and separation.
- h. Place all containment and cleanup materials in drums for proper disposal. Some items, such as absorbent rags or booms may have to be cut up.
- i. Place all recovered liquid wastes and contaminated soil in drums for removal to an approved disposal site.

The Emergency Coordinator will determine whether or not the spill has exceeded a "reportable quantity", as established by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (refer to Appendix B). If the spill exceeds a reportable quantity, the Emergency Coordinator should contact the National Response center at 800/424-8802. Also, the information in Appendix A, Page A-1, must be reported by telephone at this time. This form should be signed by the Emergency Coordinator with the original retained indefinitely in a secure file and a copy submitted to the Shift Supervisor.

The Emergency Coordinator will conduct an investigation to determine the cause of the spill and corrective action necessary to prevent future incidents. Investigative findings and proposed action will be documented in a report which shall be retained indefinitely by the Plant Manager.

#### Prevention of Recurrence or Spread of Fires, Explosions or Releases

Actions to prevent the recurrence or spread of fires, explosions, or releases, include stopping processes and operations, collecting and containing released waste, and recovering or isolating containers.

#### Storage and Treatment of Released Material

Immediately after an emergency, the Emergency Coordinator will make arrangements for treatment, storage or disposal of recovered waste, contaminated soil, surface water or any other contaminated material.

#### Post-Emergency Equipment Maintenance

After an emergency event, all emergency equipment will be cleaned so that it is fit for use or it will be replaced. Before operations are resumed, an inspection of all safety equipment will be conducted. The Regional Administrator, state, and local authorities will be notified that post-emergency equipment maintenance has been performed and operations will be resumed.



## 1.10 EMERGENCY EQUIPMENT/SYSTEMS [40 CFR 265.52 (e)]

Emergency equipment consists of hand held fire extinguishers, a stationary fire pump located on the river near the 2-story office, spill control equipment decontamination, safety, and a plant wide communication system plus alarms. A brief outline of the location and capabilities of each of these follows.

### Fire Extinguishing System

Locations of plant fire extinguishers are shown in Figure 1-2 located in Appendix C.

### Spill Control

Equipment for use in containing and cleaning up spilled hazardous wastes is stocked and maintained in area D as shown in Figure 1-2 (Appendix C). This consists of granulated spill absorbent, portable pumps, absorbent pails, and absorbent booms. In addition, empty DOT-approved 55-gallon hazardous waste drums are available in the plant with dedicated shovels and brooms.

## 1.11 COORDINATION AGREEMENTS [(40 CFR 265.52 (c))]

MOBRO Marine has made the following arrangements to facilitate the response to emergency situations:

Copies of the Contingency Plan will be given to the local police, fire department, the hospitals, and the state and local Emergency Response Teams. These agencies will be asked to review and comment on the Plan and to detail the actions they will take in an emergency situation.

- Copies of the letters accompanying the Contingency Plan and inviting the above agencies to visit the facility are provided in Appendix G.
- The purpose of these visits was to familiarize police, fire departments, and emergency response teams with the layout of the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes. Agreements are in effect with others to provide support as needed.
- A copy of Material Safety Data Sheets (MSDSs) for all of the chemical products used by Mobro will be sent to the Company Doctor:
- Copies of the MSDSs will be sent to the local fire department as well as the Florida Department of Environmental Regulation.

## 1.12 EVACUATION PLAN [40 CFR 265.52 (f)]

All emergencies require prompt and deliberate action. In the event of any major emergency it will be necessary to follow an established set of procedures. Evacuation of the plant in the event of a large fire or release of hazardous materials shall be determined by:

Plant Manager  
Emergency Coordinator  
Operations Manager  
Green Cove Springs Fire Department

Notice to evacuate will be given using telephone and building intercom systems.

Persons advised to evacuate should proceed immediately to designated assembly points. Persons should remain at the assembly points until accounted for and released to go home or notified that it is safe to return to work.

With very few exceptions, the only immediate major hazard, that would require any degree of retreat, would be a fire. As buildings are open and storage tanks are located in open areas, there are no locations where personnel would potentially be trapped. What is required is for personnel to retreat a safe distance from the point of fire and safely make their way to their designated rally point.

A typical evacuation route and the rally points for the different departments are designated on the site plan in Appendix E.

### 1.13 COPIES OF CONTINGENCY PLAN (40 CFR 265.53)

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

- (a) Maintained at the facility; and
- (b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

### 1.14 AMENDMENTS TO THE CONTINGENCY PLAN (40 CFR 265.54)

The Contingency Plan will be reviewed and immediately amended, as necessary whenever:

- The plan fails in an emergency.
- The facility significantly modifies its design, construction, operations, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents, or changes in the response necessary in an emergency.
- The list of Emergency Coordinators changes.
- The list of emergency equipment changes.
- The list of hazardous materials changes.

APPENDIX A  
EMERGENCY REPORTING FORMS

MOBRO Marine, INC.

APPENDIX B  
TABLE 302.4

LIST OF HAZARDOUS SUBSTANCES

AND

REPORTABLE QUANTITIES

ENVIRONMENTAL PROTECTION AGENCY  
40 CFR Part 302.4

APPENDIX C  
FACILITY LOCATION

APPENDIX D  
CORRESPONDENCE



APPENDIX E  
EMERGENCY EVACUATION PLAN

April 17, 1992

Mr. Richard Knoff  
Asst. Fire Chief, Hazardous Materials Team  
City of Green Cove Springs  
229 Walnut Street  
Green Cove Springs, Florida 32043

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

April 17, 1992

Mr. Lloyd Schroder, Manager  
Humana Hospital, Environmental Services  
2001 Kingsley Avenue  
Post Office Box 2000  
Orange Park, Florida 32073

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

April 17, 1992

Mr. Thomas Lafferty, Administrator  
Clay Memorial Hospital (Limited Care)  
P.O. Box 808  
Green Cove Springs, Florida 32043

Subject:       **Emergency Response**  
                  **Fire, Explosion, Hazardous Material Spills**  
                  **MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE:             RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

April 17, 1992

Mr. Dalton Bray  
Sheriff  
Clay County  
801 Orange Avenue  
Green Cove Springs, Florida 32043

Subject: **Emergency Response  
Fire, Explosion, Hazardous Material Spills  
MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

April 17, 1992

Department of Community Affairs  
Division of Emergency Management  
2740 Centerview Drive  
Tallahassee, Florida 32399-2400

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

e

APPENDIX F  
HANDLING HAZARDOUS MATERIAL

## EMERGENCY PROCEDURES

### Flammable Liquids

#### HEALTH HAZARDS

Poisonous; may be fatal if inhaled, swallowed or absorbed through skin. Contact may cause burns to skin and eyes.

Runoff from fire control or dilution water may cause pollution.

#### FIRE OR EXPLOSION

Flammable/combustible material: May be ignited by heat, sparks or flames.

Vapors may travel to a source of ignition and flash back.

Container may explode in heat of fire.

Vapor explosion and poison hazard indoors, outdoors or in sewers.

Runoff to sewer may create fire or explosion hazard.

#### EMERGENCY ACTION

Keep unnecessary people away, isolate hazard area and deny entry.

Stay upwind; keep out of low areas.

Self-contained breathing apparatus and chemical protective clothing which is specifically recommended by the shipper or producer may work but they do not provide thermal protection unless it is stated by the clothing manufacturer. Structural fire fighter's protective clothing is not effective with these materials.

Isolate for 1/2 mile in all directions if tank car or truck is involved in fire.

CALL CHEMTREC AT 1-800-424-9300 FOR EMERGENCY ASSISTANCE.

If water pollution occurs, notify the appropriate authorities.

#### FIRE

Small fires; dry chemical, CO<sub>2</sub>, Halon, water spray or standard foam.

Large fires; water spray, fog or standard foam is recommended.  
Move container from fire area if you can do it without risk.



Dike fire control water for later disposal; do not scatter the material.

Cool containers that are exposed to flames with water from the side until well after fire is out. Stay away from ends of tanks.

Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

#### SPILL OR LEAK

Shut off ignition sources; no flares, smoking or flames in hazard area.

Do not touch spilled material; stop leak if you can do it without risk.

Water spray may reduce vapor, but it may not prevent ignition in closed spaces.

Small spills; take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large spills; dike far ahead of liquid spill for later disposal.

#### FIRST AID

Move victim to fresh air and call emergency medical care; if not breathing, give artificial respiration; if breathing is difficult, give oxygen.

Remove and isolate contaminated clothing and shoes at the site.

In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes.

Keep victim quiet and maintain normal body temperature.

Effects may be delayed; keep victim under observation.

In the event plant evacuation is called for by the Emergency Coordinator, the following actions will be taken:

1. The signal for plant evacuation will be activated.
2. Both gates will immediately be opened. No further entry of visitors, contractors or trucks will be permitted unless authorization by the Emergency Coordinator. All non-emergency vehicle traffic within the plant will cease to allow safe exit of personnel and movement of emergency equipment.
3. ALL non-emergency personnel, visitors, and contractors will immediately leave through the exit gate located east of the main office. Any vehicle traffic will exit through the gate west of the main office.
4. No persons shall remain or re-enter the location unless specifically authorized by the Emergency Coordinator or his designee. In allowing this, the person in charge assumes responsibility for those persons within the perimeter. Those within the fenced area will normally only include fire fighting personnel, emergency teams or certain designated and trained employees.
5. ALL person will be accounted for by their immediate supervisors. Supervisors will designate the safest existing procedure for his or her employees. To assist in this endeavor, the Emergency Coordinator will use the public address system supplemented by radio and the internal telephone system to achieve the most rapid and efficient communication.
6. Employees and others will proceed to the rally points in an orderly manner. Refer to Figure 1-3. Immediately upon exit through the gate, the Yard Supervisor will prepare a list of all personnel at the exit gate. All other personnel who have persons reporting to them must confirm the final accounting.
7. Upon completion of the employee list, the supervisor in charge will hand-carry the list to the Emergency Coordinator. all other personnel will remain at the gate area.
8. Contract personnel should also be listed with the name of their company.
9. The names of emergency team members involved in emergency response will be reported, in writing, to the front gate by designated response team personnel.
10. A final tally of persons will be made by the Emergency Coordinator.
11. No attempt by persons other than specifically trained emergency response workers to find persons not accounted for will involve endangering lives of others by re-entry into emergency areas.

12. Re-entry into the fenced area will be made only after clearance is given by the Emergency Coordinator. At his/her direction, a signal or other notification will be given for re-entry into the plant.
13. In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of those employees they are seeing. Contractors are the responsibility of those persons administering the individual contracts.
14. Drills are held to practice all of these procedures and are treated with the same seriousness as an actual emergency.

APPENDIX G  
HAZARDOUS WASTE TRACKING

## HAZARDOUS WASTE TRACKING

Hazardous wastes will be containerized in 55-gallon drums as they are generated. Containers will be assigned an identification number and labeled as containing hazardous waste before use. As each drum is filled, it will be placed in a hazardous waste containment area. A log book will be maintained containing the following information for each container of waste:

- Container identification number;
- Volume of waste in the container;
- Description and type of waste;
- Date the waste was generated;
- Disposal date, manifest number, and disposal contractor's name, EPA ID number, and telephone number;
- Disposal facility's name, EPA ID number and phone number.

A copy of the waste manifest will be kept in a designated file. The log book will be cross-checked quarterly against manifests to ensure that all disposed drums are accounted for. All containers will be inspected weekly and the results of the inspection will be noted in the log book.

NORTHEAST DISTRICT  
**RECEIVED**  
APR 17 1992  
**REGISTERED**  
DER - JACKSONVILLE

**DRAFT PRELIMINARY  
CONTAMINATION ASSESSMENT PLAN  
MOBRO MARINA, INC.  
STATE ROUTE 16  
GREEN COVE SPRINGS, FLORIDA  
FDER/EPA ID NO. FLD 081 946 105**

Prepared For:

Ms. Jane Mears  
Florida Department of Environmental Regulation  
Northeast District

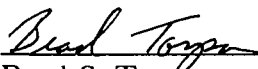
Prepared By:

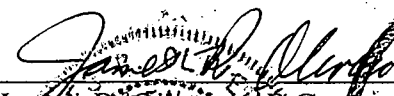
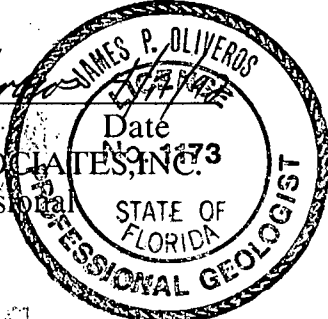
Missimer & Associates, Inc.  
8130 Baymeadows Way West, Suite 104  
Jacksonville, Florida 32256

April 17, 1992

Project Number JE1-470

Control Number 1042

  
Brad S. Tompa  
Project Manager

  
James P. Oliveros, P.G.  
MISSIMER AND ASSOCIATES, INC.  
Florida Licensed Professional  
Geologist # 1173  
  
# 92.12

## TABLE OF CONTENTS

		<u>Page</u>
LETTER OF TRANSMITTAL		
TABLE OF CONTENTS .....		i
SECTION	1.0 INTRODUCTION .....	1
	1.1 Scope of Work .....	3
SECTION	2.0 SITE DESCRIPTION .....	4
	2.1 General Description .....	4
	2.2 Facility Process Description .....	4
SECTION	3.0 GEOLOGY AND HYDROGEOLOGY	
	3.1 Regional Geology and Hydrogeology .....	7
	3.2 Site Geology and Hydrogeology .....	7
	3.3 Aquifer Identification and Classification .....	7
	3.4 Private and Public Potable Supply Well Inventory .....	7
	3.5 Identification of Surface Water Features .....	8
SECTION	4.0 FIELD IDENTIFICATION .....	9
	4.1 Monitoring Well Location and Justification .....	9
	4.2 Monitoring Well Installation and Construction .....	9
	4.3 Soil Sample Location and Justification .....	11
	4.4 Soil Boring Installation and Sampling Procedures .....	13
	4.5 Groundwater Sampling Procedures .....	14
SECTION	5.0 SAMPLE ANALYSIS .....	15
	5.1 Laboratory Selection and Criteria .....	15
	5.2 Soil/Sediment Analyses .....	15
	5.3 Groundwater Analyses .....	15
SECTION	6.0 PROJECT WORK SCHEDULE .....	16

**LIST OF FIGURES**

Figure 1-1 Location Map . . . . . 2  
Figure 2-1 Site Plan and Proposed Soil and Groundwater Sample Locations . 5  
Figure 4-1 Schematic Diagram of Shallow Monitoring Wells . . . . . 12  
Figure 6-1 PCAR Schedule . . . . . 17

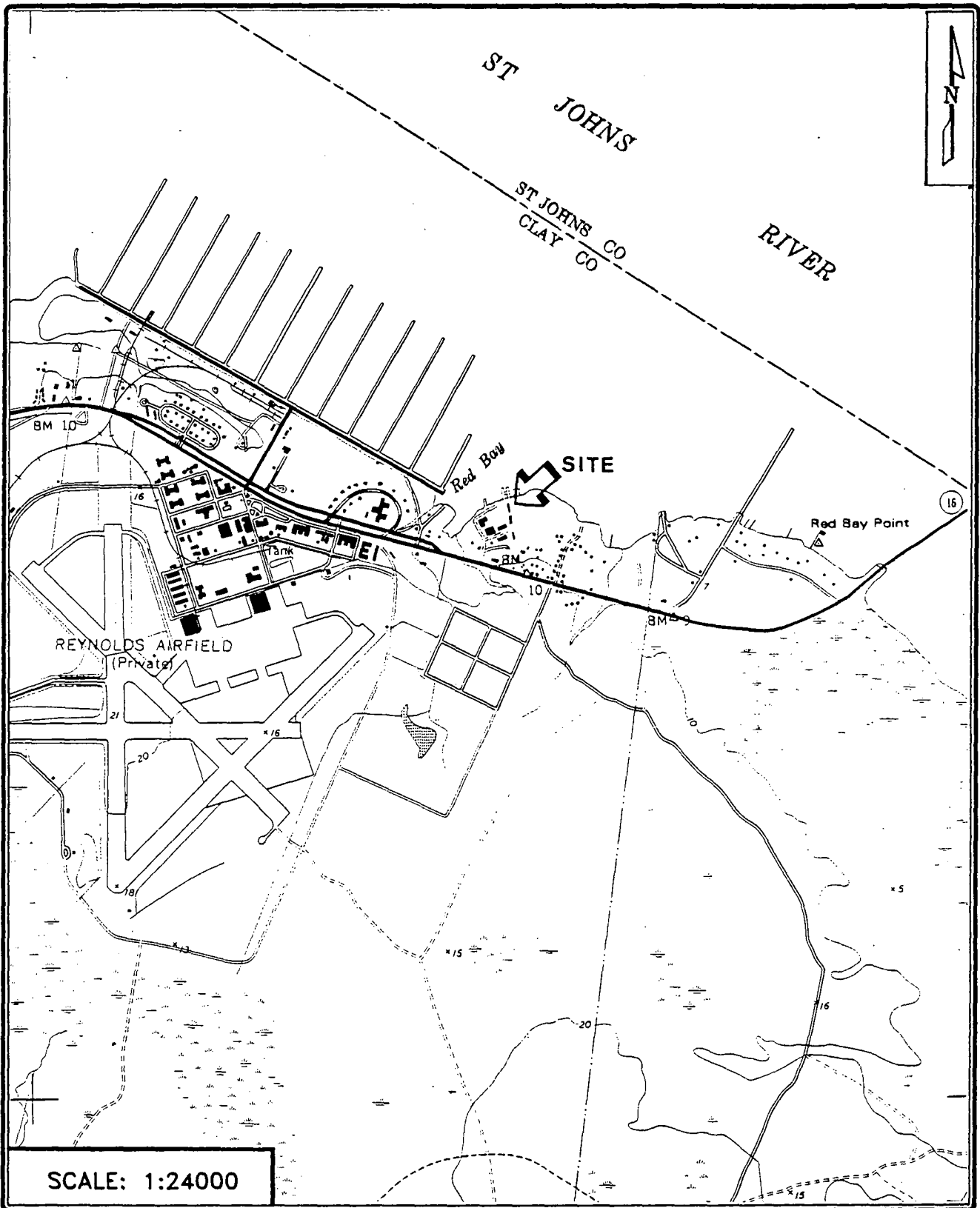


## 1.0 INTRODUCTION

MOBRO Marine, Inc., retained Missimer and Associates, Inc. (M&A) to prepare a Preliminary Contamination Assessment Plan (PCAP) for the facility located in Green Cove Springs, Clay County, Florida. The site is located in Section 38, Township 6 South, Range 26 East, Latitude 30 degrees, 56 minutes and 45 seconds, Longitude 81 degrees, 38 minutes and 44 seconds (Figure 1). The Florida Department of Environmental Regulation (FDER) conducted a hazardous waste inspection of the MOBRO Marine facility on September 14, 1990. Some of the hazardous waste violations found during the inspection were addressed by the FDER in a Consent Order dated February 19, 1992 (OGC Consent Order No. 90-1662). As part of the requirements of the Consent Order, MOBRO Marine must submit a PCAP in accordance with the FDER document entitled "Corrective Actions for Groundwater Contamination Cases", for the areas identified in the Consent Order as 7, 9 and 12.

MOBRO Marine, Inc. is a tugboat and barge construction and rework facility. Rework activities include sandblasting, welding, mechanical refitting, and painting. Tractor mounted and barge mounted cranes are also repaired and painted at the facility.

The purpose of the PCAP is to present a work plan to the FDER to evaluate whether soil or groundwater has been adversely impacted by alleged discharges in the three areas. Also, the PCAP describes procedures to determine if contamination is detected, whether concentrations of these contaminants exceed the criteria set forth in Florida Administrative Code (FAC) Chapter 17-3.



<b>MGA</b>	<b>ENVIRONMENTAL AND GROUNDWATER SERVICES</b>		<b>Missimer &amp; Associates, Inc.</b>
	DRN. BY: CBH DWG NO. 91J1520	DATE: 4-15-92	
	PROJECT NAME: MOBRO MARINE, INC.	NUMBER: JE1-538	

FIGURE 1-1. SITE LOCATION MAP  
 SOURCE: USGS GREEN COVE SPRINGS, FL QUADRANGLE MAP

## 1.1 Scope of Work

This PCAP describes the sources of information and field investigations that will be used to accomplish the following tasks:

1. Characterize the regional hydrogeology;
2. Characterize the surficial hydrogeology of the site;
3. Identify and classify the surficial aquifer at the site;
4. Identify private and public potable water wells within one-half (1/2) mile of the site;
5. Identify permanent surface water bodies within one-half (1/2) mile of the site;
6. Construct and develop temporary monitoring wells on the site;
7. Collect and analyze groundwater samples;
8. Collect soil samples and screen them with an OVA-FID;
9. Collect soil samples for laboratory analysis.

In addition, this PCAP:

1. Describes the location and justification of monitoring wells to be constructed at the site;
2. Describes sampling equipment and methods that will be used to collect soil and groundwater samples;
3. Identifies the parameters and analytical methods that will be used for soil and groundwater samples analyzed;
4. Identifies possible laboratories that soil and groundwater samples will be submitted for analysis;
5. Provides maps and figures as appropriate to show the location of MOBRO Marine, Inc., major physical features on the site, proposed locations of temporary monitoring wells, proposed locations of soil samples and temporary monitoring well construction details.

## 2.0 SITE DESCRIPTION

### 2.1 General Description

The MOBRO Marine property is located along the south side of the St. Johns River. The land is relatively flat, sloping gently toward the river to the north. The site is bordered on the north by the St. Johns River and on the south by State Route 16, to the east and west is private land. The facility consists of several concrete and corrugated steel block buildings that are used for offices and workshops. Access roads and parking areas are generally unpaved with concrete areas near the buildings. Several areas of the site are used for the storage of large scrapped equipment, vehicles and containers or items temporarily not in use.

### 2.2 Facility Process Description

The MOBRO Marine, Inc. (originally Moody Brothers, Inc.) facility has been in operation for approximately 20 years. The primary operation is the repair and maintenance of barges and tugboats; however, crane repair and maintenance is also conducted at the facility. The facility may be divided into two work areas; the barge and tugboat area and the crane area. A site plan of the facility is shown in Figure 2-1.

Barges and tugboats typically undergo several phases of treatment, including sandblasting, maintenance or repair work, and repainting. The barges are pulled out of the water by rail to the repair area. The boats are then sandblasted or scraped to remove old paint and barnacles. After sandblasting, repairs such as welding or replacement of damaged sections are completed. Upon completion of repairs, the barges are repainted using spray guns and placed back into service.

### 3.0 GEOLOGY AND HYDROGEOLOGY

#### 3.1 Regional Geology and Hydrogeology

The regional geology and hydrogeology will be investigated by a review of published interpretative reports describing the geology and hydrogeology of northeast Florida. Sources of published reports that will be reviewed include the Florida Geological Survey, the U.S. Geological Survey, and the St. Johns River Water Management District. Information from wells identified during the well inventory will be used to supplement the information obtained from published reports.

#### 3.2 Site Geology and Hydrogeology

Data from existing production wells on the site and from temporary monitoring wells constructed in the surficial aquifer on the site during the Preliminary Contamination Assessment will be used to characterize the geology and hydrogeology of the site. Detailed descriptive geologic logs will be prepared by a M&A geologist during installation of temporary monitoring wells. Permanent water-level measuring points (MPs) will be established on the casing of each temporary monitoring well. MP elevations will be referenced to an arbitrary on-site benchmark surveyed by M&A personnel. If construction of existing production wells on the site allows for measurement of water depths, then MPs will be established on these wells and elevations will also be surveyed. Relative elevations of water levels in temporary monitoring wells will be used to determine the direction of groundwater flow in the surficial aquifer at the site.

#### 3.3 Aquifer Identification and Classification

The site overlies undifferentiated pliocene and recent deposits. The depth to the principal aquifer and the presence or absence of overlying permeable and confining units at and near the site will be investigated by an examination of the logs of wells identified

during the well inventory. Classification of shallow groundwater, in accordance with Chapter 17-3 FAC, will be determined at the site.

#### 3.4 Potable Water Supply Well Inventory

A well inventory will be conducted to determine the number and locations of public and private potable water-supply wells within a one-half mile radius of the facility. A search of computer files of the St. Johns River Water Management District, the Northeast District of the FDER and other county and public agencies will be made. Wells identified during the file search will be verified by field reconnaissance.

#### 3.5 Surface Water Inventory and Classification

Permanent surface water bodies within one-half mile of the site will be identified by an examination of U.S. Geological Survey Green Cove Springs 7-1/2 minute Quadrangle Map. Surface-water bodies identified during the examination of topographic maps will be verified by field reconnaissance.

## 4.0 FIELD INVESTIGATION

### 4.1 Monitoring Well Location and Identification

Consent Order No. 90-1662, issued by the FDER to MOBRO Marine, Inc., requires the completion of a Preliminary Contamination Assessment Plan (PCAP). The PCAP must address Areas 7, 9 and 12 (Figure 2-1) that were identified in the FDER's September 14, 1990 inspection report. The placement of the temporary monitoring wells will be designed to maximize the evaluation of potential impacts at each area.

Area 7 is located west of a large parts storage building. The building at Area 7 is a multi-bay maintenance building with a concrete floor. The westernmost bay of the building was used to store 55-gallon drums filled with waste oil. A waste oil tank was also stored in Area 7 in which D001/F005 hazardous wastes were allegedly placed. Area 7 is currently used to store several empty 55-gallon drums. Temporary monitoring wells will be installed on the north, south, and west sides of the building. The northern temporary monitoring well will be installed directly north of the maintenance bay that was used to store the waste oil in which the D001/F005 waste was allegedly placed.

Area 9 is adjacent to the St. Johns River at the north-central portion of the facility near the barge rework area. Area 9 consists of a concrete pad that had been the foundation of a storage building. Area 9 was used for the storage of a 55-gallon drum which was allegedly filled with oil and water pumped from bilges. Temporary monitoring wells will be installed on the north, southeast, and southwest of the concrete pad.

Area 12 is the diesel aboveground storage tank (AST) area. Area 12 includes three ASTs, the eastern AST is a 15,000-gallon diesel fuel tank. The westernmost AST is a 15,000-gallon tank used for the storage of oil and water pumped from bilges. The center AST is an 8,000-gallon tank that is currently empty and serves as a contingency tank for the overfill of the westernmost AST. All three ASTs are located within an

approximately four-foot high containment wall. Temporary monitoring wells will be installed on the north, east, and west sides of the area, outside the containment walls.

An additional temporary monitoring well will be installed at an upgradient location, to be determined in the field, for measurement of background concentrations of constituents in the groundwater. Approximate locations of the proposed temporary monitoring wells are shown in Figure 4-1.

#### 4.2 Temporary Monitoring Well Installation and Construction

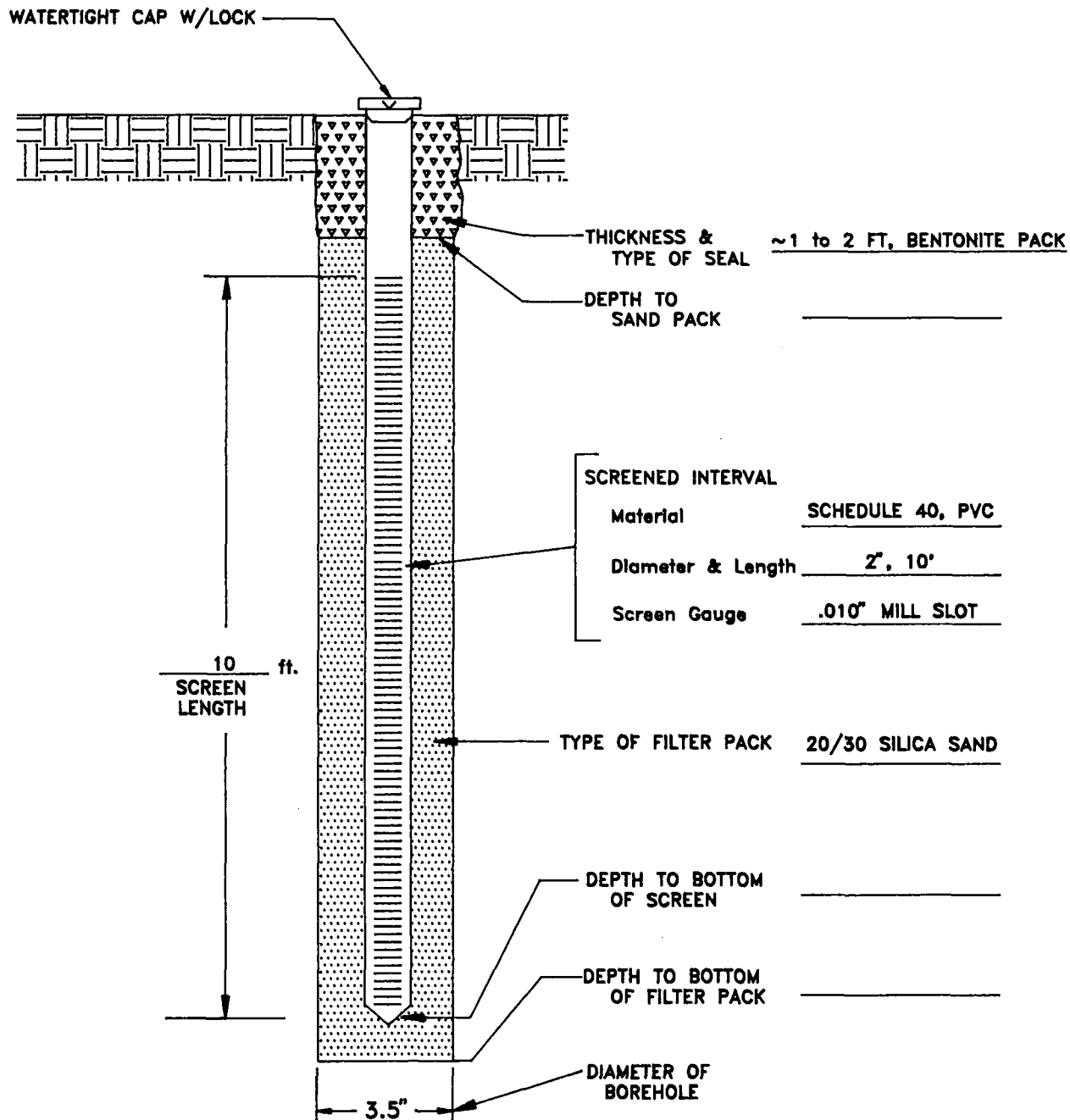
Boreholes for the temporary monitoring wells will be completed using a stainless steel hand auger. Soil samples will be collected vertically every two feet in each borehole to the water table. Soil samples will then be field screened for volatile organic vapors using an organic vapor analyzer equipped with a flame ionization detector (OVA-FID).

Samples will be split and placed into clean sample jars. Each jar will be sealed with aluminum foil and allowed to equilibrate prior to analysis. Split soil samples will be analyzed using an activated carbon filter to screen for non-hazardous methane gas that occurs naturally in the soil. Net volatile organic vapors associated with each soil sample will be determined by subtracting the filtered from the unfiltered OVA-FID calibrated to manufacturers' specifications prior to use. Physical characteristics of soil samples will be classified and documented.

Temporary monitoring wells will be constructed inside the auger borings using clean two-inch diameter, schedule 40, PVC casing with 10 feet of 0.010-inch mill-slotted screen. Screened intervals will be determined based on field determinations of the depth to groundwater to ensure that the groundwater level will be within the screened interval. Filter packs of 20-30 size silica sand will be installed in the annular space around the screened intervals from total depth to approximately 2-3 feet bls. A bentonite seal will be placed above the sand packs to land surface. A typical monitoring well construction diagram is presented in Figure 4-1.



# TYPICAL TEMPORARY MONITORING WELL CONSTRUCTION DIAGRAM



**MGA**

*ENVIRONMENTAL AND GROUNDWATER SERVICES*

DRN. BY: CBH DWG NO. 92J0244

DATE: 4-15-92

PROJECT NAME: MOBRO MARINE, INC.

NUMBER: JE1-470

Missimer  
&  
Associates, Inc.

FIGURE 4-1. SCHEMATIC DIAGRAM OF SHALLOW TEMPORARY MONITORING WELL

All temporary wells to be installed as part of the PCAP will be developed using a peristaltic pump with dedicated teflon tubing or a dedicated disposable teflon bailer. Development will be considered complete when water withdrawn from the well is visibly free of turbidity. Locking caps with locks will be used to secure the wells inside meter boxes installed within a concrete pad constructed at grade level.

Equipment used to install boreholes, construct temporary monitoring wells, and complete well development will be properly decontaminated prior to each use. Decontamination procedures will be performed in accordance with M&A's approved Comprehensive Quality Assurance Plan (QAP) #870468-G on file with FDER in Tallahassee, Florida.

#### 4.3 Soil and Groundwater Sample Location and Justification

To comply with the PCAP requirements for evaluating soil in Areas 7 and 9, one soil sample will be collected from each. The samples will be collected from the location most likely to have been adversely impacted. These soil samples will be submitted for laboratory analyses as described below. One background soil sample will be collected at a suitable location, to be determined in the field. A total of three soil samples will be collected for laboratory analysis. Approximate soil sample locations are shown in Figure 4-1.

The soil in Area 12 will be screened with an OVA-FID in accordance with the procedures outlined in Chapter 17-770 FAC. The extent of excessively contaminated soil, as defined in Chapter 17-770 FAC, will be evaluated vertically and horizontally.

Groundwater flow direction for each area will be determined based on the surveyed groundwater levels. The flow direction will be determined by triangulation of the groundwater elevations in the temporary monitoring wells for each area. Based on groundwater flow direction, one groundwater sample will be collected from the downgradient temporary monitoring well at each area. One groundwater sample will all

be collected from the background temporary monitoring well. A total of four groundwater samples will be collected.

#### 4.4 Soil Boring Installation and Sampling Procedures

The following procedures will be used to collect soil samples for laboratory analysis. Soil samples will be collected as grab samples at approximately 0.5 to 1.0 ft bls. The stainless steel hand auger will be decontaminated prior to use at each boring location. An equipment rinseate will also be analyzed in accordance with M&A's QAP. Each soil sample will be placed in a properly identified laboratory supplied container. After collection, samples will be preserved on ice and forwarded via overnight delivery to a FDER-approved laboratory for analyses using appropriate chain of custody procedures. All soil sampling and decontamination procedures will be performed in accordance with M&A's approved Comprehensive QAP #870468-G.

#### 4.5 Groundwater Sampling Procedures

The following procedures will be used to collect groundwater samples for laboratory analysis. Prior to sampling, at least three well volumes of water will be purged from each well using peristaltic pump with dedicated teflon tubing or a dedicated disposal teflon bailer. After well purging, samples will be collected from the wells and placed in appropriate laboratory-supplied containers. Equipment rinseate blanks will be prepared as necessary. After collection, samples will be preserved on ice and forwarded via overnight delivery to a FDER-approved laboratory for analyses using appropriate chain of custody procedures. Resumes of sampling personnel are presented in M&A's comprehensive QAP. Groundwater sampling protocol will be performed in accordance with M&A's approved Comprehensive QAP #870468-G.

## 5.0 SAMPLE ANALYSES

### 5.1 Laboratory Selection and Criteria

The laboratory selected to perform the analytical work for the Preliminary Contamination Assessment will be a reputable laboratory capable of performing the specified analysis in accordance with standards, methods, and practices exhibited in the FDER's Preliminary Contamination Assessment Action Rules. In addition, the selected laboratory must have a FDER-approved Generic Quality Assurance Project Plan (QAPP) or similar document that will outline sample handling and analytical procedures.

Two laboratories that are being considered for the project are:

- |    |  |    |   |
|----|--|----|---|
| 1. | Analytical Technologies, Inc.<br>11 East Olive Road<br>Pensacola, Florida 32514<br>(904) 474-1001<br>Contact: Ms. Suzanne Michelotti | 2. | Savannah Laboratories, Inc.<br>2846 Industrial Plaza Drive<br>Tallahassee, Florida 32301<br>(904) 878-3994<br>Contact: Mr. Wayne Word |
|----|--|----|---|

### 5.2 Soil Analyses

A total of four soil samples will be collected at the MOBRO Marine facility. Analyses of soil samples will be specific for each of the required areas. The samples from Areas 7 and 9 will be analyzed by EPA Methods 8240, 8270 and the eight RCRA metals. The sample from Area 12 will be analyzed by EPA Methods 8010, 8020, 8270 and lead as specified in DER 17-770.600(8)(b) for the kerosene and mixed-product analytical groups. The background sample will be analyzed by EPA Methods 8240, 8270 and the eight RCRA metals.

### 5.3 Groundwater Analyses

A total of four groundwater samples will be collected from temporary monitoring wells at the MOBRO Marine facility. Analyses of groundwater samples will be specific for each of the required areas. The samples from Areas 7 and 9 will be analyzed by EPA Methods 8240, 8270 and the eight RCRA metals. The sample from Area 12 will be analyzed by EPA Methods 8010, 8020, 8270, and lead as specified in DER 17-770.600(8)(b) for the kerosene and mixed-product analytical groups. The background sample will be analyzed by EPA Methods 8240, 8270 and the eight RCRA metals. Appropriate QA/QC samples will be submitted in accordance with M&A's comprehensive QAP.

## 6.0 PROJECT WORK SCHEDULE

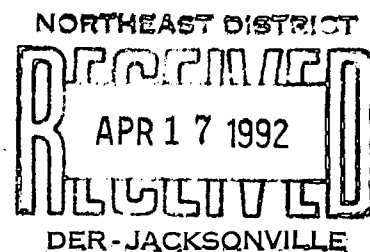
The project schedule as detailed in Figure 6-1 covers a period of approximately six months, beginning with submission of the draft PCAP to the FDER and ending with final approval of the PCAR. The schedule includes allowances for FDER comments to draft documents and time responses to comments.

Field investigation are estimated to take no longer than two weeks. Three (3) weeks have been for receipt of analytical results from the laboratory.

MOBRO MARINE, INC.  
 PRELIMINARY CONTAMINANT ASSESSMENT PLAN  
 PROJECT SCHEDULE

ACTIVITY DESCRIPTION	WEEKS																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					
DRAFT PCAP REVIEW BY FDER	██████████																																
PCAP REVISIONS					██████████																												
FDER FINAL REVIEW & APPROVAL							██████████																										
FIELD INVESTIGATIONS									██████████																								
LAB ANALYSES										██████████																							
DRAFT PCAR & SUBMIT TO FDER												████████████████████																					
PCAR REVIEW BY FDER																			██████████														
PCAR REVISIONS																							██████████										
FDER FINAL APPROVAL																										██████████							

FIGURE 6-1. PCAR SCHEDULE



**HAZARDOUS WASTE CONTINGENCY PLAN**

**PRELIMINARY DRAFT**

**PREPARED FOR:**

**MOBRO Marine, Inc.  
State Road 16  
Green Cove Springs, Florida**

**PREPARED BY:**

**Missimer & Associates, Inc.  
8130 Baymeadows Way West, Suite 104  
Jacksonville, Florida 32256**

**April 17, 1992**

**M&A Project Number JE1-559**

**Control Number 1061**



## TABLE OF CONTENTS

1.1	APPLICABILITY, PURPOSE AND IMPLEMENTATION (40 CFR 265.50,51)	1
1.2	CONTENT OF THE PLAN (40 CFR 265.52) .....	1
1.4	EMERGENCY COORDINATOR (40 CFR 265.55) .....	5
1.5	NOTIFICATION [40 CFR 265.56(a), 265.56(d)(1), 265.56(d)(2)] .....	8
1.6	IDENTIFICATION OF HAZARDOUS MATERIALS AND HAZARD ASSESSMENT [40 CFR 265.56(b)] .....	9
1.7	PLAN IMPLEMENTATION .....	10
1.8	EMERGENCY RESPONSE PROCEDURES (40 CFR 265.56) .....	12
1.9	GENERAL PROCEDURES (40 CFR 265.56) .....	15
1.10	EMERGENCY EQUIPMENT/SYSTEMS [40 CFR 265.52 (e)] .....	23
1.11	COORDINATION AGREEMENTS [(40 CFR 265.52 (c)] .....	24
1.12	EVACUATION PLAN [40 CFR 265.52 (f)] .....	25
1.13	COPIES OF CONTINGENCY PLAN (40 CFR 265.53) .....	25
1.14	AMENDMENTS TO THE CONTINGENCY PLAN (40 CFR 265.54) .....	26

**1.1 APPLICABILITY, PURPOSE AND IMPLEMENTATION (40 CFR 265.50,51)**

The information has been prepared in accordance with the requirements for Contingency Plan and Emergency Procedures as outlined in the Code of Federal Regulations (CFR), Title 40, Part 265 Subpart D. The plan addresses the actions that are to be taken in the event of a fire, explosion of any unplanned sudden or non-sudden release of hazardous substances or constituents to air, soil, or surface water which could threaten human health or the environment.

**1.2 CONTENT OF THE PLAN (40 CFR 265.52)**

The plan and the emergency response procedures (ERPs) provide direction for response to emergencies. These emergencies may vary in severity from minor personnel injuries to situations involving real or potential off-site chemical releases. In the event of an emergency, the procedures outlined in this Plan must be implemented.

**FACILITY DESCRIPTION**

This contingency plan has been developed for:

**MOBRO Marine, Inc.  
State Road 16  
Green Cove Springs, Florida**

MOBRO Marine, Inc. is the "Owner" and "Operator" of the facility. This facility, in Clay County, Florida and is located north of State Road 16 in Green Cove Springs.

This facility functions as both a marine repair and crane maintenance facility. The only hazardous waste constituents produced by on-site operations are spent paint and thinner and their residues and minute quantities of diesel from gas freeing operations.

Insert Figure 1.2

## HAZARDOUS WASTE GENERATION

The MOBRO facility is classified as a small quantity generator. The limit is established in the 1984 amendments to the Resource Conservation and Recovery Act (RCRA). The facility is not a Treatment, Storage or Disposal (TSD) facility and is not subject to TSD regulations. Hazardous wastes are not stored longer than 90 days.

For identifying purposes, Florida Department of Environmental Regulation (FDER), through coordination with the U.S. Environmental Protection Agency (EPA), has assigned EPA I.D. No. FLD081946105. Implementation and modifications of current procedures will produce no more than 55-gallons of hazardous waste per month.

#### 1.4 EMERGENCY COORDINATOR (40 CFR 265.55)

In the event of an emergency, the Emergency Coordinator will be the Yard Superintendent (or, in his absence, a Relief Supervisor acting as Yard Superintendent), who will be notified immediately. An Emergency Coordinator will be onsite at all times. In the event of an emergency, the employee who discovers the emergency will immediately notify the Yard Superintendent.

In the event of an emergency or a reportable release, the Emergency Coordinator will notify the following:

Yard Superintendent, Harry Baxley, Ext. 9670  
3469 County Road 220  
Middleburg, Florida 32068  
Home Telephone Number 282-1338

The person listed above has been authorized by MOBRO to coordinate emergency response measures and to commit the resources necessary to implement the Plan as he is familiar with this Plan, with the operations and activities at the facility, with the location and characteristics of the hazardous substances handled, and with the layout of the facility.

If the emergency involves fire, explosion, and/or personal injury, the Yard Superintendent will immediately dial 911. Upon placing the initial call to 911 the following agencies will automatically be called on all hazardous materials incidents:

- a) Fire Department, Emergency Medical Services
- b) Police/Sheriff's Department
- c) Bio-Environmental Services Division
- d) U.S. Coast Guard

Additional support agencies will be notified, as necessary, by the initial responding agency. The Green Cove Springs Fire Department has the authority to assume command of any hazardous material incident. A communication reference list is provided in Table 1.2, however, the initial call for assistance need only be to 911. Notification to appropriate environmental agencies may be required; see Section 1.4.

TABLE 1.2: EMERGENCY COMMUNICATIONS LIST

EMERGENCY	ORGANIZATION/AGENCY	TELEPHONE NUMBER
INJURY	EMERGENCY MEDICAL SERVICES HUMAN HOSPITAL LIFE FLIGHT (JAX) POISON CONTROL (JAX)	911 276-8580 1-800-396-LIFE 387-7500
FIRE/EXPLOSION	GREEN COVE SPRINGS FIRE DEPT.	911 284-9073
OBTAIN ADDITIONAL FOAM, DRY CHEMICAL OTHER EQUIPMENT	JAX INTL. AIRPORT FIRE DEPT. U.S. NAVY-SEA BASE COMMAND ASW/LANT DUTY OFFICER	757-2219/757-2251 772-2746 (DAY) 772-2338 (EVE)
EXPLOSIVE DISPOSAL	FLORIDA AIR NATIONAL GUARD	757-1360
HAZARDOUS MATERIAL SPILL OR RELEASE	EPA NATIONAL RESPONSE CTR. FL DEPT. ENVIRON. REGULATION CHEMTREC LOCAL EMER. PLAN COMM (LEPC) STATE EMER. RESP. COMM (SERC) STATE WARNING POINT NUMBER	1-800-424-8802 798-4200 1-800-424-9300 730-6260 1-800-635-7179 1-488-1320
IF SPILL REACHES NAVIGABLE WATER, STREAMS	U.S. COAST GUARD U.S. COAST GUARD FLORIDA MARINE PATROL	791-2648 (DAY) 246-7341 (EVE) 241-7107
CIVIL DISTURBANCE	CLAY COUNTY SHERIFF'S OFFICE	284-7575

1.5 NOTIFICATION [40 CFR 265.56(a), 265.56(d)(1), 265.56(d)(2)]

If the Emergency Coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he or she will report findings as follows:

1. If the initial assessment indicates that evacuation of local areas may be advisable, the Emergency Coordinator will immediately notify appropriate local authorities AT 911.
2. The Emergency Coordinator will immediately notify either the government official designated as the on-scene coordinator for that geographical area or the National Response Center [using its 24-hour toll free number 1-800/424-8802)]. The report will include:
  - a. Emergency Coordinator name and telephone number;
  - b. Name and address of facility;
  - c. Time and type of incident (e.g., release, fire);
  - d. Names and quantities of material(s) involved, to the extent known;
  - e. The extent of injuries, if any; and
  - f. The possible hazards to human health or the environment outside the facility.

Any emergency event (e.g., fire, explosion, spill, etc.) that requires implementation of the Contingency Plan and involves reportable quantities of hazardous materials shall be reported in writing to the EPA Regional Administrator by the Emergency Coordinator within 15 days after the incident. A copy of this form and the mailing address of the Regional Administrator is found in Appendix A. A telephone report to the National Response Center (NARC) is also required at the time of the incident. A copy of this form, found in Appendix A, must be completed and retained at MoBro when the NARC is notified. Appendix B contains the Federal list of reportable quantities (RQ) for hazardous substances.



1.6 IDENTIFICATION OF HAZARDOUS MATERIALS AND HAZARD ASSESSMENT [40 CFR 265.56(b)]

The Emergency Coordinator will be responsible for the assessment of possible hazards to human health or the environment. This assessment will be based on the nature of the emergency (e.g., spill, fire), the extent of the release, and the types and locations of the materials involved. The Emergency Coordinator will determine the effects of any toxic, irritating, or asphyxiating gases released or the effects of any surface runoff of water and chemicals used to control fire.

In order to provide adequate initial response to a spill, the collection and distribution of key information is essential. The following information must be obtained from the individual who first reports the incident in order to begin the assessment process and formulate the necessary response.

Initial Hazard/Incident Assessment

1. Obtain the reporter's name and telephone number  
If the spill is of significant magnitude, maintain an open line to the site.
2. Identify the type and amount of the spill material  
If the spilled material has not been identified, solicit data from shipping labels, manifests, or product container labels. Alternatively, request information on container type, container description, size, etc. Estimate the volume of material released.
3. Determine the exact location and extent of the spill  
Identify the products if the spill extends to a water body or if the spill has the potential for escaping the facility. Note whether the spill has been contained or confined to an impermeable surface.

4. Establish the nature of the problem and the time of the spill event  
Supplemental notifications may be required if safety or security conditions indicate the presence of or potential for injuries, fire, etc.
  
5. Determine emergency response and cleanup procedures  
Provide for safety and containment. For first reference, see the Department of Transportation (DOT) Hazardous Materials Emergency Response Guidebook or Spill Control Plan. If necessary, contact ChemTrec.
  
6. Assess the need for assistance  
Coordinate requests for outside assistance with management and plant supervisory personnel.

#### 1.7 PLAN IMPLEMENTATION

The decision to activate the Contingency Plan has been assigned to the Emergency Coordinator. That decision shall be based upon an "imminent" or "actual" threat to the human health or environment. Imminent shall mean "likely to happen" in the Coordinator's judgment. Whenever there is an imminent or actual emergency situation, the Emergency Coordinator will immediately respond according to the Contingency Plan.

The following guidance is intended to facilitate the Emergency Coordinator's decision to initiate the Contingency Plan and Emergency Procedures. The Plan shall be implemented on occurrence of any of the following events:

### Fire and/or Explosion:

- Fire cannot be extinguished with a single hand-held fire extinguisher.
- Release of toxic fumes. Potential to ignite materials at other locations on-site or could cause heat-induced explosions.
- Use of water or water and chemical fire suppressant could contaminate run-off.
- Imminent danger exists that an explosion could occur, causing a safety hazard because of flying fragments or shock waves.
- Imminent danger exists that an explosion could ignite other hazardous wastes at the facility.
- Imminent danger exists that an explosion could result in a release of toxic material(s).
- An explosion has occurred.

### Bomb Threat

- Bomb threat called in or delivered to facility.
- Bomb threat called in or delivered to local fire or sheriff's department implicating the facility.

### Spill or Materials Release:

- Release of flammable or explosive liquids or vapors.
- Release of toxic liquids or fumes.
- Potential for ground water contamination.
- Potential for soil contamination and/or ground or surface water pollution.

## Floods

- Potential for surface water contamination.
- Potential for ground water contamination.

### **1.8 EMERGENCY RESPONSE PROCEDURES (40 CFR 265.56)**

The Emergency Coordinator will take all reasonable measures to ensure that the emergency, of whatever nature, does not spread and become more acute and to guard against the development of unforeseen dangerous conditions. He/she will ensure that the system is completely shut down and will help in coordinating any fire-fighting operations that are necessary. In the event of a spill, he/she will immediately shut down any equipment and take steps to contain the material and repair the leak or other source of spill.

If a fire caused by ignition or explosion is relatively small, it may be contained, controlled, or extinguished by the use of portable fire extinguisher, directing the extinguisher stream to the base of the flames. The City Fire Department must be called, (911), to respond to any plant fires that cannot be extinguished within the first few minutes. It is not the intent of plant personnel to fight major fires, but only to fight fires in the incipient stage and then to assist the city in any way possible.

## Bomb Threat

The Yard Superintendent shall implement the following measures to protect plant personnel and equipment:

- Sound the alarm
- Institute evacuation procedure as needed
- Notify local fire and sheriff's departments at 911

The Emergency Coordinator will determine the magnitude of the threat based on the following information:

- Imminent hazard to employees;
- Potential to cause spill or release of hazardous materials to the environment;
- Potential for spread to offsite areas.

#### Spill or Materials Release

The Yard Superintendent shall implement the following measures to halt and/or contain the release:

- Controlling the leaking source;
- Applying oil absorbent sheets and/or pigs on the spill; and
- Blocking off nearby storm drains to prevent discharge to surface water.

The Emergency Coordinator will determine the magnitude of the incident based on the following information:

- Nature and characteristic of spill and/or release;
- Location and effective extent of incident;
- Quantity spilled and/or released;
- Direction in which the spill or release is migrating;
- Extent of personnel injuries; and
- Potential and/or intensity of the event.

Some of the hazardous substances are solid. A solid material, if spilled, may be returned to the same type of container in which it was originally contained, or in an emergency, any open-top steel drum.

Hazardous liquids, if spilled, may be returned to their original container or a similar container, unless contamination is a problem. Any contaminated released liquid material will be pumped or absorbed with granulated absorbent or booms. In general, any hazardous liquid may be recovered in a stainless steel tote tank, or open-top steel drum pending further disposition by supervisors trained in hazardous waste disposal.

WASTE INCOMPATIBILITY [40 CFR 265.56 (h)(1)]

No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.

POST EMERGENCY EQUIPMENT MAINTENANCE [40 CFR 265.56 (h)(2)]

Any equipment used in the control of a release will be cleaned and all contamination removed from the equipment before operations are resumed. Any contaminated materials which cannot readily be decontaminated will be disposed with the material from the release. The Emergency Coordinator will notify the appropriate state and local authorities that the cleanup is complete prior to the restart of operations.

CONTAINER SPILLS AND LEAKAGE (40 CFR 265.171)

Any materials released from the accumulation or storage of drums will be handled as described in Section 1.9. The material remaining in the container will be transferred to a structurally sound drum or to the emergency standby hazardous waste drum reserved for that purpose. The leaking container will be disposed in an appropriate manner.

## FLOOD RESPONSE

Should rising water become a problem, the Shift Superintendent shall implement the following measures:

- Instituting water diversion measures, i.e., trenching, berms, etc.
- Movement of equipment onto wooden pallets or away from floodwaters as appropriate.
- Shutting down exposed electrical equipment.
- Movement of chemicals and hazardous materials away from floodwaters.

### 1.9 GENERAL PROCEDURES (40 CFR 265.56)

In the event of an emergency, the Emergency Coordinator will assess the situation and determine the facility's emergency response capabilities. The Coordinator will deploy the necessary in-plant personnel and contact the outside agencies as required. Refer to Table 1.2 for the Emergency Communications List.

In case of fire, supervisors of unaffected areas will stay with their personnel and be ready to evacuate and account for the persons under their supervision.

The Emergency Coordinator has the responsibility for determining when the fire has been extinguished or the emergency condition is declared under control and the safety of personnel is no longer jeopardized. He will consult with the local fire department responding team to determine that the emergency has passed before declaring the situation under control. All used emergency equipment must be cleaned and fit for use prior to resumption of plant operations in the affected areas. The Emergency Coordinator is responsible for coordinating all cleanup operations and restoring the affected areas.

## Fire and/or Explosion

The paint flammables storage on the northern portion of the site (near the river) can be easily accessed by fire fighting and other emergency vehicles and equipment. Roads must remain clear at all times. Access to the paint locker in the crane shop is more limited. Adequate storage and aisle space must be maintained to allow unobstructed movement of personnel and fire protection equipment. During an emergency, the Green Cove Springs Fire Department will be called to respond to any plant fire that cannot be extinguished within the first few minutes. It is not the intent of the facility personnel to fight major fires, but only fires in the initial stage and then to assist the city fire department.

During power failures or severe weather, fire response personnel will be assigned to protect personnel and property. In the event of a fire, the response team will focus on preventing the fire from spreading.



The following actions are required in affected areas:

- Immediately discontinue all hazardous work and cease pumping any flammable liquids in the area;
- De-energize all affected equipment;
- Contact the Emergency Coordinator;
- Clear the area of all non-essential personnel. These persons are to report to their designated rally points (Appendix E) for accountability.
- Do not move an injured person until an emergency medical team reaches the scene unless there is a significant risk of further injury related to the emergency; and
- Administer first aid while waiting for the emergency medical team. A current list of personnel trained in first aid, CPR, or both is posted in the main office.

Because fire is always a potential hazard in spills of flammable materials, possible sources of ignition must be eliminated. During any spill event, vehicular traffic and hazardous work in the area will cease until the spill is contained and a safe environment is restored.

If a highly flammable material is released (e.g., natural gas), the Clay County Sheriff's Department will be notified. The Sheriff's Department will then notify all persons within at least a quarter-mile radius of the release. All ignition sources within the release area will be eliminated. Electrical devices will be turned off. The use of motor vehicles in the vicinity of the release will be restricted or eliminated to avoid ignition of the vapor, and resulting flashback which could cause an explosion or fire of wide dimensions at the source. If the chances of an impending explosion are significant, the entire area within a 2,000-ft radius of the source will be evacuated.

If a fire is involved and is concentrated at the source, people will be evacuated up to a half-mile downwind.

Area or plant evacuation will be necessary in the event of a major fire or explosion. The telephone activated public address (P.A.) system will be used if it is functioning. If not, the response team will be responsible for coordinating communication via 2-way radios. All personnel have been trained in evacuation procedures and means of exit from their respective work areas (Appendix F). The procedures are routinely reviewed during fire drills which are conducted a minimum of two times a year.

Until evacuation is signaled, by fire alarm, P.A. system or voice, personnel who are not in an affected area will stay in their respective work areas. Contract personnel and visitors will immediately be cleared from the area at the first sign of an emergency or spill condition.

#### Bomb Threat

The procedures to be followed upon receipt of a bomb threat are similar to those followed for Fire and/or Explosion. Aisles and roadways must be kept clear at all times to facilitate movement by fire fighting and other emergency vehicles and equipment. Adequate storage and aisle space must be maintained at all times to allow unobstructed movement of personnel and fire protection equipment.

The following actions are required:

- Immediately discontinue all hazardous work and cease pumping any flammable liquids;
- De-energize all equipment;
- Contact the Emergency Coordinator;
- Clear the area of all non-essential personnel. These persons are to report to their designated rally points (Appendix E) for accountability.

Plant evacuation will be necessary in case of a bomb threat. The telephone activated public address (P.A.) system will be used if it is functioning. If not, the response Team will be responsible for coordinating communication via 2-way radios. All personnel have been trained in evacuation procedures and means of exit from their respective work areas (Appendix F). These procedures are routinely reviewed during fire drills which are conducted a minimum of two times a year.

### Spill or Materials Release

Anyone who discovers a chemical spill will immediately report it to the Shift Superintendent. Immediately following spill or leak detection, facility personnel will attempt to stop the leak or spill in progress. In the event toxic material is discovered migrating offsite, the Emergency Coordinator will notify, as necessary, the appropriate agencies listed in Table 1.2.

If a chemical spill is not contained within a dike or sump area, an area of isolation will be established around the spill. The size of the area will generally depend on the size of the spill and the materials involved. If the spill is large, an initial isolation of at least 100 feet in all directions is recommended to allow cleanup, repair and to prevent exposure. When any spill occurs, only those persons involved in overseeing or performing emergency operations will be allowed within the designated hazard area. If possible the area will be roped or otherwise blocked off.

If the control and cleanup of a spill, release, or fire is within the capabilities of company personnel and local response teams, the Florida Department of Environmental Regulations or the National Response Center will not be notified unless the quantity of hazardous material spilled is equal to or greater than the reportable quantity specified under 40 CFR Part 117.

If the Emergency Coordinator determines that the company is unable to handle the emergency, then local, state, and Federal Authorities will be notified of the situation.

Evacuation of potentially affected plant areas will begin as soon as possible.

For all large spills or serious leaks the following guidelines will be followed as closely as possible:

1. If a leak develops or a spill occurs the person discovering the discharge will leave the immediate area and contact the Emergency Coordinator. The Emergency Coordinator will obtain the following information:
  - a. Person(s) injured and seriousness of injury.
  - b. Location of the spill or leak, material involved, and source (tank, pipeline, etc.).
  - c. The approximate amount spilled, estimate of the liquid discharge rate, and the direction the liquid is moving.
  - d. Whether or not a fire is involved.
  
2. Next, the Emergency Coordinator will:
  - a. Evacuate the hazardous area as needed. For small spills or leaks, isolate at least 50 feet in all directions. For large spills, initially isolate at least 100 feet in all directions.
  - b. Obtain medical attention for any injured persons. It may be helpful to instruct the caller in the initial first aid procedures. Then call the hospital.
  - c. Call the fire department if a fire is involved that cannot be extinguished by plant personnel.
  - d. Dispatch emergency personnel to the site to take the appropriate action.
  - e. Contact the proper authorities (Table 1.2) if the spill or release is large. If a large spill occurs, the initial evacuation area downwind should be 1000 feet long by 500 feet wide.

3. Cleanup personnel will:
  - a. Make sure all unnecessary persons are removed from the hazard area.
  - b. Put on protective clothing and equipment.
  - c. Remove all ignition sources, and use spark and explosion proof equipment and clothing in containment and cleanup.
  - d. If possible try to stop the leak. Special materials will be kept on hand for temporary repairs.
  - e. Remove all surrounding material that could be especially reactive with materials in the waste. Determine the major components in the waste at the time of the spill.
  - f. Use absorbent pads, booms, earth, sand, and other inert materials to contain, divert, and clean up a spill if it has not been contained by a dike or sump. Most spills contained within the dike or sump can be pumped back into the appropriate storage tank or drum.
  - g. In the event an oil spill occurs, the contents of the ditch will be pumped to the industrial waste water treatment facility for retention and separation.
  - h. Place all containment and cleanup materials in drums for proper disposal. Some items, such as absorbent rags or booms may have to be cut up.
  - i. Place all recovered liquid wastes and contaminated soil in drums for removal to an approved disposal site.

The Emergency Coordinator will determine whether or not the spill has exceeded a "reportable quantity", as established by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (refer to Appendix B). If the spill exceeds a reportable quantity, the Emergency Coordinator should contact the National Response center at 800/424-8802. Also, the information in Appendix A, Page A-1, must be reported by telephone at this time. This form should be signed by the Emergency Coordinator with the original retained indefinitely in a secure file and a copy submitted to the Shift Supervisor.

The Emergency Coordinator will conduct an investigation to determine the cause of the spill and corrective action necessary to prevent future incidents. Investigative findings and proposed action will be documented in a report which shall be retained indefinitely by the Plant Manager.

#### Prevention of Recurrence or Spread of Fires, Explosions or Releases

Actions to prevent the recurrence or spread of fires, explosions, or releases, include stopping processes and operations, collecting and containing released waste, and recovering or isolating containers.

#### Storage and Treatment of Released Material

Immediately after an emergency, the Emergency Coordinator will make arrangements for treatment, storage or disposal of recovered waste, contaminated soil, surface water or any other contaminated material.

#### Post-Emergency Equipment Maintenance

After an emergency event, all emergency equipment will be cleaned so that it is fit for use or it will be replaced. Before operations are resumed, an inspection of all safety equipment will be conducted. The Regional Administrator, state, and local authorities will be notified that post-emergency equipment maintenance has been performed and operations will be resumed.

## 1.9 EMERGENCY EQUIPMENT/SYSTEMS [40 CFR 265.52 (e)]

Emergency equipment consists of hand held fire extinguishers, a stationary fire pump located on the river near the 2-story office, spill control equipment decontamination, safety, and a plant wide communication system plus alarms. A brief outline of the location and capabilities of each of these follows.

### Fire Extinguishing System

Locations of plant fire extinguishers are shown in Figure 1-3.

### Spill Control

Equipment for use in containing and cleaning up spilled hazardous wastes is stocked and maintained in area D as shown in Figure 1-3. This consists of granulated spill absorbent, portable pumps, absorbent pails, and absorbent booms. In addition, empty DOT-approved 55-gallon hazardous waste drums are available in the plant with dedicated shovels and brooms.

## 1.11 COORDINATION AGREEMENTS [(40 CFR 265.52 (c))]

MOBRO Marine has made the following arrangements to facilitate the response to emergency situations:

Copies of the Contingency Plan will be given to the local police, fire department, the hospitals, and the state and local Emergency Response Teams. These agencies will be asked to review and comment on the Plan and to detail the actions they will take in an emergency situation.

- Copies of the letters accompanying the Contingency Plan and inviting the above agencies to visit the facility are provided in Appendix G.
- The purpose of these visits was to familiarize police, fire departments, and emergency response teams with the layout of the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes. Agreements are in effect with others to provide support as needed.
- A copy of Material Safety Data Sheets (MSDSs) for all of the chemical products used by Mobro will be sent to the Company Doctor:
- Copies of the MSDSs will be sent to the local fire department as well as the Florida Department of Environmental Regulation.



### 1.12 EVACUATION PLAN [40 CFR 265.52 (f)]

All emergencies require prompt and deliberate action. In the event of any major emergency it will be necessary to follow an established set of procedures. Evacuation of the plant in the event of a large fire or release of hazardous materials shall be determined by:

Plant Manager  
Emergency Coordinator  
Operations Manager  
Green Cove Springs Fire Department

Notice to evacuate will be given using telephone and building intercom systems.

Persons advised to evacuate should proceed immediately to designated assembly points. Persons should remain at the assembly points until accounted for and released to go home or notified that it is safe to return to work.

With very few exceptions, the only immediate major hazard, that would require any degree of retreat, would be a fire. As buildings are open and storage tanks are located in open areas, there are no locations where personnel would potentially be trapped. What is required is for personnel to retreat a safe distance from the point of fire and safely make their way to their designated rally point.

A typical evacuation route and the rally points for the different departments are designated on the site plan in Appendix E.

### 1.13 COPIES OF CONTINGENCY PLAN (40 CFR 265.53)

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

- (a) Maintained at the facility; and
- (b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

1.14 AMENDMENTS TO THE CONTINGENCY PLAN (40 CFR 265.54)

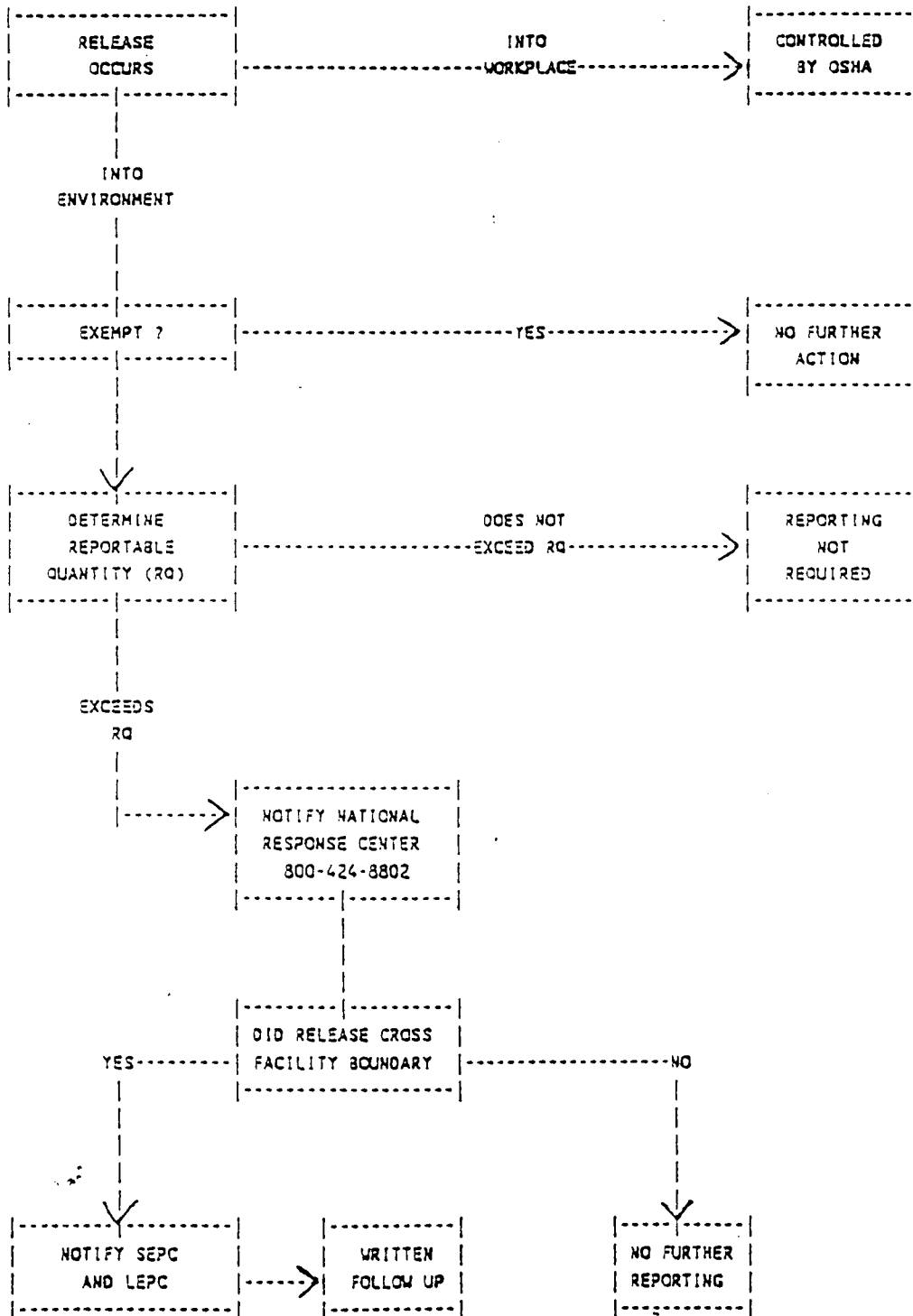
The Contingency Plan will be reviewed and immediately amended, as necessary whenever:

- The plan fails in an emergency.
- The facility significantly modifies its design, construction, operations, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents, or changes in the response necessary in an emergency.
- The list of Emergency Coordinators changes.
- The list of emergency equipment changes.
- The list of hazardous materials changes.

APPENDIX A  
EMERGENCY REPORTING FORMS

MOBRO Marine, INC.

CERCLA/SARA REPORTING REQUIREMENTS



REPORT OF HAZARDOUS SUBSTANCE RELEASE  
(REF: "SUPERFUND ACT" OF 1980)

1. Telephoned report to NRC made by:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

2. Name(s) and estimated amount(s) of hazardous substance(s) ("Superfund definition") released: \_\_\_\_\_

3. Geographical location of release: \_\_\_\_\_

4. Listing used to classify material released as hazardous (e.g., CWA Section 311, RCRA Section 3001, etc.): \_\_\_\_\_

5. The reportable quantity(ies) for substance(s) involved: \_\_\_\_\_

6. Release was to (air, water, ground): \_\_\_\_\_

7. Date, time, and duration of release: \_\_\_\_\_

8. Cause of release: \_\_\_\_\_

9. Remedial actions taken to control, and/or mitigate the effects of, the release: \_\_\_\_\_

10. Name and title of person at NRC to whom report was made: \_\_\_\_\_

11. Other regulatory groups contacted (if any):

\_\_\_\_\_ Date & Time: \_\_\_\_\_

\_\_\_\_\_ Date & Time: \_\_\_\_\_

\_\_\_\_\_ Date & Time: \_\_\_\_\_

Approved: \_\_\_\_\_

EMERGENCY COORDINATOR

REPORTING FORM FOR EMERGENCY EVENTS

---

Name, Address and Phone Number of Owner Operator

---

Name, Address and Phone Number of Facility

---

Date, Time and Type of Incident (a.g., Fire Explosion, etc.)

---

Name and Quantity of Material(s) Involved

---

Extent of Injuries (if any)

---

Assessment of Actual or Potential Hazards to Human Health or the Environment  
(If applicable)

---

Estimated Quantity and Disposition of Material Recovered From the Incident

---

Sent to: (Name)

Regional Administrator  
U.S. EPA, Region IV  
345 Courtland Street, N.E.  
Atlanta GA 30365

APPENDIX B  
TABLE 302.4

LIST OF HAZARDOUS SUBSTANCES

AND

REPORTABLE QUANTITIES

ENVIRONMENTAL PROTECTION AGENCY  
40 CFR Part 302.4

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code r	RCRA Waste Number	Category	Pounds (Kg)
The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and a total of ten percent or more (by volume) of one or:							
(a) Xylene (mixed).....	1330207		1000	1,4	U229	C	1000 (454)
(b) Acetone.....	67541		1*	4	U002	D	5000 (2270)
(c) Ethyl acetate.....	141786		1*	4	U112	D	5000 (2270)
(d) Ethylbenzene.....	100414		1000	1,2		C	1000 (454)
(e) Ethyl ether.....	60297		1*	4	U117	B	100 (45.4)
(f) Methyl isobutyl ketone.....	108101		1*	4	U161	D	5000 (2270)
(g) n-Butyl alcohol.....	71383		1*	4	U031	D	5000 (2270)
(h) Cyclohexanone.....	108943		1*	4	U057	O	5000 (2270)
(i) Methanol.....	67561		1*	4	U154	D	5000 (2270)
F004.....			1*	4	F004	C	1000 (454)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:							
(a) Cresols/Cresylic acid.....	1319773		1000	1,4	U052	C	1000 (454)
(b) Nitrobenzene.....	98953		1000	1,2,4	U169	C	1000 (454)
F005.....			1*	4	F005	B	100 (45.4)
The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents:							
(a) Toluene.....	108883		1000	1,2,4	U220	C	1000 (454)
(b) Methyl ethyl ketone.....	78933		1*	4	U159	D	5000 (2270)
(c) Carbon disulfide.....	75150		5000	1,4	P022	B	100 (45.4)
(d) Isobutanol.....	78831		1*	4	U140	D	5000 (2270)
(e) Pyridine.....	110861		1*	4	U196	C	1000 (454)
F006.....			1*	4	F006	A	10 (4.54)
Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfonic acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbon steel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum.							
F007.....			1*	4	F007	A	10 (4.54)
Spent cyanide plating bath solutions from electroplating operations.							
F008.....			1*	4	F008	A	10 (4.54)
Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.							
F009.....			1*	4	F009	A	10 (4.54)
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.							
F010.....			1*	4	F010	A	10 (4.54)
Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.							
F011.....			1*	4	F011	A	10 (4.54)
Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).							
F012.....			1*	4	F012	A	10 (4.54)



TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code r	RCRA Waste Number	Category	Pounds (Kg)
1,1,1-Trichloroethane	71558	Ethane, 1,1,1-trichloro-	1*	2,4	U228	C	1000 (454)
		Methyl chloroform					
1,1,2-Trichloroethane	79005	Ethane, 1,1,2-trichloro-	1*	2,4	U227	B	100 (45.4)
Trichloroethene	79018	Ethane, trichloro-	1000	1,2,4	U228	B	100 (45.4)
		Trichloroethylene					
Trichloroethylene	79018	Ethane, trichloro-	1000	1,2,4	U228	B	100 (45.4)
		Trichloroethene					
Trichloromethanesulfonyl chloride	594423	Methanesulfonyl chloride, trichloro-	1*	4	P118	B	100 (45.4)
Trichloromonofluoromethane	75894	Methane, trichlorofluoro-	1*	4	U121	D	5000 (2270)
Trichloroanisol	25187822		10	1		A	10 (4.54)
2,3,4-Trichlorophenol	15950860						
2,3,5-Trichlorophenol	933788						
2,3,6-Trichlorophenol	933755						
2,4,5-Trichlorophenol	95954	Phenol, 2,4,5-trichloro-	10*	1,4	U230	A	10 (4.54)
2,4,6-Trichlorophenol	88062	Phenol, 2,4,6-trichloro-	10*	1,2,4	U231	A	10 (4.54)
2,4,5-Trichlorophenol	609198						
2,4,5-Trichlorophenol	95954	Phenol, 2,4,5-trichloro-	10*	1,4	U230	A	10 (4.54)
2,4,6-Trichlorophenol	88062	Phenol, 2,4,6-trichloro-	10	1,2,4	U231	A	10 (4.54)
Triethanolamine dodecylbenzenesulfonate	27323417		1000	1		C	1000 (454)
Triethylamine	121448		5000	1		D	5000 (2270)
Trimethylamine	75503		1000	1		B	100 (45.4)
1,3,5-Trinitrobenzene	99354	Benzene, 1,3,5-trinitro-	1*	4	U234	A	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	123637	Paraldehyde	1*	4	U192	C	1000 (454)
Tri(2,3-dibromopropyl) phosphite	128727	1-Propanol, 2,3-dibromo-, phosphite ((2:1))	1*	4	U235	A	10 (4.54)
Trypan blue	72571	2,7-Naphthalenedisulfonic acid, 3,3'-3,3'-di-methyl-(1,1'-bi(aryloxy))-4,4'-diyl-bis(azo)bis(5-amino-4-hydroxy)-tetrasodium salt	1*	4	U238	A	10 (4.54)
Unlisted Hazardous Wastes Characteristic of Corrosivity	N.A.		1*	4	C002	B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of EP Toxicity	N.A.		1*	4			
Arsenic C004	N.A.		1*	4	C004	X	1 (0.454)
Barium C005	N.A.		1*	4	C005	C	1000 (454)
Cadmium C006	N.A.		1*	4	C006	A	10 (4.54)
Chromium C007	N.A.		1*	4	C007	A	10 (4.54)
Lead C008	N.A.		1*	4	C008		
Mercury C009	N.A.		1*	4	C009	X	1 (0.454)
Selenium C010	N.A.		1*	4	C010	A	10 (4.54)
Silver C011	N.A.		1*	4	C011	X	1 (0.454)
Endrin C012	N.A.		1	1,4	C012	X	1 (0.454)
Lindane C013	N.A.		1	1,4	C013	X	1 (0.454)
Methoxychlor C014	N.A.		1	1,4	C014	X	1 (0.454)
Toxaphene C015	N.A.		1	1,4	C015	X	1 (0.454)
2,4-D C016	N.A.		100	1,4	C016	B	100 (45.4)
2,4,5-TP C017	N.A.		100	1,4	C017	B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Ignitability	N.A.		1*	4	C001	B	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity	N.A.		1*	4	C003	B	100 (45.4)
Uracil mustard	68751	2,4-(1H,3H)-Pyrimidinone, 5-(bis(2-chloroethyl)amino)-	1*	4	U237	A	10 (4.54)
Uranyl acetate	541093		5000	1		B	100 (45.4)
Uranyl nitrate	10102064		5000	1		B	100 (45.4)
	38478769						
Urea, N-ethyl-N-nitroso-	759739	N-Nitroso-N-ethylurea	1*	4	U178	X	1 (0.454)
Urea, N-methyl-N-nitroso-	684935	N-Nitroso-N-methylurea	1*	4	U177	X	1 (0.454)
Vanadic acid, ammonium salt	7803558	Ammonium vanadate	1*	4	P119	C	1000 (454)
Vanadium oxide V205	1314621	Vanadium pentoxide	1000	1,4	P120	C	1000 (454)
Vanadium pentoxide	1314621	Vanadium oxide V205	1000	1,4	P120	C	1000 (454)
Vanadyl sulfate	27774138		1000	1		C	1000 (454)
Vinyl chloride	75014	Ethene, chloro-	1*	2,3,4	U043	X	1 (0.454)
Vinyl acetate	108054	Vinyl acetate monomer	1000	1		D	5000 (2270)
Vinyl acetate monomer	108054	Vinyl acetate	1000	1		D	5000 (2270)
Vinylamine, N-methyl-N-nitroso-	4549400	N-Nitrosomethylvinylamine	1*	4	P084	A	10 (4.54)
Vinylidene chloride	75354	Ethene, 1,1-dichloro-	5000	1,2,4	U078	B	100 (45.4)
		1,1-Dichloroethylene					
Warfarin, & salts, when present at concentrations greater than 0.3%	81812	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%	1*	4	P001	B	100 (45.4)
Xylene (mixed)	1330207	Benzene, dimethyl	1000	1,4	U239	C	1000 (454)
m-Benzene, dimethyl	108383	m-Xylene					
o-Benzene, dimethyl	95478	o-Xylene					
p-Benzene, dimethyl	106423	p-Xylene					

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code r	RCRA Waste Number	Category	Pounds (Kg)
Saccharin and salts	81072	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	1*	4	U202	B	100 (45.4)
Salrole	94597	1,3-Benzodioxole, 5-(2-propenyl)-	1*	4	U203	B	100 (45.4)
Selenious acid	7783008		1*	4	U204	A	10 (4.54)
Selenious acid, dithallium (1+) salt	12039520	Thallium selenite	1*	4	P114	C	1000 (454)
Selenium trisulfide	7782492		1*	2		B	100 (45.4)
SELENIUM AND COMPOUNDS	N.A.		1*	2		B	100 (45.4)
Selenium dioxide	7446084	Selenium oxide	1000	1,4	U204	A	10 (4.54)
Selenium dioxide	7446084	Selenium dioxide	1000	1,4	U204	A	10 (4.54)
Selenium sulfide	7488564	Selenium sulfide SeS2	1*	4	U205	A	10 (4.54)
Selenium sulfide SeS2	7488564	Selenium sulfide	1*	4	U205	A	10 (4.54)
Selenourea	830104		1*	4	P103	C	1000 (454)
L-Serine, diazacetate (ester)	115028	Azaserine	1*	4	U015	X	1 (0.454)
Silver trisulfide	7440224		1*	2		C	1000 (454)
SILVER AND COMPOUNDS	N.A.		1*	2		C	1000 (454)
Silver cyanide	506849	Silver cyanide Ag (CN)	1*	4	P104	X*	1 (0.454)
Silver cyanide Ag (CN)	506849	Silver cyanide	1*	4	P104	X	1 (0.454)
Silver nitrate	7781888		1	1		X	1 (0.454)
Silver (2,4,5-TP)	93721	Propionic acid, 2-(2,4,5-trichlorophenoxy)-2,4,5-TP acid	100	1,4	U233	B	100 (45.4)
Sodium	7440225		1000	1		A	10 (4.54)
Sodium arsenate	7631892		1000	1		X	1 (0.454)
Sodium arsenite	7784485		1000	1		X	1 (0.454)
Sodium azide	26628228		1*	4	P105	C	1000 (454)
Sodium bichromate	10588019		1000	1		A	10 (4.54)
Sodium difluoride	1333831		5200	1		B	100 (45.4)
Sodium disulfite	7631905		5000	1		D	5000 (2270)
Sodium chromate	7775113		1000	1		A	10 (4.54)
Sodium cyanide	143339	Sodium cyanide Na (CN)	10	1,4	P106	A	10 (4.54)
Sodium cyanide Na (CN)	143339	Sodium cyanide	10	1,4	P106	A	10 (4.54)
Sodium dodecylbenzenesulfonate	25155300		1000	1		C	1000 (454)
Sodium fluoride	7681494		5000	1		C	1000 (454)
Sodium hydrosulfide	16721805		5000	1		D	5000 (2270)
Sodium hydroxide	1310732		1000	1		C	1000 (454)
Sodium hypochlorite	7681529		100	1		B	100 (45.4)
	10622705		1000	1		C	1000 (454)
Sodium methylate	124414		1000	1		C	1000 (454)
Sodium nitrate	7632000		100	1		B	100 (45.4)
Sodium phosphate, dibasic	7558794		5000	1		C	5000 (2270)
	10039324		10140656				
	10140656		10140656				
Sodium phosphate, tribasic	7601549		5000	1		C	5000 (2270)
	7758294		7758294				
	7785844		7785844				
	10101890		10101890				
	10124568		10124568				
	10261894		10261894				
Sodium selenite	10102188		1000	1		B	100 (45.4)
	7782823		7782823				
Streptozocin	18883664	D-Glucose, 2-deoxy-2-(((methylmimosamine)-carbonyl)amino)- Glucopyranose, 2-deoxy-2-(3-methyl-3-mimosamine)-	1*	4	U225	X	1 (0.454)
Strontium chromate	7789082		1000	1		A	10 (4.54)
Strychnidin-10-one	57249	Strychnine, & salts	10	1,4	P108	A	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357573	Strucine	1*	4	P018	B	100 (45.4)
Strychnine, & salts	57249	Strychnidin-10-one	10	1,4	P108	A	10 (4.54)
Styrene	100425		1000	1		C	1000 (454)
Sulfur monochloride	12771083		1000	1		C	1000 (454)
Sulfur phosphide	1314803	Phosphorus pentasulfide Phosphorus sulfide	100	1,4	U189	B	100 (45.4)
Sulfuric acid	7664939		1000	1		C	1000 (454)
	8014957		8014957				
Sulfuric acid, dithallium (1+) salt	7448186	Thallium (I) sulfate	1000	1,4	P115	B	100 (45.4)
	10031591		10031591				
Sulfuric acid, dimethyl ester	77781	Dimethyl sulfate	1*	4	U103	B	100 (45.4)
2,4,5-T acid	93785	Acetic acid, (2,4,5-trichlorophenoxy) 2,4,5-T	100	1,4	U232	C	1000 (454)
	2008460		100	1		D	5000 (2270)
2,4,5-T amines	1319728		1319728				
	2813147		2813147				
	6369966		6369966				
	6369977		6369977				

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES -Continued

Hazardous Substances	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code#	RCRA Waste Number	Category	Pounds (Kg)
Phenol, 2-chloro	95573	o-Chlorophenol 2-Chlorophenol	1	2.4	U048	B	100 (45.4)
Phenol, 4-chloro-3-methyl-	59507	p-Chloro-m-cresol 4-Chloro-m-cresol	1*	2.4	U039	D	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	131895	2-Cyclohexyl-4,6-dinitrophenol	1*	4	P034	B	100 (45.4)
Phenol, 2,4-dichloro-	120832	2,4-Dichlorophenol	1*	2.4	U081	B	100 (45.4)
Phenol, 2,6-dichloro-	37650	2,6-Dichlorophenol	1*	4	U082	B	100 (45.4)
Phenol, 4,4'-(1,2-dieethyl-1,2-ethenediyl)bis-(E)	56531	Diethylstilbestrol	1*	4	U089	X	1 (0.454)
Phenol, 2,4-dimethyl-	105679	2,4-Dimethylphenol	1*	2.4	U101	B	100 (45.4)
Phenol, 2,4-dinitro-	51295	2,4-Dinitrophenol	1000	1.2.4	P048	A	10 (4.54)
Phenol, methyl-	1319773	Cresol(s) Cresylic acid	1000	1.4	U052	C	1000 (454)
m-Cresol	108394	m-Cresylic acid					
o-Cresol	95487	o-Cresylic acid					
p-Cresol	106445	p-Cresylic acid					
Phenol, 2-methyl-4,6-dinitro-	534521	4,6-Dinitro-o-cresol and salts	1*	2.4	P047	A	10 (4.54)
Phenol, 2,2,4-trichloro-	70304	Hexachlorophene	1*	4	U132	B	100 (45.4)
Phenol, 2-(1-methylpropyl)-4,6-dinitro-	38857	Dinoseb	1*	4	P020	C	1000 (454)
Phenol, 4-nitro-	100027	p-Nitrophenol	1000	1.2.4	U170	B	100 (45.4)
1,4-Nitrophenol							
Phenol, pentachloro-	37365	Pentachlorophenol	10	1.2.4	U242	A	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	58902	2,3,4,6-Tetrachlorophenol	1*	4	U212	A	10 (4.54)
Phenol, 2,3,5-trichloro-	95954	2,3,5-Trichlorophenol	10	1.4	U220	A	10 (4.54)
Phenol, 2,4,6-trichloro-	38062	2,4,6-Trichlorophenol	10	1.2.4	U231	A	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	131748	Ammonium picrate	1*	4	P009	A	10 (4.54)
L-Phenylalanine, 4-bis(2-chloroethyl) amino]	145823	Meiphalan	1*	4	U150	X	1 (0.454)
[1,10-(1,2-Phenylene)pyrene	193295	Indeno[1,2,3-cd]pyrene	1*	2.4	U157	B	100 (45.4)
Phenylmercury acetate	62254	Mercury (acetato-O)phenyl-	1*	4	P092	B	100 (45.4)
Phenylthiourea	103255	Thiourea, phenyl-	1*	4	P093	B	100 (45.4)
Phorate	295022	Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	1*	4	P094	A	10 (4.54)
Phosgene	75445	Carbonic dichloride	5000	1.4	P095	A	10 (4.54)
Phosphine	7503512		1*	4	P096	B	100 (45.4)
Phosphoric acid	7664822		5000	1		D	5000 (2270)
Phosphoric acid, dimethyl 4-nitrophenyl ester		311435 Dimethyl-p-nitrophenyl phosphate	1*	4	P041	B	100 (45.4)
Phosphoric acid, lead(II)-salt(2)	7448277	Lead phosphate	1*	4	U115		
Phosphorodithioic acid, O,O-diethyl S-(2-ethylthio)ethyl ester	295044	Disulfoton	1	1.4	P092	X	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio) methyl ester	295022	Phorate	1*	4	P094	A	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3258362	O,O-Diethyl S-methyl dithiophosphate	1*	4	U057	D	5000 (2270)
Phosphorodithioic acid, O,O-diethyl S-(dimethylamino)ethoxyethyl ester	60513	Dimethoate	1*	4	P044	A	10 (4.54)
Phosphorodithioic acid, bis(1-methylbutyl) ester	55914	Diisopropyl fluorophosphate	1*	4	P04C	B	100 (45.4)
Phosphorodithioic acid, O,O-diethyl O-4-nitrophenyl ester	56382	Parathion	1	1.4	P089	A	10 (4.54)
Phosphorodithioic acid, O-(4-(dimethylamino) sulfonyl)phenyl O,O-diethyl ester	32557	Famphur	1*	4	P097	C	1000 (454)
Phosphorodithioic acid, O,O-diethyl O-4-nitrophenyl ester	295000	Methyl parathion	100	1.4	P071	B	100 (45.4)
Phosphorodithioic acid, O,O-diethyl O-pyrazinyl ester	297972	O,O-Diethyl O-pyrazinyl phosphorothioate	1*	4	P040	B	100 (45.4)
Phosphorus	7723140		1	1		X	1 (0.454)
Phosphorus oxychloride	10025373		5000	1		C	1000 (454)
Phosphorus pentasulfide	1314803	Phosphorus sulfide Sulfur phosphide	100	1.4	U189	B	100 (45.4)
Phosphorus sulfide	1314803	Phosphorus pentasulfide Sulfur phosphide	100	1.4	U189	B	100 (45.4)
Phosphorus trichloride	7719122		5000	1		C	1000 (454)
PHthalate ESTERS	N.A.		1*	2			
Phthalic anhydride	35449	1,3-Isobenzofurandione	1*	4	U190	D	5000 (2270)
2-Picoline	109098	Pyridine, 3-methyl-	1*	4	U191	D	5000 (2270)
Piperidine, 1-nitroso-	100754	N-Nitrosopiperidine	1*	4	U179	A	10 (4.54)
Plumbane, tetraethyl-	78002	Tetraethyl lead	100	1.4	P110	A	10 (4.54)
POLYCHLORINATED BIPHENYLS (PCBs)	1338363		10	1.2		X	1 (0.454)
Aroclor 1015	12674112	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1221	11104282	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1252	11141155	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1242	53469219	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1248	12572296	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1254	11097691	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
Aroclor 1260	11096825	Polychlorinated biphenyls	10	1.2		X	1 (0.454)
POLYNUCLEAR AROMATIC HYDROCARBONS	N.A.		1*	2			
Potassium arsenate	7784410		1000	1		X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code r	RCRA Waste Number	Category	Pounds (Kg)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57749	Chlordane Chlordane, alpha & gamma isomers Chlordane, technical	1	1,2,4	U036	X	1 (0.454)
Methanol	67561	Methyl alcohol	1*	4	U154	O	5000 (2270)
Methacrylene	91805	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyr-dimyl-N'-(2-thienylmethyl)-	1*	4	U155	O	5000 (2270)
Methomyl	16752775	Ethanediamine acid, N-[[[(methyl-amino)carbamoyloxy]-methyl ester	1*	4	P066	B	100 (45.4)
Methoxychlor	72435	Benzene, 1,1'-(2,2,2-trichloroethyldene) bis(4-methoxy-	1	1,4	U247	X	1 (0.454)
Methyl alcohol	67561	Methanol	1*	4	U154	O	5000 (2270)
Methyl bromide	74839	Methane, bromo-	1*	2,4	U029	C	1000 (454)
1-Methylbutadiene	504609	1,3-Pentadiene	1*	4	U186	B	100 (45.4)
Methyl chloride	74873	Methane, chloro-	1*	2,4	U045	B	100 (45.4)
Methyl chlorocarbonate	79221	Carbonochloridic acid, methyl ester Methyl chloroformate	1*	4	U156	C	1000 (454)
Methyl chloroform	71556	Ethane, 1,1,1-trichloro-	1*	2,4	U226	C	1000 (454)
Methyl chloroformate	79221	Carbonochloridic acid, methyl ester Methyl chlorocarbonate	1*	4	U156	C	1000 (454)
3-Methylcholanthrene	56495	Benz[ <i>h</i> ]aceanthrylene, 1,2-dihydro-3-methyl-	1*	4	U157	A	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	101144	Benzeneamine, 4,4'-methylenebis(2-chloro-	1*	4	U158	A	10 (4.54)
Methylene bromide	74953	Methane, dibromo-	1*	4	U068	C	1000 (454)
Methylene chloride	75092	Methane, dichloro-	1*	2,4	U080	C	1000 (454)
Methyl ethyl ketone (MEK)	78933	2-Butanone	1*	4	U159	O	5000 (2270)
Methyl ethyl ketone peroxide	1338234	2-Butanone peroxide	1*	4	U160	A	10 (4.54)
Methyl hydrazine	60344	Hydrazine, methyl-	1*	4	P068	A	10 (4.54)
Methyl iodide	74884	Methane, iodo-	1*	4	U158	B	100 (45.4)
Methyl isobutyl ketone	108101	4-Methyl-2-pentanone	1*	4	U161	O	5000 (2270)
Methyl isocyanate	624839	Methane, isocyanato-	1*	4	P064	= =	= =
2-Methylacetamide	75865	Acetone cyanohydrin Propanenitrile, 2-hydroxy-2-methyl-	10	1,4	P069	A	10 (4.54)
Methylmercaptan	74931	Methanethiol Thiomethanol	100	1,4	U153	B	100 (45.4)
Methyl methacrylate	80625	2-Propenoic acid, 2-methyl-, methyl ester	5000	1,4	U162	C	1000 (454)
Methyl parathion	298000	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	100	1,4	P071	B	100 (45.4)
4-Methyl-2-pentanone	108101	Methyl isobutyl ketone	1*	4	U161	O	5000 (2270)
Methylthiourea	56042	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thio-	1*	4	U154	A	10 (4.54)
Mevinolone	7736347		1	1		A	10 (4.54)
Mexacarbate	315184		1000	1		C	1000 (454)
Mitomycin C	50077	Aceno(2',3',3',4')pyrrolo[1,2-a]indole-4,7-dione, 5-amino-3-[[[(aminocarbonyloxy)methyl]-1,1a,2,9,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a <i>S</i> )-(1a <i>alpha</i> ), 8 <i>beta</i> -, 3 <i>alpha</i> -, 3 <i>beta</i> -, 8 <i>alpha</i> )]-	1*	4	UC10	A	10 (4.54)
MNNG	70257	Guandine, N-methyl-N'-nitro-N-nitroso-	1*	4	U163	A	10 (4.54)
Monomethylamine	75047		1000	1		B	100 (45.4)
Monomethylamine	74895		1000	1		B	100 (45.4)
Muscimol	2753964	3(2 <i>H</i> )-isoxazalone, 5-(aminomethyl)-5-(aminomethyl)-3-isoxazolol	1*	4	P007	C	1000 (454)
Naled	300755		10	1		A	10 (4.54)
5,12-Naphthacenedione, 8-acetyl-10-(3-amino-2,3,8-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,3,9,10-tetrahydro-6,3,11-trihydroxy-1-methoxy-, (8 <i>S</i> - <i>cis</i> -)	20830813	Cauromycin	1*	4	UC59	A	10 (4.54)
1-Naphthalenamine	134327	alpha-Naphthylamine	1*	4	U187	B	100 (45.4)
2-Naphthalenamine	91598	beta-Naphthylamine	1*	4	U168	A	10 (4.54)
Naphthalenamine, N,N'-bis(2-chloroethyl)-	494031	Chlornaphazine	1*	4	U029	B	100 (45.4)
Naphthalene	91203		5000	1,2,4	U165	B	100 (45.4)
Naphthalene, 2-chloro-	91587	beta-Chloronaphthalene 2-Chloronaphthalene	1*	2,4	U047	O	5000 (2270)
1,4-Naphthalenedione	130154	1,4-Naphthoquinone	1*	4	U166	O	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[[3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	72571	Trypan blue	1*	4	U238	A	10 (4.54)
Naphthoic acid	1338245		100	1		B	100 (45.4)
1,4-Naphthoquinone	130154	1,4-Naphthalenedione	1*	4	U166	O	5000 (2270)
alpha-Naphthylamine	134327	1-Naphthalenamine	1*	4	U167	B	100 (45.4)
beta-Naphthylamine	91598	2-Naphthalenamine	1*	4	U168	A	10 (4.54)
alpha-Naphthylthiourea	86884	Thiourea, 1-naphthyl-	1*	4	P072	B	100 (45.4)
Nickel II	7440020		1*	2		B	100 (45.4)

TABLE 302.1—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Notes: All Comments/Notes Are Located at the End of This Table.)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA Waste Number	Category	Pounds (Kg)
Fulminic acid, mercury(2+) salt	628864	Mercury fulminate	1*	4	P065	A	10 (4.54)
Fumalic acid	110178		5000	1		D	5000 (2270)
Furan	110009	Furfuran	1*	4	U124	B	100 (45.4)
Furan, tetrahydro-	109999	Tetrahydrofuran	1*	4	U213	C	1000 (454)
2-Furancarboxaldehyde	98011	Furfural	1000	1,4	U125	O	5000 (2270)
2,5-Furandione	108316	Maleic anhydride	5000	1,4	U147	O	5000 (2270)
Furfural	98011	2-Furancarboxaldehyde	1000	1,4	U125	O	5000 (2270)
Furfuran	110009	Furan	1*	4	U124	B	100 (45.4)
Glucopyranose, 2-deoxy-2-[[3-methyl-3-nitrosoureido]-	18883654	D-Glucose, 2-deoxy-2-[[3-methyl-3-nitrosoureido]-carbamylamino] Streptozotocin	1*	4	U206	X	1 (0.454)
D-Glucose, 2-deoxy-2-[[3-methyl-3-nitrosoureido]-	18883664	Glucopyranose, 2-deoxy-2-[[3-methyl-3-nitrosoureido]-	1*	4	U206	X	1 (0.454)
Glycidylaldehyde	765344	Oxiranecarboxaldehyde	1*	4	U126	A	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257	MNNG	1*	4	U163	A	10 (4.54)
Gumion	86500		1	1		X	1 (0.454)
HALCETHERS	N.A.		1*	2			..
HALCETHANES	N.A.		1*	2			..
Heptachlor	76448	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-1a,4,7,7a-tetrahydro-	1	1,2,4	P059	X	1 (0.454)
HEPTACHLOR AND METABOLITES	N.A.		1*	2			..
Heptachlor epoxide	1024573		1*	2		X	1 (0.454)
Hexachlorobenzene	118741	Benzene, hexachloro-	1*	2,4	U127	A	10 (4.54)
Hexachlorobutadiene	87683	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1*	2,4	U128	X	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608731		1*	2			..
Hexachlorocyclohexane (gamma isomer)	58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-gamma-3H-C	1	1,2,4	U129	X	1 (0.454)
Hexachlorocyclooctadiene	77474	1,3-Cyclooctadiene, 1,2,3,4,5,5-hexachloro-	1	1,2,4	U130	A	10 (4.54)
Hexachloroethane	67721	Ethane, hexachloro-	1*	2,4	U131	B	100 (45.4)
Hexachlorobenzene	70304	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	1*	4	U132	B	100 (45.4)
Hexachlorocyclopentene	1888717	1-Propene, 1,1,2,3,3,3-hexachloro-	1*	4	U243	C	1000 (454)
Hexaethyl tetra phosphoric acid, hexaethyl ester	757584		1*	4	P062	B	100 (45.4)
Hydrazine	302012		1*	4	U133	X	1 (0.454)
Hydrazine, 1,2-diethyl-	1615801	N,N'-Diethylhydrazine	1*	4	U086	A	10 (4.54)
Hydrazine, 1,1-dimethyl-	57147	1,1-Dimethylhydrazine	1*	4	U098	A	10 (4.54)
Hydrazine, 1,2-dimethyl-	540738	1,2-Dimethylhydrazine	1*	4	U099	X	1 (0.454)
Hydrazine, 1,2-diphenyl-	122567	1,2-Diphenylhydrazine	1*	2,4	U109	A	10 (4.54)
Hydrazine, methyl-	60344	Methyl hydrazine	1*	4	P058	A	10 (4.54)
Hydrazinecarboimidamide	79196	Thiosemicarbazide	1*	4	P116	B	100 (45.4)
Hydrochloric acid	7847010	Hydrogen chloride	5000	1		O	5000 (2270)
Hydrocyanic acid	74908	Hydrogen cyanide	10	1,4	P063	A	10 (4.54)
Hydrofluoric acid	7664393	Hydrogen fluoride	5000	1,4	U134	B	100 (45.4)
Hydrogen chloride	7847010	Hydrochloric acid	5000	1		O	5000 (2270)
Hydrogen cyanide	74908	Hydrocyanic acid	10	1,4	P063	A	10 (4.54)
Hydrogen fluoride	7664393	Hydrofluoric acid	5000	1,4	U134	B	100 (45.4)
Hydrogen sulfide	7733064	Hydrogen sulfide H2S	100	1,4	U135	B	100 (45.4)
Hydrogen sulfide H2S	7733064	Hydrogen sulfide	100	1,4	U135	B	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	30159	alpha, alpha-Dimethylbenzylhydroperoxide	1*	4	U096	A	10 (4.54)
2-Imidazolidinethione	96457	Ethylenethiourea	1*	4	U116	A	10 (4.54)
Indeno[1,2,3-cd]pyrene	193395	1,10-(1,2-Phenylene)pyrene	1*	2,4	U137	B	100 (45.4)
1,3-Isobenzofuranone	85449	Phthalic anhydride	1*	4	U190	O	5000 (2270)
Isobutyl alcohol	78831	1-Propanol, 2-methyl-	1*	4	U140	O	5000 (2270)
Isodrin	465736	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5beta,8beta,8beta)-	1*	4	P060	X	1 (0.454)
Isopropone	78591		1*	2		O	5000 (2270)
Isoprene	78795		1000	1		B	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	42504461		1000	1		C	1000 (454)
Isosafrole	120581	1,3-Benzoxazole, 5-(1-propenyl)-	1*	4	U141	B	100 (45.4)
3(2H)-Isoxazoline, 5-(aminomethyl)-	2763964	Muscimol	1*	4	P007	C	1000 (454)
Keopone	143500	5-(Aminomethyl)-3-isoxazolol	1	1,4	U142	X	1 (0.454)
Lasiocarpine	303344	1,3,4-Metheno-2H-cycloocta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,9-decachlorooctahydro-	1*	4	U143	A	10 (4.54)
Lead II	7439921	2-Butenoic acid, 2-methyl-, 7-[[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolo[2,1-b]pyridin-1-yl ester, [(1S-(1alpha(Z), 7(2S*,3R*)),7aalpha)]-	1*	2			..

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA Waste Number	Category	Pounds (Kg)
3,3'-Dimethoxybenzidine	119904	(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethoxy-	1*	4	U091	B	100 (45.4)
Dimethylamine	124403	Methanamine, N-methyl-	1000	1,4	U092	C	1000 (454)
p-Dimethylaminoazobenzene	50117	Benzaniline, N,N-dimethyl-4-(phenylazo)-	1*	4	U093	A	10 (4.54)
7,12-Dimethylbenz[ajanthracene	57976	Benzo[aj]anthracene, 7,12-dimethyl-	1*	4	U094	X	1 (0.454)
3,3'-Dimethylbenzidine	119907	(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethyl-	1*	4	U095	A	10 (4.54)
alpha, alpha-Dimethylbenzylhydroperoxide	80159	Hydroperoxide, 1-methyl-1-phenylethyl-	1*	4	U096	A	10 (4.54)
Dimethylcarbamoyl chloride	79447	Carbamic chloride, dimethyl-	1*	4	U097	X	1 (0.454)
1,1-Dimethylhydrazine	57147	Hydrazine, 1,1-dimethyl-	1*	4	U098	A	10 (4.54)
1,2-Dimethylhydrazine	540738	Hydrazine, 1,2-dimethyl-	1*	4	U099	X	1 (0.454)
alpha, alpha-Dimethylphenethylamine	122098	Benzeneethanamine, alpha, alpha-dimethyl-	1*	4	P046	D	5000 (2270)
2,4-Dimethylphenol	105679	Phenol, 2,4-dimethyl-	1*	2,4	U101	B	100 (45.4)
Dimethyl phthalate	131113	1,2-Benzenedicarboxylic acid, dimethyl ester	1*	2,4	U102	D	5000 (2270)
Dimethyl sulfate	77781	Sulfuric acid, dimethyl ester	1*	4	U103	B	100 (45.4)
Dinitrobenzene (mixed)	25154545		1000	1		B	100 (45.4)
m-Dinitrobenzene	99650						
o-Dinitrobenzene	525290						
p-Dinitrobenzene	100254						
4,6-Dinitro-o-cresol and salts	534521	Phenol, 2-methyl-4,6-dinitro-	1*	2,4	P047	A	10 (4.54)
Dinitrophenol	25550587		1000	1		A	10 (4.54)
2,5-Dinitrophenol	329715						
2,5-Dinitrophenol	573568					A	
2,4-Dinitrophenol	51285	Phenol, 2,4-dinitro-	1000	1,2,4	P048	A	10 (4.54)
Dinitrotoluene	25321146		1000	1,2		A	10 (4.54)
3,4-Dinitrotoluene	610399						
2,4-Dinitrotoluene	121142	Benzene, 1-methyl-2,4-dinitro-	1000	1,2,4	U105	A	10 (4.54)
2,5-Dinitrotoluene	606202	Benzene, 2-methyl-1,3-dinitro-	1000	1,2,4	U106	B	100 (45.4)
Dinoseb	88857	Phenol, 2-(1-methylpropyl)-4,6-dinitro	1*	4	P020	C	1000 (454)
Dl-n-octyl phthalate	117840	1,2-Benzenedicarboxylic acid, dioctyl ester	1*	2,4	U107	D	5000 (2270)
1,4-Dioxane	123911	1,4-Dioxinenedioxide	1*	4	U108	B	100 (45.4)
DIPHENYLHYDRAZINE	N.A.		1*	2			**
1,2-Diphenylhydrazine	122567	Hydrazine, 1,2-diphenyl-	1*	2,4	U109	A	10 (4.54)
Dionosonoramida, octamethyl-	152169	Octamethylcyranosporamide	1*	4	P085	B	100 (45.4)
Dionosononic acid, tetraethyl ester	107493	Tetraethyl cyranosonate	100	1,4	P111	A	10 (4.54)
Dipropylamine	142847	1-Propanamine, N-propyl-	1*	4	U110	D	5000 (2270)
Dl-n-propylnitrosamine	621647	1-Propanamine, N-nitroso-N-propyl-	1*	2,4	U111	A	10 (4.54)
Diquat	35007		1000	1		C	1000 (454)
	2754729						
Disulfoton	298044	Phosphorodithioic acid, o,o-diethyl S-(2-(ethynylthio)ethyl)ester	1	1,4	P039	X	1 (0.454)
Dithiouret	541537	Thioimidocarbonyl diamide ((H2N)C(S)12NH	1*	4	P049	B	100 (45.4)
Diuron	330541		100	1		B	100 (45.4)
Dodecylbenzenesulfonic acid	2717870		1000	1		C	1000 (454)
Endosulfan	115297	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,9,10,10-hexachloro-1,5,5a,8,9,9a-hexahydro-, 3-oxide	1	1,2,4	P050	X	1 (0.454)
alpha - Endosulfan	359988		1*	2		X	1 (0.454)
beta - Endosulfan	35213559		1*	2		X	1 (0.454)
ENDOSULFAN AND METABOLITES	N.A.		1*	2			**
Endosulfan sulfate	1031079		1*	2		X	1 (0.454)
Endothal	145733	7-Oxacyclo[2.2.1]heptane-2,3-dicarboxylic acid	1*	4	P088	C	1000 (454)
Endrin	72208	Endrin & metabolites 2,7,3,5-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-	1	1,2,4	P051	X	1 (0.454)
Endrin aldehyde	7421934		1*	2		X	1 (0.454)
ENDRIN AND METABOLITES	N.A.		1*	2			**
Endrin, & metabolites	72208	Endrin 2,7,3,5-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha, 2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-	1	1,2,4	P051	X	1 (0.454)
Epichlorohydrin	106898	Oxirane, (chloromethyl)-	1000	1,4	U041	B	100 (45.4)
Epinephrine	51434	1,2-Benzenediol, 4-[(1-hydroxy-2-(methylamino)ethyl)-	1*	4	P042	C	1000 (454)
Ethanal	75070	Acetaldehyde	1000	1,4	U001	C	1000 (454)
Ethanamine, N-ethyl-N-nitroso-	55185	N-Nitrosodiethylamine	1*	4	U174	X	1 (0.454)
1,2-Ethanediamine, N,N-dimethyl-N'-2-pyr-dinyl-N''-(2-mienylmethyl)-	91805	Methanamine	1*	4	U155	D	5000 (2270)
Ethane, 1,2-dibromo-	106934	Ethylene dibromide	1000	1,4	U067	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Notes: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA Waste Number	Category	Pounds (Kg)
Cyclonexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58899	gamma-BHC Hexachlorocyclonexane (gamma isomer) Lindane	1	1,2,4	U129	X	1 (0.454)
Cyclonexanone.....	108941		1*	4	U057	D	5000 (2270)
2-Cyclonexyl-4,6-dinitrophenol.....	131895	Phenol, 2-cyclonexyl-4,6-dinitro-	1*	4	PC34	B	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77474	Hexachlorocyclopentadiene	1	1,2,4	U130	A	10 (4.54)
Cyclophosphamide.....	50180	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-2-oxide	1*	4	UC58	A	10 (4.54)
2,4-D Acid.....	94757	Acetic acid (2,4-dichlorophenoxy)-2,4-D, salts and esters	100	1,4	U240	B	100 (45.4)
2,4-D Ester.....	94111 94791 94804 1320189 1923387 1920618 1929733 2971382 25188267 53467111		100	1		B	100 (45.4)
2,4-D, salts and esters.....	94757	Acetic acid (2,4-dichlorophenoxy)-2,4-D Acid	100	1,4	U240	B	100 (45.4)
Daunomycin.....	20830813	5,12-Naanthracenedione, 8-acetyl-10-(3- amino-2,3,5-Indoxy-alpha-L-xylo-hexop- pyranosyl)oxy)-7,9,9,10-tetrahydro- 6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	1*	4	UG59	A	10 (4.54)
DDD.....	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4- chloro- TCE	1	1,2,4	U060	X	1 (0.454)
4,4' DDD.....	72548	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4- chloro- DDD TCE	1	1,2,4	U060	X	1 (0.454)
DDE.....	72559	4,4' DDE	1*	2		X	1 (0.454)
4,4' DDE.....	72559	DDE	1*	2		X	1 (0.454)
DDT.....	50293	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis(4-chloro- 4,4' DDT	1	1,2,4	U061	X	1 (0.454)
4,4' DDT.....	50293	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis(4-chloro- DDT	1	1,2,4	U061	X	1 (0.454)
DDT AND METABOLITES.....	N.A.		1*	2			**
Diallate.....	2003164	Carbamothioic acid, bis(1-methylthyl)-, S- (2,3-dichloro-2-propenyl) ester	1*	4	U062	B	100 (45.4)
Diazinon.....	300415		1	1		X	1 (0.454)
Dibenz(a,h)anthracene.....	53703	Dibenz(a,h)anthracene 1,2,5,8-Dibenzanthracene	1*	2,4	U063	X	1 (0.454)
1,2,5,8-Dibenzanthracene.....	53703	Dibenz(a,h)anthracene Dibenz(a,h)anthracene 1,2,5,8-Dibenzanthracene	1*	2,4	U053	X	1 (0.454)
Dibenz(a,h)anthracene.....	53703	Dibenz(a,h)anthracene 1,2,5,8-Dibenzanthracene	1*	2,4	U063	X	1 (0.454)
Dibenz(a,i)pyrene.....	189553	Benzo(1,2,3-cd)pyrene	1*	4	U064	A	10 (4.54)
1,2-Dibromo-3-chloropropane.....	96123	Propane, 1,2-dibromo-3-chloro-	1*	4	U066	X	1 (0.454)
Di-butyl phthalate.....	84742	Di-n-butyl phthalate n-Butyl phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,4	U069	A	10 (4.54)
Di-n-butyl phthalate.....	84742	Di-butyl phthalate n-Butyl phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,4	U059	A	10 (4.54)
Dicamba.....	1918009		1000	1		C	1000 (454)
Dichlobenil.....	1194658		1000	1		B	100 (45.4)
Dichlone.....	117806		1	1		X	1 (0.454)
Dichlorobenzene.....	25321225		100	1		B	100 (45.4)
1,2-Dichlorobenzene.....	95501	Benzene, 1,2-dichloro- o-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4)
1,3-Dichlorobenzene.....	541731	Benzene, 1,3-dichloro m-Dichlorobenzene	1*	2,4	U071	B	100 (45.4)
1,4-Dichlorobenzene.....	106467	Benzene, 1,4-dichloro p-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4)
m-Dichlorobenzene.....	541731	Benzene, 1,3-dichloro 1,3-Dichlorobenzene	1*	2,4	U071	B	100 (45.4)
o-Dichlorobenzene.....	95501	Benzene, 1,2-dichloro 1,2-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4)
p-Dichlorobenzene.....	106467	Benzene, 1,4-dichloro 1,4-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4)
DICHLOROBENZIDINE.....	N.A.		1*	2			**
3,3'-Dichlorobenzidine.....	91941	[(1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-	1*	2,4	U073	X	1 (0.454)

TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RC	
			RC	Code r	RCRA Waste Number	Category	Pounds (Kj)
n-Butyl alcohol	71363	1-Butanol	1*	4	U031	D	5000 (2270)
Butylamine	109739		1000	1		C	1000 (454)
iso-Butylamine	78819						
sec-Butylamine	510485						
	13952846						
tert-Butylamine	75849						
Butyl benzyl phthalate	85687		1*	2		B	100 (45.4)
n-Butyl phthalate	84742	Di-n-butyl phthalate Dibutyl phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester	100	1,2,4	U089	A	10 (4.54)
Butyric acid	107928		5000	1		D	5000 (2270)
iso-Butyric acid	79312						
Cacodylic acid	75605	Arsenic acid, dimethyl-	1*	4	U138	X	1 (0.454)
Cadmium	7440439		1*	2		A	10 (4.54)
Cadmium acetate	543908		100	1		A	10 (4.54)
CADMIUM AND COMPOUNDS	N.A.		1*	2			..
Cadmium bromide	7789425		100	1		A	10 (4.54)
Cadmium chloride	10108642		100	1		A	10 (4.54)
Calcium arsenite	7778441		1000	1		X	1 (0.454)
Calcium arsenite	52740166		1000	1		X	1 (0.454)
Calcium carbide	75207		5000	1		A	10 (4.54)
Calcium chromate	13765190	Chromic acid H2CrO4, calcium salt	1000	1,4	U032	A	10 (4.54)
Calcium cyanide	592018	Calcium cyanide Ca(CN)2	10	1,4	P021	A	10 (4.54)
Calcium cyanide Ca(CN)2	592018	Calcium cyanide	10	1,4	P021	A	10 (4.54)
Calcium dodecylbenzenesulfonate	29254062		1000	1		C	1000 (454)
Calcium hypochlorite	7778543		100	1		A	10 (4.54)
Camphene, octachloro-	8001352	Toxaphene	1	1,2,4	P133	X	1 (0.454)
Caplan	100062		10	1		A	10 (4.54)
Carbamic acid, ethyl ester	51796	Ethyl carbamate (urethane)	1*	4	U238	B	100 (45.4)
Carbamic acid, methylnitroso-, ethyl ester	615532	N-Nitroso-N-methylurethane	1*	4	U179	X	1 (0.454)
Carbamic chloride, dimethyl-	79447	Dimethylcarbamoyl chloride	1*	4	U097	X	1 (0.454)
Carbamodithioic acid, 1,2-bis(methylenebis, salts & esters	111546	Ethylenebis(dithiocarbamic acid, salts & esters	1*	4	U114	C	5000 (2270)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303164	Cialate	1*	4	U062	B	100 (45.4)
Carbaryl	63252		100	1		B	100 (45.4)
Carbutran	1553662		10	1		A	10 (4.54)
Carbon disulfide	75150		5000	1,4	P022	B	100 (45.4)
Carbon oxyfluoride	353504	Carbonic difluoride	1*	4	U033	C	1000 (454)
Carbon tetrachloride	56225	Methane, tetrachloro-	5000	1,2,4	U211	A	10 (4.54)
Carbonic acid, calcium(1-) salt	6533739	Thallium(I) carbonate	1*	4	U215	B	100 (45.4)
Carbonic chloride	75445	Phosgene	5000	1,4	P095	A	10 (4.54)
Carbonic difluoride	353504	Carbon oxyfluoride	1*	4	U033	C	1000 (454)
Carbonochloridic acid, methyl ester	79221	Methyl chloroformate Methyl chloroformate	1*	4	U159	C	1000 (454)
Chloral	75375	Acetaldehyde, trichloro-	1*	4	U034	D	5000 (2270)
Chlorambush	305033	Benzenedicarboxic acid, 4-(bis(2-chloroethyl)amino)-	1*	4	U055	A	10 (4.54)
Chlordane	57749	Chlordane, alpha & gamma isomers Chlordane, technical 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1	1,2,4	U036	X	1 (0.454)
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)	N.A.		1*	2			..
Chlordane, alpha & gamma isomers	57749	Chlordane Chlordane, technical 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1	1,2,4	U036	X	1 (0.454)
Chlordane, technical	57749	Chlordane Chlordane, alpha & gamma isomers 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1	1,2,4	U036	X	1 (0.454)
CHLORINATED BENZENES	N.A.		1*	2			..
CHLORINATED ETHANES	N.A.		1*	2			..
CHLORINATED NAPHTHALENE	N.A.		1*	2			..
CHLORINATED PHENOLS	N.A.		1*	2			..
Chlone	7782505		10	1		A	10 (4.54)
Chlomagnazine	494031	Nachtralenamine, N,N'-bis(2-chloroethyl)-	1*	4	U026	B	100 (45.4)
Chloroacetaldehyde	107200	Acetaldehyde, chloro-	1*	4	P023	C	1000 (454)
CHLORCALKYL ETHERS	N.A.		1*	2			..
p-Chloroaniline	106478	Benzenamine, 4-chloro-	1*	4	P024	C	1000 (454)
Chlorobenzene	108907	Benzene, chloro-	100	1,2,4	U037	B	100 (45.4)
Chlorobenzilate	510156	Benzenecarboxic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	1*	4	U038	A	10 (4.54)



TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

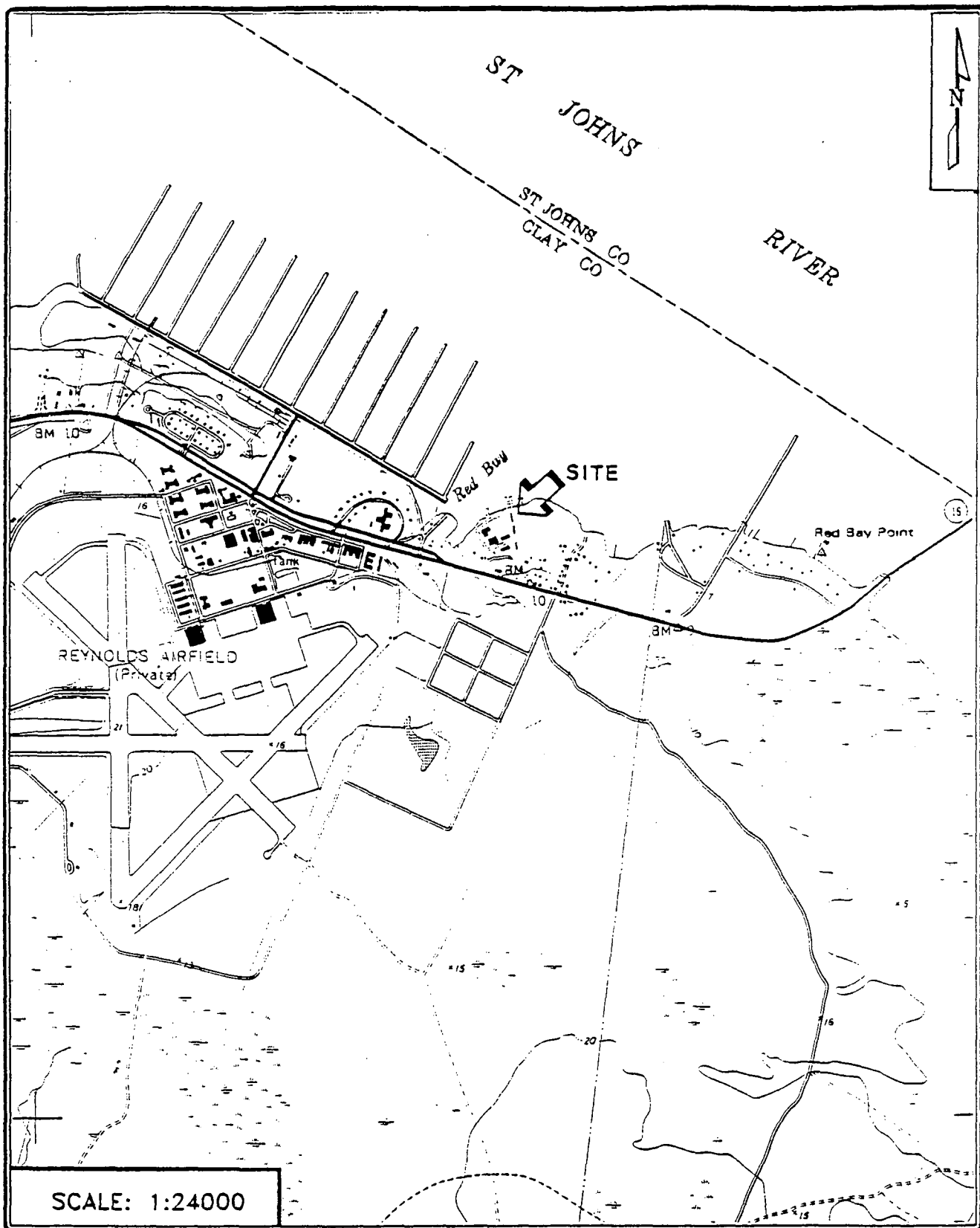
(Note: All Comments/Notes Are Located at the End of This Table)

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code:†	RCRA Waste Number	Category	Pounds (Kg)
Benzenamine	62533	Aniline	1000	1,4	U012	D	5000 (2270)
Benzenamine, 4,4'-diaminodiphenyl (N,N-dimethyl-)	492808	Auramine	1*	4	U014	B	100 (45.4)
Benzenamine, 4-chloro-	106473	p-Chloroaniline	1*	4	P024	C	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165933	4-Chloro-o-toluidine, hydrochloride	1*	4	U049	B	100 (45.4)
Benzenamine, N,N-dimethyl-(phenylazo)-	60117	p-Dimethylaminoazobenzene	1*	4	U093	A	10 (4.54)
Benzenamine, 2-methyl-	95534	o-Toluidine	1*	4	U329	B	100 (45.4)
Benzenamine, 4-methyl-	106430	p-Toluidine	1*	4	U353	B	100 (45.4)
Benzenamine, 4,4'-methylenebis(2-chloro-)	101144	4,4'-Methylenebis(2-chloroaniline)	1*	4	U158	A	10 (4.54)
Benzenamine, 2-methyl-, hydrochloride	636215	o-Toluidine hydrochloride	1*	4	U222	B	100 (45.4)
Benzenamine, 2-methyl-5-nitro-	99558	5-Nitro-o-toluidine	1*	4	U181	B	100 (45.4)
Benzenamine, 4-nitro-	100016	p-Nitroaniline	1*	4	P077	D	5000 (2270)
Benzene	71432		1000	1,2,3	U109	A	10 (4.54)
Benzenoacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510156	Chlorobenzilate	1*	4	U038	A	10 (4.54)
Benzene, 1-bromo-4-phenoxy-	101553	4-Bromophenyl phenyl ether	1*	2,4	U030	B	100 (45.4)
Benzenoacetic acid, 4-bis(2-chloroethyl)amino]-	305033	Chloramoual	1*	4	U035	A	10 (4.54)
Benzene, chloro-	106307	Chlorobenzene	100	1,2,4	U037	B	100 (45.4)
Benzene, chloromethyl-	100447	Benzyl chloride	100	1,4	P029	B	100 (45.4)
Benzene, diamine, ar-methyl-	95607	Toluenediamine	1*	4	U221	A	10 (4.54)
	496720						
	823405						
1,2-Benzenedicarboxylic acid, dioctyl ester	117840	Di-n-octyl phthalate	1*	2,4	U107	O	5000 (2270)
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]-ester	117817	Bis (2 ethylhexyl)phthalate	1*	2,4	U029	B	100 (45.4)
1,2-Benzenedicarboxylic acid, dibutyl ester	84742	Di-n-butyl phthalate	100	1,2,4	U059	A	10 (4.54)
		Cibutyl phthalate					
		n-Butyl phthalate					
1,2-Benzenedicarboxylic acid, diethyl ester	84662	Diethyl phthalate	1*	2,4	U038	C	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	101113	Dimethyl phthalate	1*	2,4	U102	O	5000 (2270)
Benzene, 1,2-dichloro-	95531	o-Dichlorobenzene	100	1,2,4	U070	B	100 (45.4)
		1,2-Dichlorobenzene					
Benzene, 1,3-dichloro-	541731	m-Dichlorobenzene	1*	2,4	U071	B	100 (45.4)
		1,3-Dichlorobenzene					
Benzene, 1,4-dichloro-	106467	p-Dichlorobenzene	100	1,2,4	U072	B	100 (45.4)
		1,4-Dichlorobenzene					
Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-)	72548	CCO TCE 4,4' CCO	1	1,2,4	U060	X	1 (0.454)
Benzene, diethylomethyl-	98879	Benzal chloride	1*	4	U017	O	5000 (2270)
Benzene, 1,1'-disocyanatomethyl-	584649	Toluene diisocyanate	1*	4	U223	B	100 (45.4)
	91087						
	28471625						
Benzene, dimethyl	130207	Xylene (mixed)	1000	1,4	U220	C	1000 (454)
m-Benzene, dimethyl	103383	m-Xylene					
o-Benzene, dimethyl	95476	o-Xylene					
p-Benzene, dimethyl	106423	p-Xylene					
1,3-Benzenediol	108483	Resorcinol	1000	1,4	U201	O	5000 (2270)
1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-	51434	Ephedrine	1*	4	P042	C	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	122098	alpha,alpha-Dimethylphenethylamine	1*	4	P046	O	5000 (2270)
Benzene, hexachloro-	118741	Hexachlorocyclohexane	1*	2,4	U127	A	10 (4.54)
Benzene, hexahydro-	110827	Cyclohexane	1000	1,4	U053	C	1000 (454)
Benzene, hydroxy-	108952	Phenol	1000	1,2,4	U188	C	1000 (454)
Benzene, methyl-	103883	Toluene	1000	1,2,4	U220	C	1000 (454)
Benzene, 2-methyl-1,3-dinitro-	606202	2,6-Dinitrotoluene	1000	1,2,4	U106	B	100 (45.4)
Benzene, 1-methyl-2,4-dinitro-	121142	2,4-Dinitrotoluene	1000	1,2,4	U105	A	10 (4.54)
Benzene, 1-methylethyl-	98828	Cumene	1*	4	U055	D	5000 (2270)
Benzene, nitro-	98953	Nitrobenzene	1000	1,2,4	U189	C	1000 (454)
Benzene, pentachloro-	603935	Pentachlorobenzene	1*	4	U193	A	10 (4.54)
Benzene, pentachloronitro-	82688	Pentachloronitrobenzene (PCNB)	1*	4	U185	B	100 (45.4)
Benzenesulfonic acid chloride	98099	Benzenesulfonyl chloride	1*	4	U020	B	100 (45.4)
Benzenesulfonic acid chloride	98099	Benzenesulfonic acid chloride	1*	4	U020	B	100 (45.4)
Benzene, 1,2,4,5-tetrachloro-	55943	1,2,4,5-Tetrachlorobenzene	1*	4	U207	D	5000 (2270)
Benzene, 1,2,4,5-tetrachloro-	55943	1,2,4,5-Tetrachlorobenzene	1*	4	U207	D	5000 (2270)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	108985	Thioxenol	1*	4	P014	B	100 (45.4)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	50293	DOT 4,4' CDT Methoxychlor	1	1,2,4	U061	X	1 (0.454)
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	72435	Methoxychlor	1	1,4	U247	X	1 (0.454)
Benzene, (trichloromethyl)-	98077	Benzotrifluoride	1*	4	U023	A	10 (4.54)
Benzene, 1,3,5-trinitro-	99154	1,3,5-Trinitrobenzene	1*	4	U234	A	10 (4.54)
Benzidine	92975	(1,1'-Biphenyl)-4,4'-diamine	1*	2,4	U021	X	1 (0.454)

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

Hazardous Substances	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code#	RCRA Waste Number	Category	Pounds/Kg
Acenaphthene	33529		1*	2		B	100(45.4)
Acenaphthylene	208968		1*	2		D	5000(2270)
Acetaldehyde	75070	Ethanal	1000	1,4	U001	C	1000(45.4)
Acetaldehyde, chloro-	107200	Chloroacetaldehyde	1*	4	P023	C	1000(45.4)
Acetaldehyde, trichloro-	75876	Chloral	1*	4	U034	D	5000(2270)
Acetamide, N-(aminothioxomethyl)-	591082	1-Acetyl-2-thiourea	1*	4	P002	C	1000(45.4)
Acetamide, N-(4-ethoxyphenyl)-	62442	Phenacetin	1*	4	U137	B	100(45.4)
Acetamide, 2-fluoro-	640197	Fluoroacetamide	1*	4	P057	B	100(45.4)
Acetamide, N-(9H-fluoren-2-yl)-	53963	2-Acetylaminofluorene	1*	4	U005	X	10(45.4)
Acetic acid	64197		1000	1		D	5000(2270)
Acetic acid (2,1-dichlorophenoxy)-	94737	2,4-D Acid	100	1,4	U240	B	100(45.4)
Acetic acid, lead(2+) salt	301042	2,1-D, salts and esters Lead acetate	5000	1,4	U144		=
Acetic acid thallium(1+) salt	563668	Thallium(I) acetate	1*	4	U214	B	100(45.4)
Acetic acid, (2,4,6-trichlorophenoxy)-	93765	2,4,6-T	100	1,4	U232	C	1000(45.4)
Acetic acid, ethyl ester	141736	2,4,6-T acid Ethyl acetate	1*	4	U112	D	5000(2270)
Acetic acid, fluoro-, sodium salt	62748	Fluoroacetic acid, sodium salt	1*	4	P053	A	10(45.4)
Acetic anhydride	108247		1000	1		D	5000(2270)
Acetone	67641	2-Propanone	1*	4	U002	O	5000(2270)
Acetone cyanohydrin	73865	Propanenitrile, 2-hydroxy-2-methyl-2-methylactonitrile	10	1,4	P069	A	10(45.4)
Acetonitrile	75056		1*	4	U003	D	5000(2270)
Acetophenone	98862	Ethanone, 1-phenyl-	1*	4	U004	X	5000(2270)
2-Acetylaminofluorene	53963	Acetamide, N-(9H-fluoren-2-yl)-	1*	4	U005	D	1(10.454)
Acetyl bromide	506967		5000	1		D	5000(2270)
Acetyl chloride	75365		5000	1,4	U006	D	5000(2270)
1-Acetyl-2-thiourea	591082	Acetamide, N-(aminothioxomethyl)-	1*	4	P002	X	1000(45.4)
Acipimol	107023	2-Propanol	1	1,2,4	P003	C	1(10.454)
Acrylamide	79061	2-Propanamide	1*	4	U007	O	5000(2270)
Acrylic acid	79107	2-Propenoic acid	1*	4	U008	O	5000(2270)
Acrylonitrile	107121	2-Propenenitrile	100	1,2,4	U009	B	100(45.4)
Acrylic acid	121049		5000	1		O	5000(2270)
A. Dicarb.	116063	Propanal, 2-methyl-2-(methylthio)-O-[(methylamino)carbonyl]oxime	1*	4	P070	X	1(10.454)
Aldrin	309002	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,1,4,4,5,8,8a-hexahydro, (alpha, alpha, beta, beta, gamma, gamma, delta)	1	1,2,4	P004	X	1(10.454)
Allyl alcohol	107136	2-Propen-1-ol	100	1,4	P005	B	100(45.4)
Allyl chloride	107031		1000	1		C	1000(45.4)
Aluminum phosphide	20859728		1*	4	P006	B	100(45.4)
Aluminum sulfate	10042013		5000	1		D	5000(2270)
5-Aminomethyl-3-isoxazolol	2763964	Muscimol (12H)-(isoxazolone, 5-amino-methyl)-	1*	4	P007	C	1000(45.4)
4-Aminopyridine	504215	4-Pyridinamine	1*	4	P008	C	1000(45.4)
Ammonia	61825	1H-1,2,4-Triazol-3-amine	1*	4	U011	A	10(45.4)
Ammonia	766447		100	1		B	100(45.4)
Ammonium acetate	631615		5000	1		O	5000(2270)
Ammonium benzoate	1563634		5000	1		O	5000(2270)
Ammonium bicarbonate	1066207		5000	1		O	5000(2270)
Ammonium bicarbonate	7739095		1000	1		O	10(45.4)
Ammonium bifluoride	134197		5000	1		B	100(45.4)
Ammonium bisulfite	10192209		5000	1		O	5000(2270)
Ammonium carbamate	1111750		5000	1		O	5000(2270)
Ammonium carbonate	506575		5000	1		O	5000(2270)
Ammonium chloride	12125029		5000	1		O	5000(2270)
Ammonium chromate	7738989		1000	1		A	10(45.4)
Ammonium citrate, dibasic	3012855		5000	1		D	5000(2270)
Ammonium fluoroborate	13525630		5000	1		O	5000(2270)
Ammonium fluoride	12125015		5000	1		B	100(45.4)

APPENDIX C  
FACILITY LOCATION



<b>MGA</b>	<i>ENVIRONMENTAL AND GROUNDWATER SERVICES</i>		Missimer & Associates, Inc.
	DRN. BY: CBH DWG NO. 91J1520	DATE: 4-15-92	
	PROJECT NAME: MOBRO MARINE, INC.	NUMBER: JE1-538	

FIGURE 1-2 SITE LOCATION MAP  
SOURCE: USGS GREEN COVE SPRINGS, FL QUADRANGLE MAP

APPENDIX D  
CORRESPONDENCE



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Services

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

April 17, 1992

Mr. Richard Knoff  
Asst. Fire Chief, Hazardous Materials Team  
City of Green Cove Springs  
229 Walnut Street  
Green Cove Springs, Florida 32043

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Services

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

April 17, 1992

Mr. Dalton Bray  
Sheriff  
Clay County  
801 Orange Avenue  
Green Cove Springs, Florida 32043

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Services

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

April 17, 1992

Mr. Thomas Lafferty, Administrator  
Clay Memorial Hospital (Limited Care)  
P.O. Box 808  
Green Cove Springs, Florida 32043

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl





# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Services

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

April 17, 1992

Mr. Lloyd Schroder, Manager  
Humana Hospital, Environmental Services  
2001 Kingsley Avenue  
Post Office Box 2000  
Orange Park, Florida 32073

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.

We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl



# MISSIMER & ASSOCIATES, INC.

Environmental and Groundwater Services

Suite 104  
8130 Baymeadows Way West  
Jacksonville, Florida 32256

(904) 448-6400  
Fax (904) 448-8556

April 17, 1992

Department of Community Affairs  
Division of Emergency Management  
2740 Centerview Drive  
Tallahassee, Florida 32399-2400

Subject: **Emergency Response**  
**Fire, Explosion, Hazardous Material Spills**  
**MOBRO Marine, Inc., State Road 16, Green Cove Springs, Florida**

RE: RCRA Contingency Plan

Dear Sir:

On behalf of MOBRO Marine, we are pleased to inform you that your office will receive a copy of the "RCRA Contingency Plan and Emergency Procedures" manual. We invite you to familiarize yourself with the manual.


We are anxious for you or your representative to visit the MOBRO facility to assure that the best possible preparations for responding to any emergency event which may occur has been made. Of course, we invite any suggestions or comments you may wish to offer.

MOBRO will contact you within the next few weeks to schedule the plant visit. Meanwhile, if any questions arise, please feel free to contact them for assistance in arranging a facility tour.

Thank you very much for your cooperation and assistance.

Sincerely,

MISSIMER & ASSOCIATES, INC.

  
Thomas M. Martin  
Manager, Environmental Compliance  
and Industrial Hygiene

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

TMM/dl

APPENDIX E  
EMERGENCY EVACUATION PLAN

In the event plant evacuation is called for by the Emergency Coordinator, the following actions will be taken:

1. The signal for plant evacuation will be activated.
2. Both gates will immediately be opened. No further entry of visitors, contractors or trucks will be permitted unless authorization by the Emergency Coordinator. All non-emergency vehicle traffic within the plant will cease to allow safe exit of personnel and movement of emergency equipment.
3. ALL non-emergency personnel, visitors, and contractors will immediately leave through the exit gate located east of the main office. Any vehicle traffic will exit through the gate west of the main office.
4. No persons shall remain or re-enter the location unless specifically authorized by the Emergency Coordinator or his designee. In allowing this, the person in charge assumes responsibility for those persons within the perimeter. Those within the fenced area will normally only include fire fighting personnel, emergency teams or certain designated and trained employees.
5. ALL person will be accounted for by their immediate supervisors. Supervisors will designate the safest existing procedure for his or her employees. To assist in this endeavor, the Emergency Coordinator will use the public address system supplemented by radio and the internal telephone system to achieve the most rapid and efficient communication.
6. Employees and others will proceed to the rally points in an orderly manner. Refer to Figure 1-3. Immediately upon exit through the gate, the Yard Supervisor will prepare a list of all personnel at the exit gate. All other personnel who have persons reporting to them must confirm the final accounting.
7. Upon completion of the employee list, the supervisor in charge will hand-carry the list to the Emergency Coordinator. all other personnel will remain at the gate area.
8. Contract personnel should also be listed with the name of their company.
9. The names of emergency team members involved in emergency response will be reported, in writing, to the front gate by designated response team personnel.
10. A final tally of persons will be made by the Emergency Coordinator.
11. No attempt by persons other than specifically trained emergency response workers to find persons not accounted for will involve endangering lives of others by re-entry into emergency areas.

12. Re-entry into the fenced area will be made only after clearance is given by the Emergency Coordinator. At his/her direction, a signal or other notification will be given for re-entry into the plant.
13. In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of those employees they are seeing. Contractors are the responsibility of those persons administering the individual contracts.
14. Drills are held to practice all of these procedures and are treated with the same seriousness as an actual emergency.

APPENDIX F  
HANDLING HAZARDOUS MATERIAL

## EMERGENCY PROCEDURES

### Flammable Liquids

#### HEALTH HAZARDS

Poisonous; may be fatal if inhaled, swallowed or absorbed through skin. Contact may cause burns to skin and eyes.

Runoff from fire control or dilution water may cause pollution.

#### FIRE OR EXPLOSION

Flammable/combustible material: May be ignited by heat, sparks or flames.

Vapors may travel to a source of ignition and flash back.

Container may explode in heat of fire.

Vapor explosion and poison hazard indoors, outdoors or in sewers.

Runoff to sewer may create fire or explosion hazard.

#### EMERGENCY ACTION

Keep unnecessary people away, isolate hazard area and deny entry.

Stay upwind; keep out of low areas.

Self-contained breathing apparatus and chemical protective clothing which is specifically recommended by the shipper or producer may work but they do not provide thermal protection unless it is stated by the clothing manufacturer. Structural fire fighter's protective clothing is not effective with these materials.

Isolate for 1/2 mile in all directions if tank car or truck is involved in fire.

CALL CHEMTREC AT 1-800-424-9300 FOR EMERGENCY ASSISTANCE.

If water pollution occurs, notify the appropriate authorities.

#### FIRE

Small fires; dry chemical, CO<sub>2</sub>, Halon, water spray or standard foam.

Large fires; water spray, fog or standard foam is recommended.  
Move container from fire area if you can do it without risk.

Dike fire control water for later disposal; do not scatter the material.

Cool containers that are exposed to flames with water from the side until well after fire is out. Stay away from ends of tanks.

Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

#### SPILL OR LEAK

Shut off ignition sources; no flares, smoking or flames in hazard area.

Do not touch spilled material; stop leak if you can do it without risk.

Water spray may reduce vapor, but it may not prevent ignition in closed spaces.

Small spills; take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large spills; dike far ahead of liquid spill for later disposal.

#### FIRST AID

Move victim to fresh air and call emergency medical care; if not breathing, give artificial respiration; if breathing is difficult, give oxygen.

Remove and isolate contaminated clothing and shoes at the site.

In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes.

Keep victim quiet and maintain normal body temperature.

Effects may be delayed; keep victim under observation.



APPENDIX G  
HAZARDOUS WASTE TRACKING

## HAZARDOUS WASTE TRACKING

Hazardous wastes will be containerized in 55-gallon drums as they are generated. Containers will be assigned an identification number and labeled as containing hazardous waste before use. As each drum is filled, it will be placed in a hazardous waste containment area. A log book will be maintained containing the following information for each container of waste:

- Container identification number;
- Volume of waste in the container;
- Description and type of waste;
- Date the waste was generated;
- Disposal date, manifest number, and disposal contractor's name, EPA ID number, and telephone number;
- Disposal facility's name, EPA ID number and phone number.

A copy of the waste manifest will be kept in a designated file. The log book will be cross-checked quarterly against manifests to ensure that all disposed drums are accounted for.