

## **“Company B” Demonstration model – integrated contingency plan (One Plan)**

### **Note on this demonstration model of the integrated contingency plan framework:**

The following is a generic version of the integrated contingency plan (ICP, or “One Plan”) developed for a medium-sized metal finishing facility under the One Plan Case Study project, a joint effort on the part of the Massachusetts Office of Technical Assistance (OTA) and the U.S. Environmental Protection Agency Region One office. Please note that every facility plan will have its own unique criteria, particularly those of larger or more complex operations. For example, your local emergency planning committee (LEPC) may have specific criteria for what they want to see included in your emergency response plan. **Contact your LEPC before beginning this process.** It is important for them to be involved and provide input.

**This model is intended as reference only**, not as a template for developing your own integrated plan. Use this model to see how the framework laid out in the federal integrated contingency plan guidance (published in the June 5, 1996 *Federal Register*) may be applied. There are many variations on how the One Plan may be written.

Names, addresses and numbers for persons and case-specific entities (hospitals, DEP regional office, etc.) have been substituted with a description of the type of information needed, given in parenthesis and in italicized monotype font.

For example, the name of the facility owner is given as *(name)*.

To ease replication, tabs, maps and figures that appear in the original plan are not provided in this generic version. Due to these changes, the page numbers for the document have changed. Every attempt has been made to revise page numbers referenced in the text (page numbers cited in Annex 8 have not been revised). These discrepancies are the result of the changes made to the original document, and do not represent defaults in the document as it was created for the use by the model company.

Where possible and desired by the model company, process-specific information (name and/or volume of chemical, etc.) has been slightly altered. No changes have been made that affect the design of the One Plan.

**INTEGRATED CONTINGENCY PLAN**

**“Company B”**  
[address]

June 30, 1999

*Prepared for:*

**“Company B”**  
[address]

*Prepared by:*

**“Contractor B”**  
(address)  
Project Number: 104-01A

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# I. INTRODUCTION

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## 1. Purpose and Scope of Plan

The purpose of the Integrated Contingency Plan (ICP) is to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. This plan will establish specific emergency responses for a metal etching and manufacturing facility. The emergency responses will include facility personnel and the municipal offices to establish the response for each potential spill at the facility. The following regulations are being addressed in the ICP:

### Federal Regulations

29 CFR 1910.38  
29 CFR 1910.120 (p) and (q)  
29 CFR 1910.134  
29 CFR 1910.146  
29 CFR 1910.157  
40 CFR 122  
40 CFR 265 Subpart D  
40 CFR 262

### State Regulations

310 CMR 30.340  
310 CMR 30.516  
310 CMR 50.520  
310 CMR 40.0000

The facility currently handles the following materials that warrant this planning:

Corrosives – Etching Solutions  
Flammables – Low Flash Naphtha and Solvents  
Combustibles – Solvents, Fuels  
Toxics – Photoprocessor (Silver)

## 2. Facility Description

Facility Name: “Company B”, Co.

Owner: “Company B”, Co.  
(*name*)  
(*address*)

Facility Mailing Address: (*address*)

Facility Phone Number: (*number*)

File name and revision number

Facility Fax Number: (number)

Latitude: (degrees) Longitude: (degrees)

EPA ID Number: (number)

NAICS/SIC Code: (number)

Oil Storage Start Date: (date)

### 3. Key Contacts for Plan Development and Maintenance

#### “Company B”, Co.

(name), Safety and Environmental Coordinator

Work (number)

Home (number)

Beeper (number)

(name), Alternate Emergency Coordinator

Work (number)

Home (number)

Beeper (number)

#### City of (name)

Captain (name), Fire Department

Work (number)

(name), Mayor's Assistant for (town), LEPC

Work (number)

#### Others

Leonard Wallace, United States Environmental Protection Agency

Work (617) 918-1835

(ICP contractor)

Work (number)

#### 4. Site Description

The Site consists of approximately 3 acres of land located at *(address)* between the *(name)* Canal and the *(name)* River. Refer to Figure 1, a Site Locus, on Page X *(site locus not included here)*. The entire property is zoned for industrial use.

The “Company B” complex consists of five major buildings with several storage sheds. Buildings 100 and 200 are the primary manufacturing buildings. Building 300, the Ames building, is the administration building. Building 400 is used as an incoming warehouse. Building 111 is the maintenance building. Figure 2, a Site Plan, on Page X *(site plan not included here)* demonstrates the locations of these buildings. “Company B” is registered as a Large Quantity Generator of hazardous waste.

“COMPANY B” produces nameplates from aluminum, brass, and stainless steel sheets. Incoming sheet metal is mechanically surface-treated and washed with an alkaline cleaner. Selected aluminum sheets and selected stainless steel sheets are masked, etched, painted, cleaned, varnished, cut, and shipped as finished product. Other aluminum, stainless steel, and brass sheets are surface coated, varnished, cut, and shipped. Etching of aluminum is completed on a different production line from the line used to etch stainless steel and brass. Aluminum, brass, and stainless steel etching employs strong acid solutions. Cleaning, surface coating, and painting generally employ flammable/ combustible solvent-based materials. Toxics are used in the photoprocessing area located in Building 210.

Table 1 lists the main chemical storage areas. Figure 3, Storage Areas, on Page X *(this figure not included)* locates the main storage areas. The toxics, inks, and varnishes used at the “COMPANY B” facility are in small quantities therefore not included in Table 1.

<b>Location</b>	<b>Type of Container</b>	<b>Material Stored</b>	<b>Approx. Qty. – Gallons</b>
Paint storage shed	1-5 gallon cans	Paint and thinner	500
Vault, west side of Bldg 100	275-gallon tank	VM&P Naphtha	200
Hazardous waste shed	55-gallon drums	Flammable hazardous waste	1,000
Tank south of Bldg 100	Bulk storage tank	Ferric chloride	2,000
Tank south of Bldg 100	Bulk storage tank	Hydrochloric acid	600 (Tank can hold 3,000)
Tank north of Ames Building	Bulk storage tank	Mixed acid waste	4,000
VST south of Bldg 200	2,000-gallon VSTs	Heating oil	1,500
VST north of Bldg 100	2,000-gallon VST	VM&P Naphtha	1,400
Acid storage shed	15-gallon and 30-gallon containers	Nitric, sulfuric, and hydrofluoric acids	500

VST = Vaulted Storage Tank

Vehicular access to the “COMPANY B” facility is from *(street leading to facility)*. The *(name of town)* River, located approximately 50 feet east of the facility,

receives storm water runoff from the facility. This runoff includes roof drainage and surface runoff associated with the “COMPANY B” parking lot located at the southern portion of the property and catch-basins located on the paved areas surrounding the manufacturing buildings. Figure 4, Drainage Areas, on Page X (*this figure not included*) demonstrates the main drainage areas for the facility. The storm water runoff is the subject of a National Pollutant Discharge Elimination System storm water multi-sector general permit filed in compliance with storm water regulations.

Figure 1 – Site Locus Map

Figure 2 – Site Plan

Figure 3 – Storage Areas

Figure 4 – Drainage Areas

*(not included here)*



## II. CORE PLAN ELEMENTS

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The core plan is intended to reflect the essential steps necessary to initiate, conduct, and terminate an emergency response action. Operating hours are from 7:00 am to 3:45 pm for manufacturing operations and 7:00 am to 5:00 pm for administration.

### 5. Discovery

Upon discovery of an incident or an audible or visual alarm activated during operating hours, notify the area foreman or the Emergency Coordinator. Any plant employee is trained to notify, as plant personnel are likely to be the first observers of an emergency situation. The foreman will then notify the Emergency Coordinator as required. . If either the area foreman or Emergency Coordinator is not available, contact the in-plant operator by dialing zero (0).

The following are the automatic alarm systems at the facility:

#### **Building 100 – Wastewater Treatment Room Audible Alarm**

This alarm can be triggered by the following incidents:

- Low pH Stage I
- Low pH Stage II
- Low level acid cleaning tank
- Low pH, high pH, and high level in holding tank
- High pressure and high level in crossflow filtration tank
- High level in waste acid tank
- Low level and high level in sodium hydroxide tank
- High level in two sludge tanks
- Sump pump activation (ADT Alarm) Wastewater Spill/Overflow

Each alarm has an individual light to indicate which alarm was activated.

#### **ADT Security Services, Inc. Audible Alarms**

In the event of any one of the following occurring during non-operating hours, ADT Security Services, Inc. will notify the Emergency Coordinator for “COMPANY B” about the incident:

- Wastewater Spill/Overflow
- Flooding
- Fire
- Break In – Multiple Points

When these alarms are activated, audible and visual alarms on an alarm panel in the Building 100 office area are also activated.

**Fire Audible Alarms**

Low Pressure Activation in Building 100 and Building 200 1st Floor (ADT Alarm Fire)

VM&P Naphtha Underground Vault Audible Alarm  
Lower Explosive Level (LEL)  
Leak Detection Vault Level

Pull boxes located in the first floor mechanical room and outdoors are connected to the Fire Department. The pull boxes are also visual alarms.

After non-operating hours, the Emergency Coordinator or Alternate Emergency Coordinator should be notified via telephone. Emergency Contact Numbers shall be posted prominently at most telephones located throughout the facility.

Use the following list of telephone numbers:

**Primary Emergency Coordinator** ----- (name)  
Telephone (Office) ----- (number)  
Pager ----- (number)  
Telephone (Home) ----- (number)

**Secondary Emergency Coordinator** ----- (name)  
Telephone (Office) ----- (number)  
Pager ----- (number)  
Telephone (Home) ----- (number)

Emergency beeper codes:      Chemical Spill      x555555  
   Fire      x777777  
   Other      x999999

**6. Initial Responses**

This section provides response actions to be carried out by facility personnel or contracted personnel under the ICP to ensure safety of the facility and to mitigate or prevent a release or the substantial threat of a release. Use the following flowchart as a reference:

***(the plan includes a large flowchart here, mapping out the steps for responses to different scenarios - fire, spill, medical emergency, etc. Each scenario is broken out in a question/answer format - "Does the spill exceed reportable quantities?")***

## Initial Response Flowchart

***a. Internal and External Notifications***

**1) Internal Notifications**

The following emergency contacts shall be summoned either directly or by telephone in the event of a spill of any quantity that is either indoors or outdoors on the property. If the spill occurs during normal business hours, contact the in-plant operator by dialing zero (0). Emergency Contact Numbers and the following list shall be posted prominently at most telephones located throughout the facility. When reporting a spill, the following information should be provided:

- Identity of caller
- Contact phone number
- Location of spill
- Type of product spilled
- Quantity spill
- Extent of actual and/or potential water pollution
- Date and time of spill
- Duration of spill (sudden vs. non-sudden)
- Cause of spill

**Beeper codes:** Chemical Spill x555555  
Fire x777777  
Other x999999

**Primary Emergency Coordinator** ----- (*name*)  
Telephone (Office) ----- (*number*)  
Pager ----- (*number*)  
Telephone (Home) ----- (*number*)

**Secondary Emergency Coordinator** ----- (*name*)  
Telephone (Office) ----- (*number*)  
Pager ----- (*number*)  
Telephone (Home) ----- (*number*)

**Response Team Member**----- (*name*)  
Telephone (Office) ----- (*number*)  
Pager----- (*number*)  
Home----- (*number*)

**Response Team Member**----- (*name*)  
Telephone (Office) ----- (*number*)  
Pager----- (*number*)  
Home----- (*number*)

**Responsible Corporate Official** ----- (*name*)  
Telephone (Office) ----- (*number*)

**Chief Financial Officer** ----- (*name*)  
Telephone (Office) ----- (*number*)

**Public Relations**----- (*name*)  
Telephone (Office) ----- (*number*)

**Human Resources**----- (*name*)  
Telephone (Office) ----- (*number*)

Home phone numbers for the Chief Executive Officer, Chief Financial Officer, Public Relations Contact, and Human Resource Contact are provided to the Emergency Coordinators on a wallet size card and are not for general publication.

### **Internal Evacuation Alarm**

Employees are oriented to respond immediately to an alert over the internal paging system to evacuate all or a portion of the facility. The paging system is audible to workers throughout the plant under normal operating conditions.

## 2) External Notifications

The Emergency Coordinator or person under the Emergency Coordinator's direction shall make the necessary contact with outside support groups and regulatory agencies.

**Spill Contractor:** (company) (number)

In the event of a spill unable to be controlled by the "COMPANY B" Emergency Response Team, (company) will provide professional services for the removal and disposal of contaminated material. Also, in the event of a tank rupture, the tank will be repaired or replaced by (company) per the direction of the (name of town) Fire Department. The following is a list of other spill contractors:

<b>Company</b>	<b>Contact</b>	<b>Phone Number</b>
(company)	(name)	(number)
(company)	(name)	(number)
(company)	(name)	(number)

**Licensed Site Professional:** (name) (number)

The Emergency coordinator is responsible for **IMMEDIATE NOTIFICATION** (within 2 hours of discovery by company personnel) to the following authorities and agencies if a release to the environment (soil, groundwater, surface water, or air) greater than the reportable quantity occurs within 24 hours. Immediate response actions should be coordinated with a Licensed Site Professional pursuant to the Massachusetts Contingency Plan (310 CMR 40.0411(3)) but notification must not be delayed. Emergency phone numbers will be posted at telephones in maintenance areas and in the offices of the Emergency Coordinator.

### Local Agencies:

Fire Department	911 or (number)
Emergency Medical Service	911 or (number)
Police Department	911 or (number)
Conservation Commission	(number)
(name) River Watershed Association	(number) (before 3:30 pm) (number) (after 3:30 pm)
(name) Wastewater Treatment Plant	(number)

### Regulatory Agencies:

Local Emergency Planning Committee (LEPC)  
Mayor's Office LEPC Chair (number)

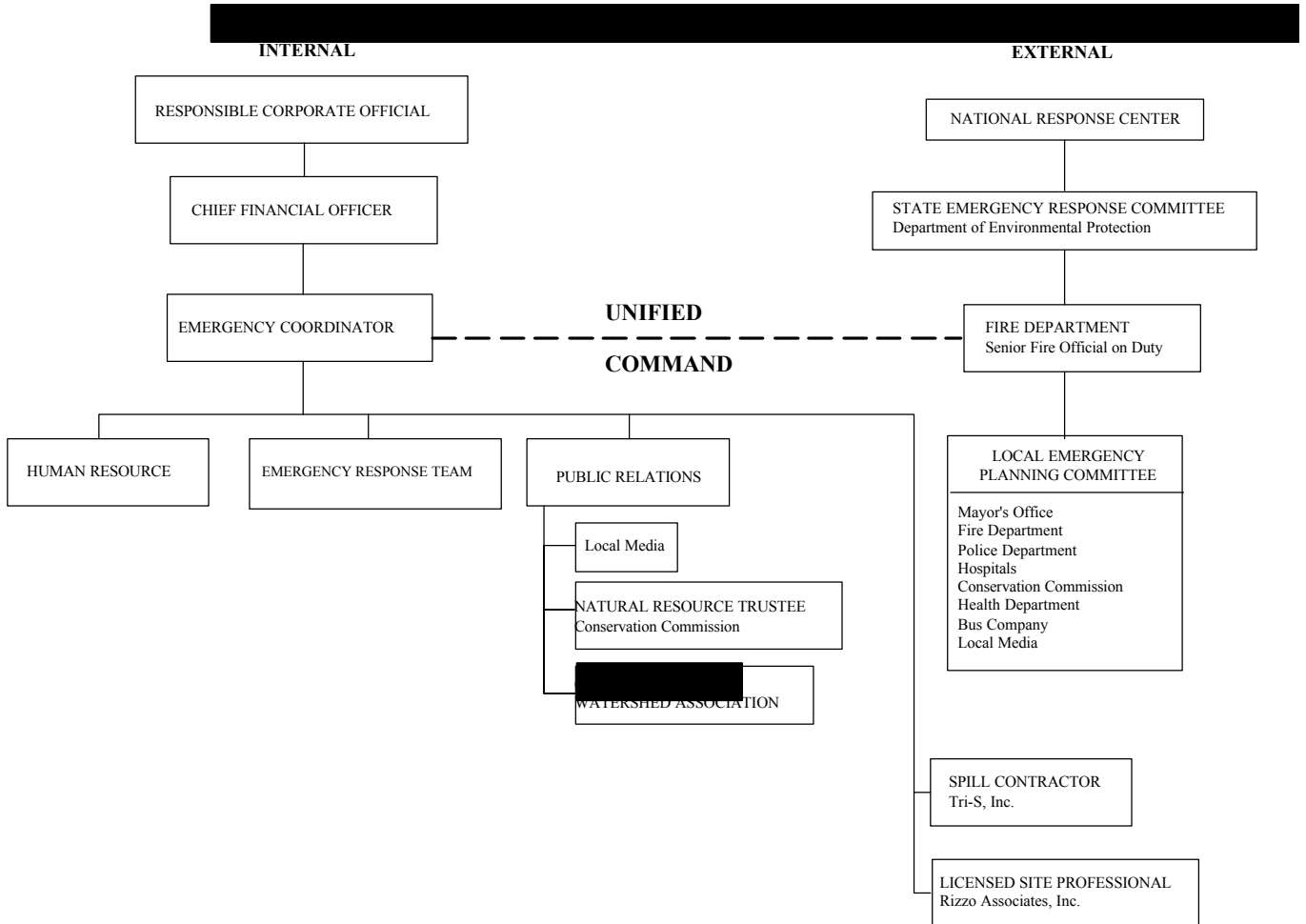
State Emergency Response Commission (SERC)  
Massachusetts DEP Emergency Response Branch  
(address)  
Business Hours: (888) 304-1133 (24-hr.)

National Response Center (800) 424-8802 (24 hr.)  
If no answer, one of the following alternates:  
U.S. EPA: (617) 223-7265 (24 hr.)  
U.S. Coast Guard: (617) 223-8600 (24 hr.)

**FAILURE TO NOTIFY A REPORTABLE SPILL IS A CRIMINAL OFFENSE  
PUNISHABLE BY FINES, IMPRISONMENT, OR BOTH.**

**b. Establishment of Response Management Structure**

The following is the organization chart for “COMPANY B” Response Management Structure.





### ***c. Preliminary Assessment***

For purposes of this ICP, the level of effort for response is divided into three groups:

- Level 0 (Internal Response)
- Level 1 (Within Property Boundaries)
- Level 2 (Beyond or Threat Beyond Facility)

Level 1 and 2 correspond to Level 1 Response and Level 2 Response in the LEPC plan.

### ***d. Establishment of Objectives and Priorities for Response***

#### **1) Immediate Goals/Tactical Planning**

These response actions are to be carried out by facility personnel or contracted personnel under the response plan to ensure human health, public safety, public welfare and environment. The following procedure is to be carried out under the direction of the Emergency Coordinator.

1. Clear persons from the impacted area to a safe distance to minimize the number of people at risk within the facility.
2. Mobilize trained responders to contain the hazard without taking extraordinary risk of harm to life or health to minimize the risk of harm to:
  - public safety,
  - environment, or
  - property damage.
3. Contain the incident within the facility boundaries – particularly avoiding release to storm drains.
4. Coordinate actions with support groups and establish clear lines of communication for effective response.

#### **2) Mitigating Actions**

Mitigating actions are tailored to make a situation less severe.

1. **Automatic detectors and alarms** –Detectors and alarms have been installed for prompt detection and recognition of emergency incidents. Personnel must react to alarms immediately. Automatic fire suppression systems are located in Building 100.
2. **Hazard recognition training** – Operations personnel have been trained to recognize incidents and alarms and must immediately call the plant operator to mobilize the in-plant Emergency Response Team.
3. **Containment and control** - This is accomplished through rapid deployment of the trained in-

plant Emergency Response Team.

4. **Outside Support** – The Emergency Coordinator will recognize the more serious incidents that may exceed the capability of the Emergency Response Team.
5. **Communication** - Communicate necessary information to stakeholders affected by the incident.

### 3) Response Resources

Response resources include contractors and supplies. This section presents a listing of contractors, an overall inventory of the emergency equipment on-hand at the manufacturing building, and suppliers. Major changes to this section will require updating the ICP. Minor inventory fluctuations due to the use of expendable equipment does not require an ICP update, provided that the equipment has been ordered for immediate replacement.

It shall be the responsibility of the Emergency Coordinator to ensure that spill response and personal protective equipment is available and in working order. The Emergency Coordinator will also have primary responsibility for coordinating the maintenance of the fire control equipment (alarm system, sprinkler system, and the fire extinguishers).

**Contractors:** In the event of a spill unable to be controlled by the “COMPANY B” Emergency Response Team, “COMPANY B” will hire a spill contractor. As indicated above, (*company*) is the main spill contractor for “COMPANY B”.

The spill contractor will supply all the necessary laborers and tradesmen to assist with an emergency (e.g. electrician, pipe installers). In addition, the spill contractor will provide supplies necessary to contain a release not limited to equipment and/or chemicals.

**Emergency Equipment:** Communication, fire control, power control, spill control, and personal protective equipment are provided at the facility. Each are summarized below.

#### Communication

On-site and off-site telephone service and an internal intercom system are available throughout the facility.

An audible outdoor fire alarm bell is installed at the facility and is automatically energized when the sprinkler system is activated.

#### Fire Control

In case of fire, the fire alarm locations are:

Alarm Number	Type	Building	Floor	Location
1	Pull Box	100	E	Alley by Maintenance
2	Pull Alarm	100	1	Inside Paint Shop
3	Pull Box	300	E	Front Entrance
4	Pull Alarm	300	1	Hallway Just Inside Door

Automatic wet deluge sprinkler systems are used for the facility:

1. Wet system Building 100 –476 heads
2. Dry system Building 111 – heads covered under Building 100
3. Wet system Building 200 & 201 – 458 heads
4. Wet system Building 300 –138 heads

Three fixed suppression systems are used in Building 100:

1. Conveyed Degreaser Protection – Automatic
2. VM&P Bunker – Automatic
3. Paint Shop – Pull Handle Operated

### **Power Control**

The main switch for power for the entire Site is located along the southern wall inside Building 200. Another control is a button located along the southern wall outside Building 200. Refer to Figure 5, Page *X* (*this figure not included*), for the locations. There is no emergency power at the facility except for emergency lighting.

Fire extinguishers are located throughout the facility. The following is a list of the fire extinguisher locations:

Type	Building	Floor	Number
ABC	Distillation Shed	1	1
BC	Paint Shed	1	1
ABC	100	Basement	1
ABC	100	1	3
BC		1	12
A		1	1
BC	100	2	3
A		2	1
BC	100	3	2
ABC	111	1	2
BC		1	2
A		1	3
A	200	Basement	1
ABC	200	1	2
BC		1	7
BC	200	2	1
A		2	5
BC	200	3	5
BC	200	4	4
A		4	3
BC	200	5	1
ABC	201	1	2
BC		1	3
ABC	201	2	1
BC		2	1
ABC	300	Basement	1
A		Basement	1
A	300	1	4
ABC	300	2	2
A		2	4
ABC	400	1	1
BC		1	1

Types: A – pressurized water B – carbon dioxide C- dry chemical

**Spill Control**

The following is a list of the spill control equipment for the facility. Refer to Figure 5, Response Equipment, on Page X (*this figure not included*) for the locations of the spill response equipment.

<b>Spill Equipment</b>	<b>Location and storage</b>
Silwik Absorbent Pillows Absorbent Pigs	Acid Chemical Deck behind Building 300
Silwik Absorbent Pillows 3 Bags of Sodium Bicarbonate Traffic Cones Caution Tape Drain Covers	Shed Above Wastewater Treatment Deck
Absorbent Pads Stakes Plugs for drains Liquid absorbent (Grab & Go™) Gap seal for petroleum hydrocarbons	HAZMAT Room in Building 300
Air Pumps Hoses Silwik Overpack Drum	Paint Room next to Etch Room
Two Overpack Drums	Next to Paint Oven Conveyor
Overpack Drum Plastic Drum Metal Drums Silwik Absorbent Pigs	Barrel Waste Storage Shed Behind Etch Building
Metal Barrels Plastic Barrels Silwik Absorbent Pigs	Stock Room

Figure 5 – Response Equipment  
(*not included here*)

### **Personal Protective Equipment**

The following personal protective equipment is available at “Company B” for use by personnel during an emergency.

- Six cartridge-type air purifying respirators (Only employees trained in the selection and use of respirators per 29 CFR 1910.134 may use respirators.)
- Chemical resistant gloves
- Hard hats, goggles & face shields
- Chemical resistant clothing i.e. (aprons, jackets, suits)
- Boots
- Safety showers:
  1. Wastewater treatment area
  2. Two in etching area hallway Building 100
- Eye wash stations:
  1. Wastewater treatment area
  2. Building 107
  3. Two in etching area hallway Building 100
  4. Stock room by Emergency Door
  5. Stockroom by Okite machine
  6. Tool room sink by Acid Etching Area (sink mounted style)
  7. Building 200, First Floor
  8. Art department 2nd floor, developing area
  9. Metal Photo department
  10. Print Department by bathroom
  11. Art room 4th floor, die block sink

The Material Safety Data Sheets in the Hazard Communication Program advise the level of protection necessary to safely work with these chemicals. The Emergency Coordinator will use this reference and other sources of information (i.e., manufacturer's literature) as a guide to determining the level of protection that response personnel will employ when responding to a release. Only employees trained in the selection and use of respirators per 29 CFR 1910.134 may use respirators.

#### ***e. Procedures for Implementation of Tactical Plan***

The following response actions are to be followed in the event of hazardous material releases, fires and/or explosions, power outages, severe storm events, medical emergencies, and hostile threats. Pertinent phone numbers are posted at telephone locations throughout the facility and are listed in the Internal and External Notifications.

## 1) Evacuation Plan Procedure

Verbal warning by the in-plant intercom system and/or runner(s) appointed by the Emergency Coordinator will be used to warn personnel of required evacuation. In the event that plant or building evacuation is deemed necessary, "Company B" personnel shall initiate the following response actions.

1. The Emergency Coordinator will direct the evacuation.
2. Personnel should ensure that tools, carts, and associated items are not blocking aisles, if possible, to prevent obstructions during evacuation. This will also allow emergency crews and equipment to pass.
3. In cases where the building is being evacuated, operators should shut down their machinery, if safe and possible.
4. Employees, contractors, and visitors will leave the facility in an orderly manner. Visitors and contractors must be escorted by "Company B" personnel.
5. Personnel should not attempt to obtain personal belongings unless otherwise authorized.
6. Personnel should walk quickly and quietly to the designated area and stay with supervisors in departmental groups.
7. During an evacuation, the Emergency Coordinator and appointed aides will ensure that unauthorized personnel are kept from entering the evacuated areas. The Assistant Coordinator will check with area foremen to determine status of department personnel.
8. The supervisors of departments will account for personnel in their department to ensure that no one has been left behind. Supervisors will report to Assistant Coordinator whether personnel are accounted for or are missing.
9. The decision to re-enter the facility will be made by the Emergency Coordinator with consultation from the (*name of town*) Fire or Police Department personnel.
10. The Emergency Coordinator will obtain rescue services for injured people, where required.
11. Emergency personnel will shut off electrical power if possible and safe to do so.
12. In the event that the primary evacuation route is blocked or determined not to be appropriate an alternate route will be followed. The primary and alternate evacuation routes are as follows:

**Primary Evacuation Route:** Proceed to your nearest exit, as indicated on the pictorial descriptions included in Annex 3, and exit the building. If the primary route of egress is not available use the secondary route of egress as indicated on the pictorial descriptions. Do not use the elevators. After exiting the building move east to the parking lot quickly and in an orderly fashion. The muster location is the main parking lot.

**Alternate Evacuation Route:** If directed to use the alternate route, please use the following. Proceed to your nearest exit, as indicated on the pictorial descriptions included in Annex 3, and exit the building. If the primary route of egress is not available use the secondary route of egress as indicated on the pictorial descriptions. Do not use the elevators. Proceed out of the buildings and move West to the gate by the dumpsters. Exit through the gate and move into the parking lot of Ames Privilege Apartments. The muster location for the alternate route is the parking lot near the large smokestack.

13. The following are the stations for the emergency personnel in the event of an evacuation:
  - Emergency Coordinator - Berm aside Building 300
  - Assistant Coordinator - Parking Lot
  - Team Member 3 - Roadway between 200 & Fire Escape
  - Team Member 4 - Roadway outside Accounting
14. The above stations will be manned to help in crowd control and assist the evacuation. Stations will only be manned if safe and possible. Stations may not be manned if personnel are dealing with other emergencies or attempting damage control.

Figure 6 on Page *X* (*this figure not included*) demonstrates the muster locations for evacuation. The evacuation routes for every floor in each building are included in Annex 3.  
**(original plan includes a map of muster locations)**



## 2) Medical Emergency Procedures

The response actions to be taken by “Company B” personnel in the event of a medical emergency or personal injury related to acute illnesses (i.e., heart attack), industrial accidents, exposure to hazardous materials, or fire are detailed below.

1. Notify the area foreman or the Emergency Coordinator. The foreman will notify the Emergency Coordinator as required.
2. The Emergency Coordinator or his designatee will summon emergency aid from outside the facility, if necessary. If situation is life threatening any supervisor may summon emergency aid from the outside. If a head, neck, or back injury is involved, only a professional medical team shall move the victim unless the situation is life threatening. It is not the responsibility of “Company B” personnel to administer first aid. Any employee who does administer first aid does so at his or her own risk.
3. Determine the cause of the medical hazard. Take precautionary measures to protect facility personnel from further medical injury.
4. “Company B” response personnel will eliminate and continue to restrict any medical hazard via the use of emergency equipment, such as fire extinguishers and spill control equipment.
5. In the event of a chemical exposure, the Emergency Coordinator shall immediately forward the appropriate Material Safety Data Sheets to on-site emergency response personnel and to the appropriate hospital, as necessary.
6. “Company B” response personnel will not enter small buildings during emergencies when the possibility of asphyxiation exists or confined spaces (i.e., the naphtha vault) at any time. Regulatory requirements relative to confined space entry (29 CFR 1910.146) must be met. Such entry will be performed by outside personnel such as the *(name of town)* Fire Department, who are trained in the use of self-contained breathing apparatus.

### 3) Spill of Oil and/or Chemicals Procedure

The response actions taken by “Company B” personnel in the event of a release of oil, hazardous materials, or hazardous wastes at the facility are detailed in this section. If the release threatens or enters surface water or groundwater, the spills to surface water and groundwater procedure on Page 28 should be followed.

**Immediate Threat to Worker:** An immediate threat to worker is when a spill of oil or chemical threatens life or exposure to acute health impacts to unprotected workers whether by routes of ingestion, inhalation, or dermal absorption. Personnel must evacuate the hazard area immediately.

**Imminent Hazard:** Notification to the Massachusetts Department of Environmental Protection within 2 hours is required if the following occurs at “COMPANY B”. The Licensed Site Professional for “COMPANY B” should be consulted with regards to the notification.

- A release to the environment which results in the presence of oil and/or hazardous material vapors within buildings, structures, or underground utility conduits at a concentration equal or greater than 10% of the LEL
- A release to the environment of reactive or explosive hazardous material as described in 310 CMR 40.0347
- A release to roadway that endangers public safety
- A release to the environment of oil and/or hazardous material which poses a significant risk to human health when present for even a short period of time, as specified in 310 CMR 40.0950
- A release to the environment of oil and/or hazardous material which produces immediate or acute adverse impacts to freshwater or saltwater fish populations
- A release to the environment indicated by the measurement of concentrations of hazardous material, equal or greater than any of the following concentration at ground surface or within a depth of six inches below ground surface at any location within 500 feet of a residential dwelling, school, playground, recreation park, unless access by children is controlled or prevented by means of bituminous pavement, concrete, fence, or other physical barrier:

Arsenic (total)	40 (µg/g)
Cadmium (total)	60 (µg/g)
Chromium (VI)	10,000 (µg/g)
Cyanide (available)	100 (µg/g)
Mercury(total)	300 (µg/g)
Methyl Mercury	10 (µg/g)
PCBs (total)	10 (µg/g)

**Reportable Quantities:** The Emergency coordinator is responsible for IMMEDIATE NOTIFICATION (within 2 hours of discovery by company personnel) to the following authorities and agencies if a release to the environment (soil, groundwater, surface water, or air) greater than the reportable quantity (RQ) occurs within 24 hours. Immediate response actions should be coordinated with a Licensed Site Professional pursuant to the Massachusetts Contingency Plan (310 CMR 40.0411(3)). Emergency phone numbers will be posted at telephones in maintenance areas and in the offices of the Emergency Coordinator and Alternates.

Chemical Name	CAS Number	CERCLA RQ (pounds)	DEP RQ (pounds)	DEP RQ (gallons)	NRC (pounds)
Asphalt	NA	NA	100	13.50	NA
Ferric Chloride	7705-08-0		50	5	NA
Hazardous Waste	NA		10		10
Heating Oil	68476-30-2		NA	10	Sheen
Hydrochloric Acid	7647-01-0		100	10.36	5,000 (gas only)
Hydrofluoric Acid	7664-39-3		10	1.20	100
Nitric Acid	7697-37-2		50	4.85	1,000
Sodium Hydroxide	1310-73-2		50	NA	1,000
Sulfuric Acid	7664-93-9		50	3.60	1,000
VM&P Naphtha	8032-32-4		NA	10	NA

NA – Not Applicable

A spill of GREATER THAN 10 GALLONS OF OIL (the reportable quantity for OIL) or SPILL OF ANY QUANTITY OF OIL THAT HAS REACHED a surface water, or into a sewer, ditch, or culvert is immediately reportable, by law, to the fore mentioned municipal, state, and federal authorities.

If the release takes longer than 24 hours to exceed the reportable quantity and has migrated beyond the facility, then the Emergency Coordinator needs to report the spill to the LEPC and SERC.

**THE RELEASE OR THREAT OF A RELEASE OF CERTAIN HAZARDOUS MATERIALS REQUIRES EMERGENCY NOTIFICATION. THE TIME CLOCK FOR NOTIFICATION STARTS ONCE THE SITUATION IS DISCOVERED NOT WHEN THE INCIDENT WAS REPORTED TO THE EMERGENCY COORDINATOR.**

**Spill – General:** The following is the first procedure for a spill.

1. Notify the area foreman or the Emergency Coordinator. The foreman will notify the Emergency Coordinator as required.
2. If it can be done safely, minimize spreading of the release by using absorbent booms, socks, or Speedy-Dri. Otherwise, leave the area and wait for emergency response personnel to arrive.
3. The Emergency Coordinator will attempt to determine if there are any injuries or exposures.
4. The Emergency Coordinator will notify the (*name of town*) Fire Department and provide the type of product and quantity spilled, the location of the spill, and any injuries or exposures
5. An emergency zone around the hazard area shall be established by the Emergency Response Team to prevent unauthorized entry. If necessary, a supervisor will isolate the area prior to team arrival. At no time is the supervisor to risk his/her life to isolate the area.
6. The Emergency Coordinator will identify and assess the character, source(s), amount, and extent of released materials.
7. The Emergency Coordinator will determine the level of response required to approach the chemical release. The Emergency Coordinator will use Material Safety Data Sheets and professional judgment to define the level of emergency response to be used.

**City Sewer System:** If a spill inside the building threatens the city sewer system, the Emergency Coordinator will contact the *(name of town)* Wastewater Treatment facility to alert the operator of the situation. The phone number is provided on Page 41.

Following the spill cleanup operations, an assessment shall be made as to the proper handling of recovered materials. Laboratory analysis of the recovered material may be necessary to determine the appropriate disposal method for the material.

**Spill Threat - Surface Water and Groundwater:** Storm drains at “COMPANY B” discharge ultimately to the *(name of town)* Canal. The locations of these drains and drainage areas are shown on Figure 4, Page *X (this figure not included)*. The topography of the “Company B” property slopes downward generally toward the *(name of town)* River. Consequently, releases that might occur from the 3,000-gallon virgin chemical tanks, the 4,000-gallon hazardous waste tanks, or the acid storage shed would be expected to migrate to storm drains located east of these storage areas (Catch Basins #1, #2, and #9 on Figure 4, Page *X (this figure not included)*). Close attention must be paid to these catch basins and any catch basins near a chemical storage area.

Groundwater may be impacted by the migration of a spill through soil to groundwater. Since the facility is paved, migration to soil and groundwater is not expected. Currently, groundwater enters the basement of Building 200 during high water table and rainstorms. Catch basin #7 is a dry well and will impact groundwater. Therefore, releases from the paint storage shed, the hazardous waste shed, and during the pumping of VM&P Naphtha from the vaulted storage tank to the Building 100 tank can impact groundwater.

If a spill threatens a surface water body directly over land or directly by entering storm drains, “Company B” emergency response personnel will initiate the following containment actions:

1. Dike and contain the immediate spill area.
2. Immediately install drain covers on the down gradient storm drains as defensive control measure.
3. Use absorbent pillows and pigs, and silwik to absorb the release.
4. Notify *(name of town)* Fire Department.
5. Notify Spill Contractor.
6. Inspect Catch Basin #2 to determine if the spill will impact the *(name of town)* River.
7. Notify the Massachusetts DEP immediately if a spill threatens a surface water body.
8. Refer to Level 2 Response on Page 33.

**Spill - Level 0 Response:** The Emergency Coordinator and Emergency Response Team **will not respond** to a significant spill involving the :

- **Flammable solvent**
- **Hydrochloric acid**
- **Hydrofluoric acid**
- **Nitric acid**

If these chemicals are involved emergency response personnel will order an immediate evacuation of the area and then, at the Emergency Coordinator's discretion, emergency response personnel will attempt to stop the release by shutting off chemical feed systems and/or shutting off electrical power serving the affected area.

**NOTE: These tasks will be conducted only if these tasks can be accomplished from a remote area with no risk of exposure to chemical vapor or explosion sources.**

If the above are applicable to the release, refer to Level 1 Response on Page 32 or Level 2 Response on Page 33 of this section to assess which level is required for the spill.

For a Level 0 Response, the Emergency Response Team will conduct the following:

1. Emergency response personnel will wear the emergency response equipment ordered by the Emergency Coordinator before responding to a release. "Company B" emergency response employees will use either Level D or Level C personal protective equipment, as defined by the OSHA Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120). For spills requiring Level A or B personnel equipment, refer to Level 1 Response on Page 32 or Level 2 Response on Page 33.
2. For releases of flammable materials, response personnel will eliminate and continue to restrict all sources of ignition from the spill area, keeping in mind that dense vapors may collect in drains, sewers, or other low spots, thereby creating an explosion hazard.
3. The Emergency Coordinator or his designatee will summon emergency aid from outside the facility, if necessary.
4. Personnel trained in the use of fire extinguishers per 29 CFR 1910.157 should position fire extinguishers near the impacted area if a flammable or combustible material has been released.
5. Emergency response personnel will dike the released material with absorbent, fuller's earth, or sand and absorb the released material from the impacted area with the absorbent. Non-sparking tools must be used to distribute the absorbent.
6. Emergency response personnel will collect the released material, including the absorbent, into a recovery/salvage drum, ensuring that all contained materials are compatible with one another, and label the drum for identification and proper disposal in accordance with all applicable hazardous waste regulations.

**Spill - Level 1 Response:** This level of response is for a spill:

- Requiring Level B or Level A personal protective equipment,
- Within the property boundaries,
- Not threatening human health or the environment beyond facility, and/or
- Containing flammable solvent, hydrochloric acid, hydrofluoric acid, or nitric acid.

The Emergency Coordinator will conduct the following:

1. Notify (*name of town*) Fire Department.
2. Notify Spill Contractor.
3. All personnel, except those designated by the Emergency Coordinator, shall evacuate the area immediately via the nearest exit and assemble in the employee parking lot at the southern end of the Site.
4. When the Spill Contractor and the Fire Department arrive, primary responsibility will be delegated to them. The Emergency Coordinator(s) should stand by to assist the Fire Department, if needed.
5. Emergency response personnel will contain and collect material via the standard spill response procedures.
6. During an evacuation, the Emergency Coordinator and appointed aides will ensure that all unauthorized personnel are kept from entering the evacuated areas. All employees are to go to the upper parking lot and remain there until told to go back by the Emergency Coordinator. Foremen will take a head count of the employees working in their areas. See Evacuation Section on Page 21 for further information.

**Spill - Level 2 Response:** This level of response is for a spill:

- Requiring Level B or Level A personal protective equipment,
- Threatening human health or the environment beyond facility, and/or
- Containing flammable solvent, hydrochloric acid, hydrofluoric acid, or nitric acid.

The Emergency Coordinator will conduct the following:

1. Notify the Local Emergency Planning Committee through the *(name of town)* Fire Department.
2. All personnel shall evacuate the facility immediately via the nearest exit. See Evacuation Section on Page 21 for further information.
3. When the Fire Department arrive, primary responsibility will be delegated to them. The Emergency Coordinator(s) should stand by to assist the Fire Department, if needed.
4. Emergency response personnel will contain and collect material via the standard spill response procedures.



#### 4) Emergency Procedures for Fire/Explosion

The use of flammable solvents and paints at “Company B” creates the potential for a fire, particularly the use of heated naphtha solvent in Building 100.

Depending on the magnitude of the fire incident, the following emergency procedures will be implemented by “Company B” personnel.

**Fire - Level 0 Response:** This level is for a small fire.

1. Dial the beeper number of the emergency coordinators and enter the beeper code for fire. Notify the (*name of town*) Fire Department.
2. Notify the Emergency Coordinator.
3. If the building or equipment is on fire, area personnel should check the area for hazardous material/hazardous waste storage or other flammable materials and remove all suspected materials from the area, if possible.
4. Response personnel to prevent unauthorized entry into the area shall establish an emergency zone around the hazard area.
5. A member of response team or personnel trained in the facilities fire protection system will be positioned at each of the automatic fire protection sprinkler control valves to aid (*name of town*) Fire Department if necessary.
6. Personnel trained in the use of fire extinguishers per 29 CFR 1910.157 should extinguish flames with fire extinguishers.
7. If a hazardous waste release was involved with the fire, “COMPANY B” emergency response personnel will follow spill response guidelines specified in Spill Response Section. Response personnel must use non-sparking tools when cleaning up a spill of flammable material.

**Fire - Level 1 or Level 2 Response:** These levels are for fires that require additional help.

1. Order an immediate evacuation as directed in the procedure for Evacuation.
2. Notify the (*name of town*) Fire Department.
3. Notify the Emergency Coordinator. Dial the beeper number of the emergency coordinators and enter the beeper code for fire.
4. All personnel, except those designated by the Emergency Coordinator, shall evacuate the area immediately via the nearest exit and assemble in the employee parking lot at the southern end of the Site.
5. If a hazardous material is involved in the fire, an attempt should be made to determine the nature of the burning material using knowledge of the container contents.
6. A member of response team trained in the facilities fire protection system will be positioned at each of the automatic fire protection sprinkler control valves to aid (*name of town*) Fire Department if necessary unless the Emergency Coordinator(s) deems the situation unsafe.
7. When the Fire Department arrives, primary responsibility will be delegated to them. The Emergency Coordinator(s) should stand by to assist the Fire Department if needed.
8. Emergency response personnel will contain and collect material and contaminated fire water runoff with earthen dikes, sand, absorbent, etc. via the standard spill response procedures.
9. During an evacuation, the Emergency Coordinator and appointed aides will ensure that all unauthorized personnel are kept from entering the evacuated areas. All employees are to go to the upper parking lot and remain there until told to go back by the Emergency Coordinator. Foremen will take a head count of the employees working in their areas. See Evacuation Section on Page 21 for further information.

## **5) Emergency Procedures for Power Outage**

This section of the Emergency Response Plan details the initial emergency response steps that shall be taken in the event of a power outage. A power outage constitutes a site-specific emergency relative to the operation of the manufacturing building and has, therefore, been addressed separately. General emergency response procedures for spills, personal injury, and fire/explosion are presented in other sections of this plan.

Response actions to be taken by “Company B” personnel in the event of a power outage are detailed below.

1. Notify the area foreman or the Emergency Coordinator. The foreman will notify the Emergency Coordinator, as required.
2. The Emergency Coordinator will coordinate the appropriate manufacturing building shutdown and start-up procedures with Maintenance Supervisor.

## 6) Emergency Procedures for Severe Weather

This section of the Emergency Response Plan details the initial emergency response steps that shall be taken in the event of severe weather (tornadoes, hurricanes, etc.). Severe weather storms may constitute a site-specific emergency relative to the operation of the manufacturing building and has, therefore, been addressed separately. General emergency response procedures for spills, personal injury, and fire/explosion are presented in other sections of this plan.

**Severe Storm:** In the event of a severe storm, such as a tornado or hurricane, “Company B” personnel shall initiate the following response actions.

1. Notify the Emergency Coordinator as soon as a severe weather warning has been announced.
2. The Emergency Coordinator will monitor the severe storm warning and alert the Plant Manager or his designatee of the situation.
3. The Emergency Coordinator will direct all loose equipment to be secured to minimize damage from high winds. Above ground bulk storage tanks, when practical, will be appropriately emptied of contents and refilled with water to reduce likelihood of collateral damage from the tanks breaking loose. Drums will be removed from facility when practical otherwise relocated if deemed necessary to prevent release due to severe weather.
4. A decision to shut down the facility operations should be made at least 12 hours prior to storm impact. The Emergency Coordinator, in consultation with the Plant Manager, will decide if shutdown will be required.
5. The Emergency Coordinator shall coordinate the appropriate facility shutdown procedures to be followed. Manufacturing building personnel will be notified of shutdown procedures via the in-plant intercom system and/or a designated runner. Employees may be notified by telephone not to report to work in the event of a plant shutdown. The telephone numbers of local and state emergency response support services are listed in Annex 1 of this plan.
6. The Emergency Coordinator will perform a safety inspection of the facility during the shutdown activities and will monitor the progress of the shutdown operations, especially with regard to the movement of the storm.
7. Once the shutdown operations are completed, the Emergency Coordinator will notify the Plant Manager or his designatee of the status of the shutdown.
8. Following a severe weather emergency the Emergency Coordinator should inspect the facility to verify it is safe for entry and operations.

**Emergency Procedures for Flood:** “Company B” is not located within the 100-year or 500-year frequency flood boundary; therefore, the requirements of 310 CMR 30.340(1)(d)(2) regarding precautions during a flood do not apply.

## 7) Emergency Procedures for Hostile Threat

This section details the initial emergency response steps that shall be taken in the event of a hostile threat including bomb threats and suspicious packages. Additional information regarding bomb threats and suspicious packages are included in Annex 3. A hostile threat constitutes a site-specific emergency relative to the operation of the facility and has, therefore, been addressed separately. General emergency response procedures for spills, personal injury, and fire/explosion are presented in other sections of this plan.

The response actions to be taken by “Company B” personnel in the event of a hostile threat are detailed below.

1. Get detailed information on the source of the threat as may be available including the description of any suspicious items, markings or identifying addresses, **BUT DO NOT TOUCH OR MOVE ANY SUSPICIOUS PACKAGE OR ITEM.**
2. Notify the Emergency Coordinator or department foreman of the threatening situation and detailed information about it. The foreman will immediately notify the Emergency Coordinator.
3. The Emergency Coordinator will immediately notify the *(name of town)* Police and Fire Departments.
4. The Emergency Coordinator will make the decision whether to evacuate all or a portion of the facility and immediately notify plant personnel via the in-plant intercom system and coordinate response actions with the *(name of town)* Police. All evacuated employees are to go to the upper parking lot and remain there until told to go back by the Emergency Coordinator. Foremen will take a head count of the employees working in their areas.
5. Primary responsibility for the situation will be delegated to the *(name of town)* Police or Fire Departments.

The Emergency Coordinator will consult with the lead response agency before directing employees to reenter the facility.

## 8) Emergency Procedures for LEL Alarm Activation

The storage of flammable solvents in a vaulted underground tank at “COMPANY B” creates the potential for the buildup of flammable vapors in excess of the Lower Explosive Limit (LEL). To help reduce the threat an LEL meter has been installed in the vault to measure the percent (%) of solvent vapors in relation to the solvent's LEL. This section details the emergency response following the activation or triggering of the alarm.

1. Contact the emergency coordinators and if necessary, dial the beeper number and enter the beeper code for other.
2. Notify the Emergency Coordinator.
3. Notify the *(name of town)* Fire Department.
4. Emergency personnel should check the area for hazardous material/hazardous waste storage or other flammable materials and remove all suspected materials from the area, if possible.
5. Response personnel to prevent unauthorized entry into the area shall establish an emergency zone around the hazard area. If necessary, personnel, except those designated by the Emergency Coordinator, shall evacuate the area immediately.
6. Personnel trained in the use of fire extinguishers per 29 CFR 1910.157 should be present to provide fire watch.
7. Response personnel must use non-sparking tools when cleaning up a spill of flammable material.
8. When the Fire Department arrives, primary responsibility will be delegated to them. The Emergency Coordinator(s) should stand by to assist the Fire Department, if needed.

## *f. Procedures for Mobilization of Resources*

The Emergency Coordinator has authority to engage private outside support contractors

- If the incident requires a Level 0 Response, the Emergency Coordinator(s) and response team members will handle the incident with notification to the Fire Department.
- If the incident requires a Level 1 Response, the Emergency Coordinator(s) will initiate the response effort, then notify the Fire Department and the emergency response contractor for additional help.
- If the incident requires a Level 2 Response, the Emergency Coordinator(s) will initiate the response effort, then notify the Fire Department, and the LEPC.

## **7. Sustained Actions**

This section outlines the actions to be conducted during a prolonged emergency.

**Personnel** – Since the “COMPANY B” Response Team is limited to four people (2 Emergency Coordinators and 2 Emergency Response Team Members) one Emergency Coordinator and one Response Team Member need to alternate 8-hour shifts to supervise the response effort.

**Equipment & Supplies** – The current spill contractor has a sufficient amount of equipment and supplies to handle a prolonged emergency at “COMPANY B”

**Financial** – The Chief Financial Officer will be summoned to approve costs associated with sustained emergency response activities.

**Business Interruption/Resumption** – Human resources will communicate to employees whether operations will be open the next day and who should report to “COMPANY B”.

**Public Relations** – The President of “COMPANY B” will provide information to the local press and will be regularly informed by the Emergency Coordinator about the situation at “COMPANY B” and immediately notify if there is a significant change of events.

## **8. Termination and Follow-up Actions**

### *a. Internal Activities*

Once the incipient emergency has been abated, the Emergency Coordinator will supervise the completion of the response action. This activity includes, at a minimum, the following.

1. Supervise cleanup actions to ensure that any released material is properly contained, identified, and labeled for disposal/treatment. Make arrangements to dispose of waste.
2. Ensure that all containerized waste materials are properly stored.
3. Supervise the decontamination, cleaning, and preparation of emergency equipment for future use. Decontamination, the removal of contaminants that have accumulated on personnel and

equipment, is critical to the health and safety of those who work in contaminated areas. All personnel, clothing, equipment, and samples leaving a contaminated area must be decontaminated to remove any harmful materials that have adhered to them.

- Using Material Safety Data Sheets or manufacturers literature, the Emergency Coordinator will determine decontamination methods based on the chemical, physical, and toxicological properties of the contaminant and the amount of contamination. (The most likely chemicals that “Company B” response personnel could potentially come in contact with in a response effort are acids, caustics, and flammable solvents.)
  - Expendable equipment, including tyvek coveralls, will be collected in a drum and disposed of accordingly.
  - In general, all nonexpendable equipment, including gloves, boots, respirators, and tools, will be washed using soap and water followed by a clean water rinse.
  - Rinse water will be collected and tested, as necessary, to assure proper disposal.
  - Following completion of the response effort, worker's hands and face will be washed with soap and water before leaving the facility.
  - Spill response contractors will have their own decontamination protocol for spills that they respond to.
4. Replace and restock necessary equipment.
  5. For cleanups of a reportable release, contact a Licensed Site Professional to verify that the release has been properly cleaned up and that the threat to human health and the environment no longer exists.
  6. Within 60 (sixty) days of a reportable release, file an Oil and Hazardous Material Release Notification Form (Annex 4) and a Response Action Outcome form (Annex 4) with the Department of Environmental Protection documenting the emergency and the response action (s) taken if a reportable waste quantity was released. The reports include the following information.
    - Name, address, and telephone number of the facility owner or operator
    - Name, address, and telephone number of the facility
    - Date, time, and type of incident (i.e., fire, spill, etc.)
    - Name and quantities of materials involved
    - The extent of personnel injuries, if any
    - Description of the response actions performed and the estimated quantity and disposition of the recovered materials that resulted from the incident
    - Proposed methods of prevention for future emergencies
    - Approval from the Licensed Site Professional that the release has been properly cleaned up and threats to human health and the environment no longer exist.
- These reports will be sent via certified mail, return receipt requested, to:
- Massachusetts Department of Environmental Protection  
(*region*) Region Office  
Office of Emergency Response  
(*address*)
7. Review the response operations with the facility's Emergency Response Team via one or more meetings where recommendations can be made to improve either the response effort or safety controls within the facility that might prevent the accident from reoccurring in the future. Meetings will be documented with minutes taken and filed in the Emergency Coordinator's office. Modifications to the Emergency Response Plan could result from this review
  8. Fill out an internal Emergency Response Report (see Annex 4) and maintain these reports on



file. This report will contain information similar to that found on a Department of Environmental Protection Release Notification Form.

9. If there is a reportable personal injury prepare the required OSHA documentation including the OSHA 200 log. (See Annex 4)
10. Review the response operations with the supervisor of the area where the release occurred via one or more meetings. Recommendations can be made to improve either the response effort or safety controls within the area that might prevent the accident from reoccurring in the future. Modifications to the ICP could result from this review.
11. All members of the in-plant response team are entitled to seek a medical examination anytime there is a possibility of exposure resulting from the response to an incident.

### ***b. Reporting Requirements***

Based on the quantity released, certain regulations require notification.

#### **1) Releases Triggering Emergency Procedures**

As required by 310 CMR 30.524(f), within 7 days after any incident involving hazardous waste that requires implementing the emergency procedures of this document, a written report shall be sent to the DEP. These procedures are carried out whenever there is a potential for, or there actually is, a fire, explosion, or other release of hazardous waste or waste constituents which could threaten public health, safety, or welfare, or the environment.

The report shall include:

1. The name, address, and telephone number of the owner or operator;
2. The name, address, and telephone number of the facility;
3. The date, time, and type of incident (e.g., fire, explosion);
4. The name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to public health, safety, welfare, or the environment, when this is applicable;
7. The estimated quantity and the disposition of recovered material that resulted from the incident;
8. All differences between the emergency response activities actually taken and those prescribed in the contingency plan and the reasons for each such difference; and
9. Proposed measures to prevent similar incidents in the future.

#### **2) Releases Triggering CERCLA RQ's**

As soon as practicably possible after a release triggering a CERCLA RQ a written follow-up notice must be filed. This notice must:

1. Update information included in the initial notice
2. Provide information on:
  - actual response actions taken
  - advice regarding medical attention necessary for exposed individuals

Send reports to:

Regional Administrator EPA Region I  
JFK Federal Building  
Boston, MA 02203

And

Emergency Response Office  
Division of Hazardous Waste  
Massachusetts DEP  
One Winter Street  
Boston, MA 02108

And

Emergency Response Office  
Division of Hazardous Waste  
Massachusetts DEP  
205 Lowell Street  
Wilmington, MA 01801

And

*(name of town)* Local Emergency Planning Commission  
Safety Complex  
*(address)*

And

*(name of town)* Police Department  
Special Hazards Unit  
*(address)*

### **3) Hazardous Materials Released to the Sewer**

Call to alert the operator of the situation and then send report within 24 hours to:

*(name of town)* Wastewater Treatment Facility  
*(address, phone)*

### *c. Preparation and Prevention*

The Emergency Coordinator has the overall responsibility associated with preparing for and preventing emergency conditions. These duties include the following:

1. Maintaining, operating, and replacing emergency & spill response equipment. This responsibility includes the maintenance of the fire control equipment (fire extinguishers, and non-sprinkler fire suppression systems). Emergency Coordinator is responsible for the following:
  - Fire Extinguisher Visual Inspection - (monthly)
  - Fire Extinguisher Maintenance Check - (annual)
  - Fire Extinguisher Internal Examination and Hydrostatic Test - (every 5 years)
  - Fixed Refillable System Weight & Pressure Check - (semi-annual)
  - Fixed Refillable System Check - (annual)
2. The responsibility for the maintenance of the remaining fire control equipment (alarm system, sprinkler system) has been delegated to the Maintenance Supervisor. Maintenance Supervisor is responsible for the following:
  - Automatic Sprinkler Main Drain Flow Test - (annual)
  - Automatic Sprinkler Inspector Test Valve - (biennial)
3. The Emergency Coordinator is responsible for maintaining a current set of active Material Safety Data Sheets. Inactive Material Safety Data Sheets should be kept in a location separate from the active sheets.
4. The Emergency Coordinator is responsible for maintaining an open line of communication with local emergency response services.
5. The Hazardous Waste Coordinator is responsible for conducting weekly inspections of all hazardous waste storage areas and daily inspections of hazardous waste storage tanks. Areas will be checked for proper container marking, accumulation dates, leaking or damaged containers, and proper spill equipment. Inspection will be documented using the form provided in Annex 7 and record of these inspections will be maintained for a minimum of three years.
6. The Emergency Coordinator will check the phone numbers and contacts in the ICP every six months.

## **ANNEX 1**

### **Facility and Location Information**

*Included here:*

- *map of sensitive receptors*
- *Environmental FirstSearch site information report*

As indicated in Part 4 of the Introduction, “Company B” (“COMPANY B”) is located between the *(name of town)* River and *(name of town)* Canal in *(name of town)*, Massachusetts. These are the main sensitive receptors for “COMPANY B”. Refer to Figure 1, *(not included here)* a Site Locus, in the Core Plan for “COMPANY B”’s exact location.

To identify known environmental resources and sensitive receptors, environmental database information was obtained from New England Data Map. Information including maps provided by New England Data Map is included in this Annex.

According to the information, an estimated 10,771 people live within 0.5 mile of “COMPANY B”.

The information also indicates that four schools are located within 0.5 mile radius of “COMPANY B”. No hospitals, day care centers, or nursing homes are located within 0.5 mile radius of “COMPANY B”. The schools are:

<b>Map ID</b>	<b>Name</b>	<b>Address</b>	<b>Distance from “COMPANY B”</b>	<b>Direction</b>
10	<i>(school)</i>	<i>(address)</i>	0.26 mile	Southwest
11	<i>(school)</i>	<i>(address)</i>	0.49 mile	Southeast
12	<i>(school)</i>	<i>(address)</i>	0.41 mile	Southwest
13	<i>(school)</i>	<i>(address)</i>	0.38 mile	Southeast

The maps are presented with 500 foot and 0.5 mile radii drawn for reference on proximity to “COMPANY B”. The schools are shown on each map and identify with the corresponding map identification number.

These maps indicate that no current or potential drinking water source areas are within one-half mile of “COMPANY B”. The *(name of town)* Water Superintendent, confirmed this information.

For sensitive receptors in the immediate vicinity of “COMPANY B”, refer to Figure 7, Sensitive Receptors.

**ANNEX 2**  
**Notification**

The Notification and Level Response Flow Chart presented in the Core Plan provides when certain in-plant, local, state, and federal entities are required for notification. The actual call down lists are provided in the Internal and External Notification Section of the Core Plan. This annex provides additional notifications that are required in special situations and not included in the Core Plan.

## **LOCAL HOSPITALS**

When an emergency has affected a significant number of people within the facility, the Emergency Coordinator will notify the following hospitals about the situation. If the emergency has affected human health beyond the facility, then the Local Emergency Planning Committee (LEPC) will notify the hospitals.

*(name of hospitals) (phone number of hospitals)*

## **LOCAL NEWS**

When a spill or fire will affect human health and public safety beyond the facility, the LEPC will notify the local news about the situation and evacuate the area surrounding the facility. If needed, the President of EEM will discuss the situation with the news media.

*(name of local stations) (phone number of local stations)*

### **ANNEX 3**

#### **Response Management System**

*Included here:*

- *the National Interagency Incident Management System Incident Command System (NIIMS ICS) model chart,*
- *several dozen maps demarking evacuation routes from specific spots in the facility*



## GENERAL

“Company B” (“COMPANY B”) has adopted the concept of the National Interagency Incident Management System Incident Command System (NIIMS ICS) as the model for multi-agency response to an emergency incident. Refer to the attached Figure 1 (*not included here*).

Considering the nature and scale of “COMPANY B” operations there is little chance that mobilization of a Federal response effort would be required. Larger scale response efforts for “COMPANY B” will be coordinated with through the Fire Department and the (*name of town*) Local Emergency Planning Committee (LEPC) where the incident command structure is established within LEPC Plan.

## COMMAND

### Incident Commander

Organization of plant personnel involved in emergency response management is provided in the Notification and Level Response Flow Chart and the Response Management Structure Chart in the Core Plan. The lead Emergency Coordinator responsibilities include:

- Pollution Prevention Team Leader,
- Emergency Coordinator,
- Environmental, Health, and Safety Coordinator, and
- Hazardous Waste Coordinator.

### Information

Dissemination of information internally will follow reporting lines where area supervisors/managers will be briefed and will in turn communicate information to personnel under their supervision.

External communication for notifications is addressed in Annex 2. Public relations with the new media will be the responsibility of the President of the Company or his designee. The Emergency Coordinator, if not the specific designee, shall make regular updates to the Public Relations Coordinator and immediate notice when critical information is discovered.

For incidents involving injuries to personnel, the Human Resources Manager will make contact with the employee’s emergency contact person listed in their personnel file.

## Safety

The Emergency Coordinator (EC) will coordinate the efforts of the Emergency Response Team (ERT) to help ensure the safety of the emergency responders. Work zones will be established by the ERT to restrict access of untrained persons into the response area. Personnel responding to the incident shall have required 24-hour Hazardous Materials (HazMat) Technician training pursuant to 29 CFR 1910.120. Personal protective equipment will be provided to ERT personnel. Because the ERT may use respirators for emergency response, the facility maintains a written Respiratory Protection Program. The EC will direct appropriate personnel decontamination procedures based upon the material released.

If needed, the facility will be evacuated in accordance with the Evacuation Procedure provided in the Core Plan. Plans showing the evacuation routes are included in this Annex.

## Liaison

The Emergency Coordinator has an integral role in controlling implementation of this Integrated Contingency Plan; and, when outside support is coordinated through the LEPC/Fire Department the incident command will be coordinated with the Fire Department or other lead agency under the LEPC Plan. The following sections review the respective roles and, for internal functions, the responsibilities of individuals or groups that may be involved in an emergency response at “COMPANY B”.

### A. Internal Response

The Emergency Coordinator and Emergency Response Team will respond to an emergency unless the following are involved:

- Flammable solvent
- Hydrochloric acid
- Hydrofluoric acid
- Nitric acid

If these chemicals are involved emergency response personnel will order an immediate evacuation of the area and then at the Emergency Coordinator's discretion, emergency response personnel will attempt to stop the release by:

1. Shutting off chemical feed systems and/or
2. Shutting off electrical power serving the affected area.

**NOTE: These tasks will be conducted only if these tasks can be accomplished from a remote area with no risk of exposure to chemical vapor or explosion sources.**

## **1. Emergency Coordinator's Duties**

In the event of an emergency, the Emergency Coordinator shall conduct the following immediate actions.

1. Immediately identify the character and source of the emergency and the extent of involvement of hazardous material.
2. Establish an emergency zone around the hazard area to prevent unauthorized entry. If necessary supervisor will isolate area prior to team arrival. At no time is the supervisor to risk his/her life to isolate the area.
3. Take steps to evacuate the facility, contain the spill and notify state, local and private emergency response organizations as necessary
4. Arrange for emergency services for any injured personnel.
5. Notify Massachusetts Department of Environmental Protection (DEP) if the emergency involves the release of hazardous material to the environment as defined by the Massachusetts Contingency Plan.
6. If the release threatens human health and/or the environment outside the facility:
  - A. Notify local authorities (Fire and Police)
  - B. Notify the DEP and the National Response Center and report:
    - Name and telephone number of the reporter
    - Name, and address of the facility
    - Time and type (fire, spill, etc.) of the incident.
    - Name and quantity of material involved.
    - Extent of injuries (if any).
    - Possible hazards to health or environment.
    - Actions proposed to remediate.
7. Determine the level of personal protective equipment required to approach the chemical release. The Emergency Coordinator will use material Safety Data Sheets and, using professional judgment to define the level of emergency response equipment to be used.
8. The Emergency Coordinator (EC) will coordinate the efforts of the Emergency Response Team (ERT) to help ensure the safety of the emergency responders. Work zones will be established by the ERT to restrict access of untrained persons into the response area. Personnel responding to the incident shall have required 24-hour Hazardous Materials (HazMat) Technician training pursuant to 29 CFR 1910.120. Personal protective equipment will be provided to ERT personnel. Because the ERT may use respirators for emergency response, the facility maintains a written

Respiratory Protection Program. The EC will direct appropriate personnel decontamination procedures based upon the material released.

## **2. Emergency Response Personnel Duties**

1. For releases of flammable materials, response personnel will eliminate and continue to restrict all sources of ignition from the spill area, keeping in mind that dense vapors may collect in drains, sewers, or other low spots, thereby creating an explosion hazard.
2. Personnel trained in the use of fire extinguishers per 29 CFR 1910.157 should position fire extinguishers near the impacted area if a flammable or combustible material has been released.
3. Emergency response personnel will dike the released material with absorbent, fuller's earth, or sand and absorb the released material from the impacted area with the absorbent. Non-sparking tools must be used to distribute the absorbent.
4. Emergency response personnel will collect the released material, including the absorbent, into a recovery/salvage drum, ensuring that all contained materials are compatible with one another, and label the drum for identification and proper disposal in accordance with all applicable hazardous waste regulations.

Response personnel will decontaminate, clean, and replace the personal protective clothing and spill response equipment employed. Expendable protective clothing should be disposed in the recovery/salvage drum. A list of expendable equipment that requires immediate replacement must be compiled.

## **3. Procedures for Bomb Threats**

The facility Emergency Coordinator and the company president have the authority to order the facility evacuated. The Emergency Coordinator will be responsible for coordinating a search of buildings for suspicious packages by members of the ERT. Anything found that is not recognized as belonging in that area, particularly gym bags, strange briefcases, suitcases or strange packages should be treated as suspect and the person in charge of the facility should be advised.

Once such an item is located, employees SHOULD NOT TOUCH OR MOVE THE PACKAGE. Plant personnel must report the location and description to the Emergency Coordinator. The Emergency Coordinator shall make the determination of whether to contact the Police Department for support and coordinate through Incident Command. A bomb threat itself is an actual form of terrorism. The threat is transmitted generally for one of three reasons:

- The person making the threat has a grudge against the threatened facility and wishes to disrupt the facility's day to day activities as a form of revenge.
- The person making the threat is an employee of the threatened facility. By transmitting the threat, they realize the facility may be evacuated and hence will get the rest of the day off from work
- The person making the threat is aware of the presence of an explosive device within the facility and is transmitting an alarm so that the building will be evacuated to save lives. Naturally, this is quite rare. However, since it is the worst possible scenario, it is foremost in thought when a bomb threat is received.

To evacuate or not upon receiving a bomb threat is a very difficult decision. Many factors must be weighed. To immediately evacuate a facility is exactly what a person who is making a threat for revenge or for a day off is expecting. Past experience shows that in these cases, evacuation leads to repeat and copycat incidents. However, one does not want to be responsible for death or injury if an actual explosion occurs without the facility being evacuated.

Once an evacuation has taken place, the decision as to when workers shall resume their normal duties shall be made by the Emergency Coordinator in coordination with the lead response agency.

#### **4. Procedures for Suspicious Packages**

There are basically two types of suspicious packages. The first is a package mailed to, delivered to or found on the premises of a threatened facility or person, or a facility or person that is perceived to be at high risk. This type of suspicious package may or may not be found in conjunction with a bomb threat. The second type of package is one that, normally in the process of delivery, someone is suspicious of the contents.

The person making the discovery of a suspicious package **SHOULD NOT TOUCH OR MOVE THE PACKAGE**. Upon finding a suspicious package, the situation must be immediately reported to the Emergency Coordinator including the best description possible of the package, including any markings, delivery address, return address, etc., as this information is vital in determining origin of the package, and report that immediately to the Environmental Coordinator. The Emergency Coordinator shall determine whether to coordinate evacuation of the immediate area. Evacuation does not necessarily mean out of the building, but out of the danger zone. It is suggested that at least two solid walls be kept between the package and all personnel. In deciding on withdrawal distance, the following should be considered

- A small device the size of a shoebox or lunch box, will usually only affect the room that it is in, unless placed against a wall. In that case, the adjacent room is also in danger.
- A medium size device, the size of a small attache' case or large hand bag, would affect adjoining rooms on all sides, as well as above and below.
- A large device, about the size of a large suitcase, will affect two or three rooms on all sides. A minimum evacuation distance of 1200 feet is recommended-.
- Any larger devices (vehicles, etc.) would also effect surrounding buildings, and even buildings up to miles away.

The Emergency Coordinator will contact the Police Department and coordinate through Incident Command.

## **B. External Response**

If outside support is needed, “COMPANY B” has made arrangements with local authorities, an emergency response contractor, and a Licensed Site Professional for additional help.

### **1. (name of town) Police Department**

“COMPANY B” maintain a close relationship with the City of *(name of town)* Police Department. The police department is familiar with access roads to and from the facility, entrances to the facility, and operations conducted, therefore, will be responsible for directing evacuation routes in the event of a Level 2 Response.

### **2. (name of town) Fire Department and Local Emergency Planning Committee**

The City of *(name of town)* has issued (through the Fire Department) permits allowing storage and use of flammable materials at the Site. Formal inspections by the Fire Department concentrate on fire and life safety hazards. The inspection consist of a complete tour of the facility by Fire Department personnel who would respond in the event of an emergency, a review of all operations involving hazardous materials including hazardous waste, the work locations of personnel, exits and evacuation plans, fire prevention activities, and training.

In the event of a release of oil or hazardous material, the Fire Department is notified about the incident. If the release is containable within the facility and by the Emergency Response Team, a phone call to the Fire Department is required after the release was removed. If the release is containable within the facility and by the Emergency Response

Team, the Fire Department responds to the release under a Level 1 Response. If incident has gone beyond the facility and threatens the environment beyond the facility, the Fire Department will respond as a Level 2 Response.

### **3. (name of town) Health Department**

The Health Department received an updated copy of their RCRA Contingency Plan for “COMPANY B”. The Health Department confirmed receipt of this document on January 15, 1998. In case of emergencies, the Fire Department notifies the Health Department about the situation, if their help is needed during a Level 2 Response.

### **4. Local Hospitals**

On January 2, 1998, EEM sent an updated copy of their RCRA Contingency Plan to (name) Hospital, (name) Medical Center, and (name) Hospital. The RCRA Contingency Plan informed them about the hazards present at “COMPANY B” in case of a medical emergency with or without chemicals. This information was provided to have the hospitals prepare for such emergencies. (name) Hospital confirmed the delivery of the RCRA Contingency Plan in writing, the others confirmed via telephone.

### **5. Emergency Response Contractors**

(company) has agreed to respond to hazardous waste emergencies, which may occur at the Site. They have been provided with a listing of hazardous materials including hazardous waste, which may be present at the Site.

### **6. Licensed Site Professional**

(company) has agreed to respond to emergencies involving releases of oil or hazardous materials to the environment, which require response actions pursuant to the Massachusetts Contingency Plan, 310 CMR 40.0000.

## **OPERATIONS**

Because this is not a complex facility, the emergency procedures are included in the core plan. This section contains more detailed information or supporting data pertaining to procedures in the Core Plan.

### **Evacuation Procedure Details**

The following diagrams demonstrate the muster locations during an evacuation and the evacuation procedures for each floor in each building.

## **PLANNING**

## **Hazard Assessment**

The following is a planning evaluation for hazardous materials handled at the “COMPANY B” facility. The presence of sensitive receptors within the vicinity of the plant is addressed so there is recognition of planning issues posed in the event of a worst case scenario. For each chemical storage area or system, the means to avoid a release and defensive countermeasure strategies to manage a release is discussed. Strategies for prevention of risks to off-site receptors are discussed generally as well. The goal is to minimize the risk to personnel within the plant and to contain the incident within the facility such that receptors outside the facility would not be impacted.

### **A. Hazard Identification**

The following tables are divided into five categories for each chemical present at the facility: Potential Hazards, Public Safety, Fire, Spill or Leak, and First Aid. Each category describes the general procedures to implement in response to a hazard involving the chemical in its concentrated form. The 1996 North American Emergency Response Guidebook and the Department of Transportation Website were used as resources for information presented in the following table. The maximum amounts indicated below are the largest volumes maintained at the facility in tanks or containers. Solutions as stored or used may be diluted. The actual concentrations are noted in the Hazard Analysis.

The facility maintains a written Hazard Communication Program with a chemical inventory listing and record keeping system so that Material Safety Data Sheets are available within the workplace.



Chemical (Max. Amt.)	Ferric Chloride (2,000 gallons)	Hydrochloric Acid (600 gallons)	Hydrofluoric Acid (30 gallons)	Nitric Acid (15 gallons)	Sulfuric Acid (30 gallons)	Sodium hydroxide (300 gallons)	Heating Oil (1,500 gallons)	VM&P Naphtha (1,400 gallons)
<b>Potential Hazards</b>								
National Fire Protection Association Ratings	Health: 2 Flammability: 0 Reactivity: 0	Health: 3 Flammability: 0 Reactivity: 0	Health: 4 Flammability: 0 Reactivity: 1	Health: 2 Flammability: 0 Reactivity: 0	Health: 3 Flammability: 0 Reactivity: 2	Health: 3 Flammability: 0 Reactivity: 1	Health: 1 Flammability: 3 Reactivity: 0	Health: 1 Flammability: 4 Reactivity: 0
Incompatibles		Bases, active metals		Combustible organics, oxidizable matter, wood, turpentine, metal powder, hydrogen sulfide, strong bases	Bases, oxidizable materials (hot)	Water, acids, flammable liquids, organic halogens, metals, aluminum, tin, zinc, nitromethane, and nitro compounds		
Health	Inhalation, ingestion, or contact with vapors, dust or substance may cause severe injuries, burns, or death Reaction with water or moist air will release toxic, corrosive, flammable gases Reaction with water may generate heat which will increase the concentration of fumes in the air Fire will produce irritating, corrosive, and or toxic gases Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution				Inhalation, ingestion, or contact with vapors, dust or substance may cause severe injuries, burns, or death Fire will produce irritating, corrosive, and or toxic gases Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution		Inhalation or contact with material may irritate or burn skin or eyes Fire may produce irritating, corrosive, and/or toxic gases Vapors may cause dizziness or suffocation Runoff from fire control or dilution water may cause pollution	
Fire or explosion	Non-combustible, may decompose upon heating to produce corrosive and/or toxic fumes Vapors may accumulate in confined areas Concentrated substance will react with water, releasing corrosive and toxic gases Reaction with water may generate heat which will increase the concentration of fumes in the air Contact with metals may evolve flammable hydrogen gas Containers will explode when heated or if contaminated with water				Material may burn, but not ignite readily May ignite combustibles Substance will react with water, releasing corrosive and/or toxic gases Flammable/toxic gases may accumulate in confined areas Contact with metals may evolve flammable hydrogen gas Containers will explode when heated or if contaminated with water Substance may be transported in a molten form		Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Some are oxidizers and may ignite combustibles Contact with metals may evolve flammable H2 gas. Containers may explode when heated.	
							<b>Highly flammable: Will easily ignite by heat, sparks, or flames</b> Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back Most vapors are heavier than air Vapor explosion hazard indoors, outdoors, or in sewers Some may polymerize explosive when heated or involved in a fire Runoff to sewer may create fire or explosion hazard Containers may explode when heated	

<b>Chemical (Max. Amt.)</b>	<b>Ferric Chloride (3,000 gallons)</b>	<b>Hydrochloric Acid (600 gallons)</b>	<b>Hydrofluoric Acid (30 gallons)</b>	<b>Nitric Acid (15 gallons)</b>	<b>Sulfuric Acid (30 gallons)</b>	<b>Sodium hydroxide (300 gallons)</b>	<b>Heating Oil (1,500 gallons)</b>	<b>VM&amp;P Naphtha (1,400 gallons)</b>
<b>Public Safety</b>								
General	Isolate spill area immediately for at least 150 to 350 feet in all directions. Keep unauthorized personnel away Stay upwind Keep out of low areas Ventilate enclosed areas					Isolate spill area immediately for at least 80 to 160 feet. Keep unauthorized personnel away Stay upwind Keep out of low areas Ventilate enclosed areas	Isolate spill area immediately for at least 150 to 350 feet in all directions. Keep unauthorized personnel away Stay upwind Keep out of low areas Ventilate enclosed areas	
Protective Clothing	DOT Recommended – Wear SCBA, chemical protective clothing Structural firefighters' protective clothing for fire situations only, not for spills							

<b>Fire</b>				
General	Most foams will react with the material and release corrosive/toxic fumes		When material is not involved in fire, do not use water on material itself	<b>LOW FLASH POINT</b> Use of water spray when fighting fire may be inefficient
Small Fire	CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam		CO <sub>2</sub> , dry chemical	CO <sub>2</sub> , dry chemical, water spray or regular foam
Fire involving tanks or trailer loads	<p>Isolate for 2,600 feet in all directions. Consider evacuation for 2,600 feet in all directions</p> <p>Fight fire from maximum distance or unmanned hose holders or monitor nozzles</p> <p>Do not get water inside containers</p> <p>Cool containers with flooding quantities of water until well after fire is out</p> <p>Withdrawl immediately in case of rising sound from venting safety devices or discoloration of tank</p> <p>ALWAYS stay away from the ends of the tanks</p>			<p>Isolate for 2,600 feet in all directions. Consider evacuation for 2,600 feet in all directions</p> <p>Fight fire from maximum distance or unmanned hose holders or monitor nozzles</p> <p>Cool containers with flooding quantities of water until well after fire is out</p> <p>Withdrawl immediately in case of rising sound from venting safety devices or discoloration of tank</p> <p>ALWAYS stay away from the ends of the tanks</p> <p>For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn</p>
Large Fire	<p>Water spray, fog or alcohol-resistant foam</p> <p>Move containers from fire area if you can do it without risk</p> <p>Do not use straight sprays</p> <p>Dike fire control water for later disposal, do not scatter the material</p>		<p>Flood fire with large quantities of water, while knocking down vapors with water fog</p>	<p>Water spray, fog or alcohol-resistant foam</p> <p>Move containers from fire area if you can do it without risk</p> <p>Do not use straight sprays</p> <p>Dike fire control water for later disposal, do not scatter the material</p>

Chemical (Max. Amt.)	Ferric Chloride (3,000 gallons)	Hydrochloric Acid (600 gallons)	Hydrofluoric Acid (30 gallons)	Nitric Acid (15 gallons)	Sulfuric Acid (30 gallons)	Sodium hydroxide (300 gallons)	Heating Oil (1,500 gallons)	VM&P Naphtha (1,400 gallons)
<b>Spill or Leak</b>								
General	Eliminate all ignition sources Ground all equipment being used Do not touch damaged containers or spilled material unless wearing protective clothing Stop leak if you can do it without risk A vapor suppressing foam may be used to reduce vapors DO NOT GET WATER INSIDE CONTAINERS Use water spray to reduce vapors or divert vapor cloud drift Prevent entry into waterways, sewers, basements, or confined areas			Fully encapsulating vapor clothing should be worn for spills and leaks with no fire DO not touch damaged containers or spilled material unless wearing appropriate protective clothing Stop leak if you and do it without risk Use water spray to reduce vapors DO NOT PUT WATER DIRECTLY ON LEAK, SPILL AREA, OR INSIDE CONTAINER Keep combustibles away from spilled material Prevent entry into waterways, sewers, basements, or confined areas		Eliminate all ignition sources Ground all equipment being used Do not touch damaged containers or spilled material unless wearing protective clothing Stop leak if you can do it without risk A vapor suppressing foam may be used to reduce vapors DO NOT GET WATER INSIDE CONTAINERS Use water spray to reduce vapors or divert vapor cloud drift Prevent entry into waterways, sewers, basements, or confined areas	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area) Ground all equipment used Do not touch or walk through spilled material Stop leak if you can do it without risk Prevent migration into waterways, sewers, basements, or confined areas A vapor suppressing foam may be used to reduce vapors Absorb or cover with dry earth, sand, or other non-combustible material and transfer to containers Use clean non-sparking tools to collect absorbed material	
Small Spills	Cover with dry earth, sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain Use clean non-sparking tools to collect material and place it into loosely covered plastic containers							
Large Spills	Same as Small Spills						Dike far ahead of liquid spill for later disposal Water spray may reduce vapor; but not prevent ignition in closed spaces	

Chemical (Max. Amt.)	Ferric Chloride (3,000 gallons)	Hydrochloric Acid (600 gallons)	Hydrofluoric Acid (30 gallons)	Nitric Acid (15 gallons)	Sulfuric Acid (30 gallons)	Sodium hydroxide (300 gallons)	Heating Oil (1,500 gallons)	VM&P Naphtha (1,400 gallons)
<b>First Aid</b>								
General	<p>Move victim to fresh air.  Call emergency medical care  Apply artificial respiration if victim not breathing  <b>Do not use mouth to mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device</b>  Administer oxygen if breathing is difficult  Remove and isolate chemical clothing and shoes  In case of contact, immediately flush skin or eyes with running water for at least 20 minutes  For minor skin contact, avoid spreading material on unaffected skin  Keep victim quiet and warm  Effects of exposure may be delayed  Ensure that medical personnel are aware of the materials involved</p>						<p>Move victim to fresh air.  Call emergency medical care  Apply artificial respiration if victim not breathing  Administer oxygen if breathing is difficult  Remove and isolate chemical clothing and shoes  In case of contact, immediately flush skin or eyes with running water for at least 20 minutes  Wash skin with soap and water  Keep victim quiet and warm  Effects of exposure may be delayed  Ensure that medical personnel are aware of the materials involved</p>	

## B. Vulnerability Analysis

As indicated in the figures presented in Annex 1, the following table summarizes the sensitive receptors within 0.5 mile of “COMPANY B”.

Identification	Within this Distance from “COMPANY B”			
	100 feet	500 feet	0.25 mile	0.5 mile
Schools	None	None	None	(name) (name) (name) (name)
Day Care	None	None	None	None
Elderly Housing	None	None	None	None
Hospitals	None	None	None	None
Surface Water	(name of town) River (name of town) Canal	None	None	None
Residential Homes	Apartment Complex	Approx. 20	Approx. 100	Approx. 500
Storm Drains to Surface Water	9 on Site to (name of town) River	Unknown	Unknown	Unknown
Drinking Water	None	None	None	None

## C. Hazard Analysis

This section addresses planning aspects for each storage system for oil or hazardous chemicals within the facility relative to factors for prevention of spills and defensive countermeasure strategies for containment of releases. Through implementation of operating procedures and automatic systems for alarms and interlocks the probability of release from these systems at “COMPANY B” is very low.

### ***Ferric Chloride (45%)***

Ferric Chloride is stored outside along the eastern wall of Building 100 and inside Building 100.

#### **Outside Storage – 3,000 gallon tank**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene

Maximum release: 3,000 gallons

Overfill Protection: Visual supervision of loading. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Concrete dike with a capacity of approximately 10,000 gallons

2<sup>nd</sup> Defense: Cover catch Basins #1 and #2. These catch basins discharge to the (*name of town*) River. The catch basins are covered during deliveries and pickups

### **Etching Room – Piping and Process**

Surface under storage: Cement floor

Service: Etching

Maximum release: 100 gallons

Overfill Protection: Visual supervision of filling. “COMPANY B” employee maintains visual contact during filling procedures.

1<sup>st</sup> Defense: Audible alarm sounds during filling operations

2<sup>nd</sup> Defense: Containment around the piping overfills into a tank in wastewater treatment room

### ***Heating Oil***

Heating oil is stored in an underground tank and inside the boiler.

### **Underground Storage –1,500 gallons in a 2,000-gallon Storage Tank**

Surface under storage: Soil

Service: Painting

Construction of Container: Single walled steel

Maximum release: 1,500 gallons

Overfill Protection: Manual measurement of tank level on a weekly basis. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Vault around tank

2<sup>nd</sup> Defense: Cover catch Basins #4 and #5. These catch basins discharge to the (*name of town*) River. The catch basins are covered during deliveries and transfers

### ***Hydrochloric Acid (31.5%)***

Hydrochloric acid is stored outside along the eastern wall of Building 100 and inside Building 100.

#### **Outside Storage – 600 gallons in a 3,000-gallon tank**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene

Maximum release: 600 gallons

Overfill Protection: Visual supervision of loading. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Concrete dike with a capacity of approximately 10,000 gallons

2<sup>nd</sup> Defense: Cover catch Basins #1 and #2. These catch basins discharge to the (*name of town*) River. The catch basins are covered during deliveries and pickups

#### **Etching Room – Piping and Process**

Surface under storage: Cement floor

Service: Etching

Maximum release: 100 gallons

Overfill Protection: Visual supervision of filling. “COMPANY B” employee maintains visual contact during filling procedures.

1<sup>st</sup> Defense: Audible alarm sounds during filling operations

2<sup>nd</sup> Defense: Containment around the piping overfills into a tank in wastewater treatment room

### ***Hydrofluoric Acid (70%)***

Hydrofluoric acid is stored at the outside storage deck and etching room in Building 100.

#### **Outside Storage Deck –One 55-gallon container**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene

Maximum release: 55 gallon

Overfill Protection: Visual inspection on a weekly basis



1<sup>st</sup> Defense: Grated overflow protection constructed of polyethylene with a capacity of 45 gallons under drums

2<sup>nd</sup> Defense: Cover catch Basin #1. This catch basin discharges to the (*name of town*) River. The catch basin is covered during deliveries and pickups

**Etching Room – 55 gallons**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene

Maximum release: 55 gallons

Overflow Protection: Visual supervision of filling. “COMPANY B” employee maintains visual contact during filling procedures.

1<sup>st</sup> Defense: Audible alarm sounds during filling operations

2<sup>nd</sup> Defense: Containment around the piping overfills into a tank in wastewater treatment room

***Nitric Acid (40%)***

Nitric acid is stored at the outside storage deck and etching room in Building 100.

**Outside Storage Deck – Three 15-gallon drums**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Stainless Steel

Maximum release: 45 gallons

Overflow Protection: Visual inspection on a weekly basis

1<sup>st</sup> Defense: Grated overflow protection constructed of polyethylene with a capacity of 45 gallons under drums

2<sup>nd</sup> Defense: Cover catch Basin #1. This catch basin discharges to the (*name of town*) River. The catch basin should be covered during deliveries and pickups

**Aluminum Etching Room – 200 gallons Dilute Nitric Acid (<1%)**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene basin

Maximum release: 6 gallons

Overfill Protection: Visual supervision of filling. “COMPANY B” employee maintains visual contact during filling procedures.

1<sup>st</sup> Defense: Audible alarm sounds during filling operations

2<sup>nd</sup> Defense: Containment around the piping overfills into a tank in wastewater treatment room

**Stainless Steel Etching Room – 200 gallons Dilute Nitric Acid (1%)**

Surface under storage: Cement floor

Service: Etching

Construction of Container: Polyethylene basin

Maximum release: 5 gallons

Overfill Protection: Visual supervision of filling. “COMPANY B” employee maintains visual contact during filling procedures.

1<sup>st</sup> Defense: Audible alarm sounds during filling operations

2<sup>nd</sup> Defense: Containment around the piping overfills into a tank in wastewater treatment room

***Sodium Hydroxide (50%)***

Sodium Hydroxide is stored in the basement of Building 100.

**Wastewater Treatment Room – 275 gallons in 300 gallon tank**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene

Maximum release: 275 gallons

Overfill Protection: Audible alarm for high level

1<sup>st</sup> Defense: Wastewater treatment floor graded towards sump pump with 2-foot berm

2<sup>nd</sup> Defense: Sump pump transfers the acid back to the wastewater treatment system

***Sulfuric Acid (77-100%)***

Sulfuric acid is stored at the outside storage deck and wastewater treatment room in Building 100.

**Outside Storage Deck – Three 15-gallon drums**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene

Maximum release: 45 gallons

Overfill Protection: Visual inspection on a weekly basis

1<sup>st</sup> Defense: Grated overfill protection constructed of polyethylene with a capacity of 45 gallons under drums

2<sup>nd</sup> Defense: Cover catch Basin #1. This catch basin discharges to the (*name of town*) River. The catch basin should be covered during deliveries and pickups

**Wastewater Treatment Room – 15 gallons**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene pan

Maximum release: 15 gallons

Overfill Protection: Visual Inspection

1<sup>st</sup> Defense: Wastewater treatment floor graded towards sump pump with 2-foot berm

2<sup>nd</sup> Defense: Sump pump transfers the acid back to the wastewater treatment system.

***VM&P Naphtha***

VM&P Naphtha is stored in an underground tank, in a vault along the southern wall of Building 100, in the paint shop in building 100, the hazardous waste shed, and the distillation shed.

**Vaulted Storage –1,000 gallons in a 2,000-gallon Storage Tank**

Surface under storage: Soil

Service: Painting

Construction of Container: Single walled steel

Maximum release: 1,000 gallons

Overfill Protection: Visual and audible alarm detecting a leak in the vault. Alarm tied into ADT for after hours. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Vault around tank

2<sup>nd</sup> Defense: Cover catch Basins #3 and #4. These catch basins discharge to the (*name of town*) River. The catch basins are covered during deliveries and transfers

**Vault – 275 gallons in a 275-gallon storage tank**

Surface under storage: Cement floor

Service: Painting

Construction of Container: Single walled steel

Maximum release: 275 gallons

Overfill Protection: “COMPANY B” employee maintains visual contact during transferring procedures..

1<sup>st</sup> Defense: During transferring, an audible alarm is sounded

2<sup>nd</sup> Defense: Cover catch Basins #3, #4, and #7. These catch basins discharge to the *(name of town)* River. The catch basins are covered during transfers.

**Waste Storage Shed – 475 gallons in a 475 gallon tank**

Surface under storage: Cement floor

Service: Storage

Construction of Container: Single walled steel

Maximum release: 475 gallons

Overfill Protection: Visual inspection of area during filling

1<sup>st</sup> Defense: 6-inch berm

2<sup>nd</sup> Defense: Cover catch Basins #4 and #7. Catch basin #4 discharges to the *(name of town)* River. Catch basin #7 is a dry well.

**Distillation Shed– 100 gallons in a 100 gallon tank**

Surface under storage: Cement floor

Service: Storage

Construction of Container: Single walled steel

Maximum release: 100 gallons

Overfill Protection: Visual inspection of area during filling

1<sup>st</sup> Defense: 2-inch berm around still room

2<sup>nd</sup> Defense: Enclosed in building

***Waste Acids***

Waste acids are stored in the wastewater treatment room in Building 100 and two tanks outside along Building 300.

**Wastewater Treatment Room – 500 gallons**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene

Maximum release: 500 gallons

Overfill Protection: Audible alarm for high level

1<sup>st</sup> Defense: Wastewater treatment floor graded towards sump pump with 2-foot berm

2<sup>nd</sup> Defense: Sump pump transfers the acid back to the wastewater treatment system.

### **Outside Storage –One 4,000 gallon tanks**

Surface under storage: Cement floor

Service: Storage before disposal

Construction of Container: Polyethylene

Maximum release: 4,000 gallons

Overfill Protection: Audible alarm for high level to a pump for emergency shutoff

1<sup>st</sup> Defense: Concrete dike

2<sup>nd</sup> Defense: Cover catch Basins #1 and #9. These catch basins discharge to the (*name of town*) River. The catch basins are covered during deliveries and pickups.

### ***pH Adjustment Tanks***

Adjustment tanks are stored in the wastewater treatment room in Building 100.

### **Wastewater Treatment Room – Two 1,000 gallon tanks**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene

Maximum release: 2,000 gallons

Overfill Protection: Audible alarm for low pH

1<sup>st</sup> Defense: Wastewater treatment floor graded towards sump pump with 2-foot berm

2<sup>nd</sup> Defense: Sump pump transfers the acid back to the wastewater treatment system.

### ***Wastewater Sludge Storage***

Wastewater sludge is stored in the wastewater treatment room in Building 100.

### **Wastewater Treatment Room – 2,000 and 3,000 gallon tanks**

Surface under storage: Cement floor

Service: Wastewater Treatment

Construction of Container: Polyethylene

Maximum release: 5,000 gallons

Overfill Protection: Audible alarm for high level

1<sup>st</sup> Defense: Wastewater treatment floor graded towards sump pump with 2-foot berm

2<sup>nd</sup> Defense: Sump pump transfers the acid back to the wastewater treatment system.

### ***Paint and Thinner***

Paint and paint thinner are stored outside inside a shed located along the southern boundary.

#### **Outside Shed – 500 gallons**

Surface under storage: Cement floor

Service: Painting

Type and Construction of Containers:           55-gallon steel drums  
  5 gallon steel containers  
  5 gallon plastic containers

Maximum release: 500 gallons

Overfill Protection: Visual supervision of loading. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Enclosed in a building

2<sup>nd</sup> Defense: Cover catch Basins #4 and #7. Catch basin #4 discharges to the (*name of town*) River. Catch basin #7 is a dry well. Catch basins are covered during deliveries and pickups.

### ***Kerosene***

Kerosene is stored outside inside a shed located along the southern boundary.

#### **Outside Shed – 10 gallons**

Surface under storage: Cement floor

Service: Painting

Type and Construction of Containers:           55-gallon steel drums

Maximum release: 10 gallons

Overfill Protection: Visual supervision of loading. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

1<sup>st</sup> Defense: Enclosed in a building

2<sup>nd</sup> Defense: Cover catch Basins #4 and #7. Catch basin #4 discharges to the (*name of town*) River. Catch basin #7 is a dry well. Catch basins are covered during deliveries and pickups.

***Metals***

Metals are stored in Building 400 before production and throughout the building.

**Copper – 850 pounds**

**Chromium – 1,500 pounds**

**Nickel – 650 pounds**

1<sup>st</sup> Defense: Visual supervision of loading. “COMPANY B” employee and delivery driver maintain visual and voice contact during loading procedures.

***Hazardous Wastes***

The following table is a summary of the hazardous wastes stored in the hazardous waste storage shed at the facility

<b>Waste Name</b>	<b>Waste Code</b>	<b>Class</b>	<b>Max. Volume</b>
Developer & Resist	D001, D021, F002, F003, F005	Ignitable, F listed, TCLP Toxic	220 gallons
Inks	D001, D007, D008, D035, F003, F005	Ignitable, F listed, TCLP Toxic	220 gallons
Oil	MA01	Mass Listed	220 gallons
Paint Chips	D001, D007, D008, D035, F003, F005	Ignitable, F listed, TCLP Toxic	220 gallons
Photo Fixer	D011	TCLP Toxic	220 gallons
Printing Press Wash	D001, D007, D008, F003, F005	Ignitable, F listed, TCLP Toxic	220 gallons
Pumic Sludge – Naphtha	D001, D007, D008, D035, F003, F005	Ignitable, F-listed, TCLP Toxic	220 gallons
Spray Booth Bottoms	D001, D007, D008, D025, F003, F005	Ignitable, F-listed, TCLP Toxic	220 gallons
Spray Booth Water	D001, D007, D008, F003, F005	Ignitable, F-listed, TCLP Toxic	220 gallons
Still Bottoms	D001, D007, D008, D035, F003, F005	Ignitable, F-listed, TCLP Toxic	220 gallons
Varnish	D001, D007, D008, F003, F005	Ignitable, F-listed, TCLP Toxic	220 gallons

Overfill Protection: Visual inspection of drum prior to filling

Surface under storage: Cement floor with two bermed areas.

Segregated Storage: Full containers grouped by waste type in one bermed area. Containers being filled segregated by waste type in second bermed area.

1<sup>st</sup> Defense: 6-inch berm

2<sup>nd</sup> Defense: Cover catch Basins #4 and #7. Catch basin #4 discharges to the (*name of town*) River. Catch basin #7 is a dry well

## **PROTECTION**

Based upon the Hazard Analysis the following planning scenarios have been considered for the facility relative to the protection for vulnerable receptors beyond the facility:

### **Probable Case - Chemical Release Within Confines Of The Facility**

In the probable case the release would be contained within the facility and there would be no need to take measures to protect persons or the environment outside the facility. The materials that might be spilled are not highly volatile and would not involve vaporization or migration in air that would be cause for concern to off-site receptors. Defensive measures for containment within the facility are addressed in the hazard analysis, which focus on the primary strategy of containing chemicals at the point of release and blocking off storm drains as a means of closing off the pathway for release off-site.

In the event that corrosive solutions are released, solid neutralizing agents such as lime or sodium bicarbonate will be used for neutralization of the acid into a harmless salt. Neutralizing agent may be applied at the source of the release and may also be applied within the storm drain system. Larger volumes contained within permanent dikes or temporary berms will be transferred into containers or vacuum trucks without neutralization.

In the event that either oil or VM&P naphtha the approach strategy will be to collect the material using absorbent materials and larger volumes contained within permanent dikes or temporary berms will be transferred into containers or vacuum trucks. Because these materials float and have low water solubility, absorbent booms may be used within the storm drain system or at the ultimate discharge point to the river to contain floating material.

### **Probable Case - Small Fire Within Confines Of The Facility**

Fire extinguishers are located strategically within the plant buildings for immediate response. Operations involving combustible materials are located in areas with either fixed



suppression systems or deluge sprinkler systems for control of a fire within the process area. There is no immediate risk to the surrounding area associated with a small fire within the facility.

The hazard identification points to the potential for toxic fumes being generated with fire involving the acids used at the facility. Strong acid solutions are stored and used in areas separate from where combustible materials are used. Response personnel will monitor those storage areas. Materials may be relocated or, if necessary, the containers may be irrigated in place for cooling to prevent rupture and release of material. Fire fighters must be prepared with self-contained breathing apparatus.

### **Worst Case – Major fire and threat of involvement of bulk corrosives storage tanks**

The obvious strategy is to avoid this occurrence through fire suppression and control systems. The adjacent buildings are of brick construction and provide some degree of fire separation. These tanks are located outside the buildings and are accessible to be irrigated for cooling to prevent evolution of corrosive vapors, or structural failure.

At the discretion of the Fire Department, a serious threat of fire involving the ferric chloride or hydrochloric acid tanks at the eastern end of Building 100 or waste acid tanks at the western end of Building 300 may warrant an area evacuation.

### **COORDINATION WITH NATIONAL RESOURCE TRUSTEES**

As shown on the Notification and Response Level Flow Chart, the National Resource Trustee (Conservation Commission) will be notified when a release threatens surface water. Under provisions of the Massachusetts Contingency Plan, the Conservation Commission will be notified as soon as possible but not later than 24 hours from initiating Immediate Response Actions within areas subject to jurisdiction of the Commission. An Emergency Certification for continued response actions will be sought from the Commission.

### **WASTE MANAGEMENT**

Wastes are classified as hazardous wastes if they exhibit the characteristics of ignitability, corrosivity, reactivity, toxicity, or are listed by the federal or state government. If you are unsure whether the waste you have generated at “Company B” is a hazardous waste, contact the Hazardous Waste Coordinator. Remediation waste involving contaminated environmental media (soil, groundwater or sediment) may require further review to determine whether the waste may be subject to different management standards.

The Hazardous Waste Coordinator will determine if the waste generated is a hazardous waste by reviewing existing literature on the waste chemical (such as a label or Material Safety Data Sheet) or submitting the waste to a laboratory for analysis. If the waste is determined to be hazardous, a waste profile will be created. A waste profile is an

information sheet on the waste similar to a Material Safety Data Sheet in that it describes the waste. Disposal firms require the completion of waste profile sheets to verify the types of waste they are receiving for disposal. Often, a disposal firm will test wastes prior to receiving it to insure that it does not accept a waste it is not permitted for or cannot treat. Waste profiles are maintained by the Hazardous Waste Coordinator for a minimum of three years for all wastes shipped off-site.

## **LOGISTICS**

This facility is a small with limited hazards therefore, this section does not apply.

## **FINANCIAL/PROCUREMENT/ADMINISTRATION**

As indicated in Section 2. Initial Responses of the Core Plan, the Responsible Corporate Official and Chief Financial Officer are informed of the situation once it is beyond the capability of the Emergency Response Team.

## **ANNEX 4**

### **Incident Documentation**

*Included here:*

- *Emergency Response Report form*
- *MA DEP BWSC-103 form*
- *MA DEP BWSC-104 form*
- *OSHA 200 log form*
- *OSHA 200 instructions*

For every incident or emergency at “Company B” (“COMPANY B”) proper documentation and reporting must be conducted to ensure compliance with applicable state and federal rules, as well to provide information that could prevent a similar incident in the future. For additional discussion, refer to the Terminating Actions Section of the Core Plan. Records shall be maintained in the Emergency Coordinator’s office.

The required forms are attached, and are described as follows:

**“COMPANY B” EMERGENCY RESPONSE REPORT**

This form must be filled out by the person responding to the emergency. Keeping a detailed written record will allow someone to review the event, evaluate if all necessary response actions have been taken, and determine if any hazardous chemical or substance might have migrated off the property and in what direction. Required information includes:

- Date and time of incident;
- Person who reported incident;
- Location;
- Significant weather and wind speed/direction information;
- Type of incident, materials and quantities involved;
- Description of the event;
- Response actions conducted;
- If the incident was contained, or if there was a release to the environment;
- Agencies notified including name of contact, phone number, and time; and
- The name of the Team Leader.

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MADEP), BUREAU OF WASTE SITE CLEANUP (BWSC) FORM 103 (BWSC-103) – RELEASE NOTIFICATION AND NOTIFICATION RETRACTION FORM**

According to the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, a release that falls under the reporting thresholds of a 2-hour Reporting Condition, a 72-hour Reporting Condition, or a 120-day Reporting Condition (as determined by 310 CMR 40.0310-0315) must be documented with this form and submitted to the MADEP.

Required information includes:

- The location of the release;
- The date and time that the responsible party obtained knowledge of the release;
- If required, the date and time that oral notification was provided to the MADEP;
- The Notification Threshold which applies;
- The name and quantity of the material released; and

- The name and address of the person required to notify.

## **BWSC-104 – RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADE PROPERTY STATUS TRANSMITTAL FORM**

According to 310 CMR 40.0404(3), within one year of a release notification to the MADEP, one of the following must be submitted to the MADEP:

- An RAO (310 CMR 40.1000); or
- A Tier Classification (and supporting Phase I – Initial Site Investigation 310 CMR 40.0480).

An RAO can be submitted if response actions conducted within that year have resulted in a condition of No Significant Risk at the site (310 CMR 40.1000). If a condition of No Significant Risk does not exist by the one year deadline, the Site must be scored and Tier Classified (according to 310 CMR 40.0500).

Future response actions will include Phase II activities (a Comprehensive Site Assessment 310 CMR 40.0830), Phase III activities (Identification, Evaluation, and Selection of Comprehensive Remedial Action Alternatives 310 CMR 40.0850), Phase IV activities (Implementation of the Selected Remedial Action Alternative 310 CMR 40.0870), and Phase V activities (Operation, Maintenance, and/or Monitoring of the Selected Alternative 310 CMR 40.0890), until an RAO is achieved.

BWSC-104 can be used to submit any of these requirements. Required information includes:

- The property address;
- What response actions have been completed (if any);
- Details on any waste that has been transported;
- If an RAO has been reached, what class;
- A Licensed Site Professional (LSP) Opinion; and
- The responsible party required to conduct response actions.

## **OSHA 200 LOG**

In the case when injury and illness occurs, the OSHA 200 Log needs to be filed with the Emergency Coordinator and retained for a minimum of 5 years. The log and corresponding directions are included in this Annex.

## **LEPC AND SERC REPORTS**

As mentioned in the Core Plan on Pages 38 and 39, a written follow-up notice must be filed with the LEPC and SERC after a release has occurred at the facility. The notice must include:

- Actual response actions taken
- Advice regarding medical attention necessary for exposed individuals
- Updated information since the initial notice

**ANNEX 5**  
**Training and Exercise/Drills**

Training requirements are outlined in the table below:

<b>Training</b>	<b>Time Requirement</b>	<b>“COMPANY B” Personnel</b>
General Hazard Communication 29 CFR 1910.1200	New Hire/Change in Position	Workers Handling Hazardous Materials
Fire Extinguisher Training 29 CFR 1910.157(g)	New Hire/Designation Annual Refresher	Designated Employees EC ERT
Evacuation Plan Orientation 29 CFR 1910.38	Competency	Evacuation Wardens
Hazardous Material Marking and Labeling 49 CFR 181	Triannual Refresher	Manifest Preparers
HAZWOPER First Responder Awareness Level 29 CFR 1910.120	Competency	Area Supervisors Production Employees
HAZWOPER Hazardous Materials Technician 29 CFR 1910.120	Initial (24 hour) Annual Refresher	EC ERT
HAZWOPER Incident Command – Competency 29 CFR 1910.120	Competency	EC
Medical Surveillance 29 CFR 1910.120	Annual	EC ERT
Respirators Use and Maintenance 29 CFR 1910.134	Annual Refresher	EC ERT Designated Employees
Storm Water Pollution Prevention 40 CFR 122/General Permit	Annual Refresher	SWPP Team

EC – Emergency Coordinator  
ERT – Emergency Response Team  
SWPP – Stormwater Pollution Prevention Team

Records of the training are kept in the Environmental, Health, and Safety files.

## **JOB DESCRIPTIONS**

In compliance with requirements of 310 CMR 30.520 the following is a listing of personnel responsible for hazardous waste management at “Company B” Company. Questions regarding hazardous waste procedures should be directed to these personnel or your immediate supervisor.

### **Hazardous Waste Coordinator**

This position entails the overall supervision and management of hazardous waste activities conducted at “Company B”. The Hazardous Waste Coordinator shall be responsible for the compliance of “Company B” with all local, state, and federal regulations regarding hazardous waste activities.



Activities performed by this individual include the following.

- Monitor changes in applicable regulations and coordinate program adjustments.
- Conduct weekly inspections of all hazardous waste storage areas and daily inspections of all hazardous waste storage tanks.
- Coordinates, plans and executes personnel training programs
- Oversees & maintains proper records for operations pertaining to hazardous waste activities, including training records, manifests, biennial reports, and inspection records. Maintains copies of manifests and Landban Notifications, including copies of the manifest received from the treatment/storage/disposal facility verifying receipt of the wastes.
- Implement, revise as needed, and educate personnel the Hazardous Waste Contingency Plan (Emergency Response Plan).
- Have knowledge of the plant or facility activities, operations, layout, and emergency systems.
- Move containers of hazardous waste from the satellite accumulation points to the Accumulation Areas.
- Arrange for off-site disposal/treatment of hazardous waste from the "Company B" Company facility.
- Sign the prepared hazardous waste manifests and Landban Notification forms, and verify that these documents are accurately completed.
- File exception reports with the Department of Environmental Protection in the event a return copy of the manifest is not received from a treatment, storage, or disposal facility within 45 days of consignment (i.e., the date the manifest was originally signed).
- Prepare periodic waste reports for submittal to the Environmental Protection Agency and Department of Environmental Protection.
- Ensure the waste is collected in clean, compatible and undamaged containers (usually drums).
- Mark the containers as hazardous waste using a red and yellow "Hazardous Waste" sticker. If these stickers are not available, legibly mark the words "Hazardous Waste" on the containers the words are clearly visible.
- Mark the contents of the container clearly and legibly, and mark the date that the drum became full (accumulation date).

### **Area Supervisors**

Since hazardous waste may be stored in their respective areas, supervisors/foremen must be knowledgeable of hazardous waste regulations as they apply to their areas and must be prepared to call the Emergency Response Team when necessary.

Supervisors responsibilities include the following.

- Attend hazardous waste training.
- Maintain good housekeeping in hazardous waste Satellite Accumulation Points and Accumulation Areas.
- Report any spills or abnormal operating conditions involving hazardous waste to the Hazardous Waste Coordinator.
- Notify the Hazardous Waste Coordinator immediately when the container is full so that it can be moved to the Accumulation Area. **This must be done within three days.**
- Insure that the containers are kept closed.
- Insure that proper procedures for the handling of hazardous waste and chemicals in general are followed on a consistent basis.
- Insure that the containers are properly labeled.

### **Production Employees**

All employees who handle hazardous waste at “Company B” Company have a responsibility to handle waste properly and safely and to minimize threats to the environment. These employees include those who transfer wastes to a hazardous waste container (i.e., transfer waste paint to the waste paint drum in the Paint Area). Employees can handle waste properly by practicing the following techniques:

- These employees should carefully transfer wastes to the appropriate waste container.
- Once the transfer is complete, employees should assure that the containers are sealed shut.
- Employees involved in hazardous waste activities should receive hazardous waste training as it applies to their responsibilities and job scope.
- Anyone who observes a discrepancy or has a question regarding hazardous waste management should contact their supervisor immediately. The supervisor will notify the Hazardous Waste Coordinator.

In the following table, jobs that involve handling hazardous waste are listed along with the wastes involved for each job.

**LIST OF JOBS THAT INVOLVE HAZARDOUS WASTE**

<b>Department</b>	<b>Job</b>	<b>Description</b>	<b>Waste (s)</b>	<b>Hazards</b>
Art	Developing Die Blocks & Films	Wastes to satellite containers	Photographic Wastes	Ignitable TCLP-Toxic
Etch	Aluminum, Stainless Steel & Brass Etching. Frosting	Waste acids and rinse waters pumped to tanks in waste treatment area.	Mixed acids Ammonium Bifluoride Hydrofluoric Acid Salts (Rinse Waters)	Corrosive, TCLP-Toxic
Maintenance	Various duties.	Wastes to satellite containers	Waste oil, solvents, paints	Ignitable TCLP-Toxic
Paint	Painting, Relieving, Maintenance.	Wastes to satellite areas	Paint Chips (Includes Waste Paint), Spray Booth Bottoms, Spray Booth Water	Ignitable TCLP-Toxic
Print	Offset Printing, Silk-screen Printing, Flying, Metal Photo	Wastes to satellite containers	Print water, Print Ink, Press Wash, Ultra Color Bleach, Zip Developer & Fixer.	Ignitable TCLP-Toxic Corrosive
Rollercoat	Clean-up	Wastes to Satellite containers	Waste Varnish	Ignitable
Stock Room	Wastes to Satellite Drums	Wastes to Satellite containers	Okite Cleaner Grinding Particulate	MA Listed
Wastewater & Waste Management	Wastewater Operations & Hazardous Waste Management	Transfer hazardous wastes to accumulation areas & hazardous waste management	All above plus wastewater treatment sludge & still bottoms	Ignitable TCLP-Toxic Corrosive

The Emergency Coordinator and Hazardous Waste Coordinator maintain training records indicating the individuals currently filling these positions and evidence that they have received the training.

**PRACTICE DRILLS**

The Emergency Coordinator will periodically conduct practice drills with members of the Emergency Response Team attempting to create realistic conditions that may test response management system and reinforce the skills involved in emergency response operations. The Emergency Coordinator may invite outside support groups to participate in these exercises.

## **CRITIQUES**

After a emergency response, the Emergency Response Team will critique their response. Documentation of these critiques will be kept in the Environmental, Health, and Safety files.

**ANNEX 6**  
**Response Critique, Plan Review and Modification Process**

A formal review of this Plan shall be made whenever there is:

- a major change in the manufacturing operations, or
- an extremely hazardous substance or hazardous substance is introduced into the facility in amounts exceeding the threshold planning quantities listed at 40 CFR 355
- an emergency response incident.

When there is a change in the operations the review will address planning aspects related to hazards posed by new substances and safety aspects related to reconfiguration of work areas.

After a response occurs, the Emergency Response Team shall review the response actions implemented, notifications made to regulatory agencies and stakeholders, records generated during response actions, and termination documents prepared. Based upon the review, the team shall document areas of the plan that warrant modification, procedures for preventing recurrence, and implementation of proposed changes intended to improve the next response.

The Emergency Coordinator shall maintain records concerning the dates when this Plan is formally reviewed and individuals participating in the review.

In accordance with 40 CFR 265.54, the contingency plan must be reviewed, and immediately amended, if necessary, whenever:

- (a) Applicable regulations are revised;
- (b) The plan fails in an emergency;
- (c) The facility changes-in its design, construction, operation, maintenance, or other circumstances-in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
- (d) The list of emergency coordinators changes; or
- (e) The list of emergency equipment changes.

## **ANNEX 7**

### **Prevention**

*Included here:*

- *Stormwater BMP Table*
- *Material Inventory Table*
- *Description of Exposed Significant Material Table*
- *Stormwater Sampling and Observation record form*
- *NPDES Discharge Monitoring report*
- *Daily Inspection Log for hazardous waste storage tanks*

## INTRODUCTION

The process of prevention planning will involve periodic reviews of system operations even in the absence of an emergency situation to identify and consider the feasibility for implementation possible changes to equipment or operating practices that could potentially reduce the risk of a release to the environment. This annex outlines the procedures established within the facility to encourage prevention of emergencies from occurring at the facility.

Preparation of Annex 3, pages 63-69, involved a process hazard analysis for operations at the facility including a description of the operating systems, controls or alarms for preventing releases and control measures for containment if there is a system failure. It is the goal to have all equipment handling hazardous materials at the facility and alarm systems installed for preventing releases to be in full operational condition. The Company is also committed to prevention of hazardous material releases through the process of toxics use reduction planning which may reduce worker and environmental risk through reducing or eliminating the use of high hazard chemicals.

“COMPANY B” has procedures to conduct root cause analysis after an emergency occurs at the facility. These measures are provided in the Core Plan under Termination and Follow-up Actions Page 44 for evaluation and maintenance and Annex 4 for incident documentation.

Sections of “COMPANY B”’s Storm Water Management Plan, which are attached to this Annex, outline the best management practices (BMPs) to minimize exposure of precipitation to pollutants and their discharge into storm water flowing, eventually, into the *(name of town)* River. These BMPs will be reviewed at least annually related to prevention of pollution via storm water exposure and when there is a change to activities that may involve potential for exposure of storm water to hazardous substances.

The facility has identified the following list as its high hazard process chemicals:

- Hydrochloric acid
- Hydrofluoric acid
- Nitric Acid
- Sulfuric Acid
- VM&P Naphtha

In the future “COMPANY B” may consider expanding the list of substances to include more chemicals within the prevention planning activity.



## **PREVENTION PLANNING**

The facility is committed to conducting prevention planning for systems and operations involving high hazard chemicals at least once each year. Changes to systems prompted by operating requirements will be reviewed through prevention planning prior to implementation. "COMPANY B" encourages employees to report "near miss" incidents and those situations will be reviewed through the company's Accident Investigation Program.

Prevention planning will be performed through periodic planning meetings that will be held with plant staff representing plant safety, maintenance, operations, and environmental management. The group will meet periodically to cover the following prevention topics for the high hazard chemicals:

- Focused Review of chemical transfer operations,
- Focused Review of chemical storage systems,
- Scheduling of preventative maintenance for critical systems; and
- Monitoring and Measurement of prevention program performance.

Toxics use reduction planning will be conducted for reporting compounds as the facility has an updated Toxics Use Reduction Plan that has initiated ongoing review of TUR techniques for implementation at the facility. The concepts of TUR planning will be addressed within the Prevention Planning effort, but a formal planning document as required by TURA will be prepared separately.

This process of ongoing review is intended to foster continual improvement in the operation. Identification of alternatives will lead to consideration of the feasibility for implementation. The facility will consider alternatives for prevention within the broad scope of available resources within the facility and concepts of full cost accounting will be generally applied for prevention projects.

The facility will meet with the LEPC and Fire Department on an annual basis to review the ICP and update them on current conditions at the facility.

### **Chemical Transfer Operations**

The review will address chemical transfer operations range from the initial delivery and unloading of material from trucks and movement of material into storage areas for containers and transfer into storage tanks. Withdrawal or dispensing of materials from storage tanks or containers into process operations will also be covered. The review will also focus on topics such as the methods and systems for removal of material from the process operation for containment and reuse, for accumulation as waste, or for management in the facility wastewater treatment system.

The chemical transfer reviews will focus on aspects such as:

- Locations and methods of manual transfers
- Equipment and methods for moving containers
- Assembly of temporary hose or piping configurations
- Pump type and operating pressures
- Piping configuration, sizing and pressure rating
- Materials of Construction – Pipe, hose, pumps, fittings, etc.
- Leak containment
- Manual operation of valves and switches
- Emergency shut-off valves and switches
- Remote operation – sensors, indicators, communications
- Potential operator exposure during transfers
- Grounding protection for flammables/combustibles
- Hazard warning detection systems and alarms
- Sensor calibration and maintenance
- System safety interlocks – Power failure mode/EP Circuits
- Requirements upon and performance of contractors/suppliers – raw materials and wastes
- Identification of Critical Systems for Preventive Maintenance

### **Chemical Storage**

Review of chemical storage includes design and operation of the areas for container storage as well as the tank systems for handling bulk quantities of material. The review may consider the appropriateness of using bulk storage or containers considering factors related to chemical transfer operations. Aspects of chemical storage will be reviewed such as:

- Chemical concentration
- Materials of construction for tanks, containers, and storage areas
- Protecting mechanical integrity of storage tanks and containers
- Adequate space for container storage – aisles, stacking, lighting, etc.
- Provisions for secondary containment
- Maintaining integrity of containment structures
- Venting and normal emission controls
- Control systems for emissions from materials in containment
- Overfill protection systems
- System safety interlocks – Power failure mode
- Procedures for handling accumulated precipitation in containment structures
- Identification of Critical Systems for Preventive Maintenance

## **Maintenance**

“COMPANY B” has a maintenance work order system that is used to initiate, track, and follow up on maintenance tasks. As critical systems are identified through the evaluation process of chemical transfer and chemical storage system reviewed the program for scheduled maintenance of those systems will be developed and refined. The Maintenance Supervisor will report at least quarterly to the Environmental Manager and the Facility Manager on the status of scheduled preventative maintenance for critical systems.

## **Measurements of Effectiveness**

“COMPANY B” may monitor the following annual metrics of environmental performance. Normalized values will be calculated by dividing actual amounts by the unit of product.

### **A. Safety**

Reportable injuries times 200,000/Total hours worked

### **B. Hazardous Waste and Solid Waste**

Hazardous waste generation rate in pounds by waste type – actual and normalized

### **C. Chemical Use**

High hazard chemical use in pounds by chemical - actual and normalized

Solid waste generation in tons - actual and normalized

Raw material inventory – maximum total pounds on hand divided by lowest  
CERCLA/MCP Reportable Quantity (RQ)

### **D. Wastewater**

Wastewater pH excursions – number of events and total duration in minutes

Wastewater treatment volume in thousands of gallons - actual and normalized

### **E. Natural Resources**

Water consumption in hundreds of cubic feet- actual and normalized

Electric power consumption in kilowatt hours - actual and normalized

Natural gas consumption in hundreds of cubic feet – actual and normalized

Fuel oil consumption in gallons – actual and normalized

## **F. Air Emissions**

VOC emissions in tons per year – actual and normalized

## **G. Releases to the Environmental**

Number of reportable releases

Number of non-reportable releases

## **H. Maintenance**

Percentage of critical systems preventive maintenance work orders completed on time

### **Fire Prevention**

“COMPANY B” handles, stores and uses combustible and flammable products within the operation. “COMPANY B” does not maintain a Fire Brigade as defined in 29 CFR 1910.155. Designated employees who may use portable fire extinguishers will be trained in the use of such equipment and the hazards involved with incipient stage fire fighting. The facility has installed various systems and implemented procedures for compliance with the following applicable regulations.

29 CFR 1910.106 Flammable and Combustible Liquids

29 CFR 1910.107 Spray Finishing using Flammable and Combustible Liquids

29 CFR 1910.108 Dip Tanks Containing Flammable and Combustible Liquids

Prevention systems include provisions for ventilation, wiring and grounding, housekeeping, extinguishment, waste management, and warning signs.

Systems for fire prevention noted above are inspected at least annually. The Prevention Planning group may identify critical portions of these systems to be included in the preventative maintenance program. Portable fire extinguishing systems are subject to routine inspection in accordance with schedules proscribed by 29 CFR 1910.157.

### **Toxic Use Reduction Planning**

“COMPANY B” is committed to continuous improvement for the purpose of pollution prevention. The prospect of using less toxic substances and using less of more toxic substances makes sense for worker safety, the environment, and for emergency contingency planning.

The following changes have been made by “COMPANY B” to reduce the amounts or types of toxic chemicals used by the facility:

- Discontinued use of ammonium bifluoride by material substitution
- Reduced by-product emissions of volatile organic compounds from the VM&P Naphtha cleaning process through process modernization and production unit redesign with the installation of an enclosed washing system and enclosed soak tanks

“COMPANY B” remains informed about latest technologies in the etching business through vendors, trade shows, trade journals, literature provided by the Toxic Use Reduction Institute (TURI), and seminars. Currently, “COMPANY B” is investigating into the following reduction technologies. Specific targets and objectives for review, evaluation, and implementation of TUR alternatives are maintained in the facility’s TUR Plan and are updated at least every two years:

*d. Laser Etching*

Laser etching could eliminate the use of ferric chloride and hydrochloric acid on some processes.

*e. Aluminum Etching Machine*

An aluminum etching machine may reduce the use of acid per unit of production.

*f. Solvent Substitution*

“COMPANY B” is currently researching into substituting the VM&P Naphtha for another chemical, which is not so volatile and has a higher flash point. “COMPANY B” has been working with the TURI Cleaning Lab in exploring alternative cleaning processes.

## **WASTE MINIMIZATION**

Environmental Protection Agency regulations require that large quantity generators of hazardous waste to develop a plan to continually reduce the amount of hazardous waste that they create. Waste minimization can occur in many ways, either by treating or recycling the waste or by eliminating the process that creates the waste, if practical. For example, waste naphtha solvent is recycled by distillation on-site and reused.

All employees of “Company B” should make every effort to reduce the amount of hazardous waste generated at the facility. Employees should be conservative with the amounts of hazardous materials they use and should avoid mixing non-hazardous waste with hazardous waste. If feasible, materials that are less hazardous or toxic will be substituted for more hazardous materials.

The Prevention Planning group will address and review alternatives for hazardous waste minimization at least annually. A focused review will be made of waste minimization

alternatives for the waste streams involving a) the greatest total cost and/or b) the greatest total volume.

**ANNEX 8**  
**Regulatory Cross-matrix**

RCRA (40 CFR part 264 Subpart D, 40 CFR part 265 Subpart D, 40 CFR part 279.52(b))	ICP Citation(s)
264.52 Content of contingency plan	Not Applicable
(a) Emergency response actions	Not Applicable
(b) Amendments to SPCC plan	Not Applicable
(c) Coordination with State and local response parties	Not Applicable
(d) Emergency coordinator(s)	Not Applicable
(e) Detailed description of emergency equipment on-site	Not Applicable
(f) Evacuation plan if applicable	Not Applicable
264.53 Copies of contingency plan	Not Applicable
264.54 Amendment of contingency plan	Not Applicable
264.55 Emergency coordinator	Not Applicable
264.56 Emergency procedures	Not Applicable
(a) Notification	Not Applicable
(b) Emergency identification/characterization	Not Applicable
(c) Health/environmental assessment	Not Applicable
(d) Reporting	Not Applicable
(e) Containment	Not Applicable
(f) Monitoring	Not Applicable
(g) Treatment, storage, or disposal of wastes	Not Applicable
(h) Cleanup procedures	Not Applicable
(1) Disposal	Not Applicable
(2) Decontamination	Not Applicable
(i) Follow-up procedures	Not Applicable
(j) Follow-up report	Not Applicable
265.52 Content of contingency plan	
(a) Emergency response actions	Pages 21-38
(b) Amendments to SPCC plan	Not Applicable
(c) Coordination with State and local response parties	Page 13, Annex 2-Page 1, Annex 3 – Pages 4-6
(d) Emergency coordinator(s)	Pages 9 and 12
(e) Detailed description of emergency equipment on-site	Pages 16-21



<b>RCRA (40 CFR part 264 Subpart D, 40 CFR part 265 Subpart D, 40 CFR part 279.52(b))</b>	<b>ICP Citation(s)</b>
(f) Evacuation plan if applicable	Pages 22-24, Annex 3 Evacuation Routes
265.53 Copies of contingency plan	Annex 3 – Pages 4-6
265.54 Amendment of contingency plan	Pages 40-41, Annex 6 – Page 1
265.55 Emergency coordinator	Page 9
265.56 Emergency procedures	
(a) Notification	Pages 8-13, 26-27
(b) Emergency identification/characterization	Page 10, Annex 3- Pages 7-21
(c) Health/environmental assessment	Pages 10 and 15, Annex 1 – Pages 1 - 2, Annex 3-Page 12
(d) Reporting	Pages 13, and 40-42
(e) Containment	Pages 29- 30, Annex 3 – Pages 2-4
(f) Monitoring	Page
(g) Treatment, storage, or disposal of wastes	Pages 39 - 40
(h) Cleanup procedures	Pages 39 - 40
(1) Disposal	Page 40
(2) Decontamination	Page 40
(i) Follow-up procedures	Pages 39-43
(j) Follow-up report	Pages 41 - 42
279.52(b)(2) Content of contingency plan	Not Applicable
(i) Emergency response actions	Not Applicable
(ii) Amendments to SPCC plan	Not Applicable
(iii) Coordination with State and local response parties	Not Applicable
(iv) Emergency coordinator(s)	Not Applicable
(v) Detailed description of emergency equipment on-site	Not Applicable
(vi) Evacuation plan if applicable	Not Applicable
(3) Copies of contingency plan	Not Applicable
(4) Amendment of contingency plan	Not Applicable
(5) Emergency coordinator	Not Applicable
(6) Emergency procedures	Not Applicable
(i) Notification	Not Applicable
(ii) Emergency identification/characterization	Not Applicable
(iii) Health/environmental assessment	Not Applicable
(iv) Reporting	Not Applicable

RCRA (40 CFR part 264 Subpart D, 40 CFR part 265 Subpart D, 40 CFR part 279.52(b))	ICP Citation(s)
(v) Containment	Not Applicable
(vi) Monitoring	Not Applicable
(vii) Treatment, storage, or disposal of wastes	Not Applicable
(viii) Cleanup procedures	Not Applicable
(A) Disposal	Not Applicable
(B) Decontamination	Not Applicable
(ix) Follow-up report	Not Applicable

EPA's Oil Pollution Prevention Regulation (40 CFR 112)	ICP Citation(s)
112.7(d)(1) Strong spill contingency plan and written commitment of manpower, equipment, and materials	Not Applicable
112.20(g) General response planning requirements	Not Applicable
112.20(h) Response plan elements	Not Applicable
(1) Emergency response action plan (Appendix F1.1)	Not Applicable
(i) Identity and telephone number of qualified individual (F1.2.5)	Not Applicable
(ii) Identity of individuals/organizations to contact if there is a discharge (F1.3.1)	Not Applicable
(iii) Description of information to pass to response personnel in event of a reportable spill (F1.3)	Not Applicable
(iv) Description of facility's response equipment and its location (F1.3.2)	Not Applicable
(v) Description of response personnel capabilities (F1.3.4)	Not Applicable
(vi) Plans for evacuation of the facility and a reference to community evacuation plans (F1.3.5)	Not Applicable
(vii) Description of immediate measures to secure the source (F1.7.1)	Not Applicable
(viii) Diagram of the facility (F1.9)	Not Applicable
(2) Facility information (F1.2, F2.0)	Not Applicable
(3) Information about emergency response	Not Applicable
(i) Identity of private personnel and equipment to remove to the maximum extent practicable a WCD or other discharges (F1.3.2, F1.3.4)	Not Applicable
(ii) Evidence of contracts or other approved means for ensuring personnel and equipment availability	Not Applicable
(iii) Identity and telephone of individuals/organizations to be contacted in event of a discharge (F1.3.1)	Not Applicable
(iv) Description of information to pass to response personnel in event of a reportable spill (F1.3.1)	Not Applicable
(v) Description of response personnel capabilities (F1.3.4)	Not Applicable
(vi) Description of a facility's response equipment, location of the equipment, and equipment testing (F1.3.2, F1.3.3)	Not Applicable
(vii) Plans for evacuation of the facility and a reference to community evacuation plans as appropriate (F1.3.5)	Not Applicable
(viii) Diagram of evacuation routes (F1.9)	Not Applicable
(ix) Duties of the qualified individual (F1.3.6)	Not Applicable
(4) Hazard evaluation (F1.4)	Not Applicable
(5) Response planning levels (F1.5, F1.5.1, F1.5.2)	Not Applicable
(6) Discharge detection systems (F1.6, F1.6.1, F1.6.2)	Not Applicable
(7) Plan implementation (F1.7)	Not Applicable
(i) Response actions to be carried out (F1.7.1.1)	Not Applicable
(ii) Description of response equipment to be used for each scenario (F1.7.1.1)	Not Applicable

<b>EPA's Oil Pollution Prevention Regulation (40 CFR 112)</b>	<b>ICP Citation(s)</b>
(iii) Plans to dispose of contaminated cleanup materials (F1.7.2)	Not Applicable
(iv) Measures to provide adequate containment and drainage of spilled oil (F1.7.3)	Not Applicable
(8) Self-inspection, drills/exercises, and response training (F1.8.1 - F1.8.3.2)	Not Applicable
(9) Diagrams (F1.9)	Not Applicable
(10) Security systems (F1.10)	Not Applicable
(11) Response plan cover sheet (F2.0)	Not Applicable
112.21 Facility response training and drills/exercises (F1.8.2, F1.8.3)	Not Applicable
Appendix F Facility-Specific Response Plan	Not Applicable
1.0 Model Facility-Specific Response Plan	Not Applicable
1.1 Emergency Response Action Plan	Not Applicable
1.2 Facility Information	Not Applicable
1.3 Emergency Response Information	Not Applicable
1.3.1 Notification	Not Applicable
1.3.2 Response Equipment List	Not Applicable
1.3.3 Response Equipment Testing/Deployment	Not Applicable
1.3.4 Personnel	Not Applicable
1.3.5 Evacuation Plans	Not Applicable
1.3.6 Qualified Individual's Duties	Not Applicable
1.4 Hazard Evaluation	Not Applicable
1.4.1 Hazard Identification	Not Applicable
1.4.2 Vulnerability Analysis	Not Applicable
1.4.3 Analysis of the Potential for an Oil Spill	Not Applicable
1.4.4 Facility Reportable Oil Spill History	Not Applicable
1.5 Discharge Scenarios	Not Applicable
1.5.1 Small and Medium Discharges	Not Applicable
1.5.2 Worst Case Discharge	Not Applicable
1.6 Discharge Detection Systems	Not Applicable
1.6.1 Discharge Detection By Personnel	Not Applicable
1.6.2 Automated Discharge Detection	Not Applicable
1.7 Plan Implementation	Not Applicable
1.7.1 Response Resources for Small, Medium, and Worst Case Spills	Not Applicable
1.7.2 Disposal Plans	Not Applicable
1.7.3 Containment and Drainage Planning	Not Applicable

<b>EPA's Oil Pollution Prevention Regulation (40 CFR 112)</b>	<b>ICP Citation(s)</b>
1.8 Self-Inspection, Drills/Exercises, and Response Training	Not Applicable
1.8.1 Facility Self-Inspection	Not Applicable
1.8.2 Facility Drills/Exercises	Not Applicable
1.8.3 Response Training	Not Applicable
1.9 Diagrams	Not Applicable
1.10 Security	Not Applicable
2.0 Response Plan Cover Sheet	Not Applicable

USCG FRP (33 CFR part 154)	ICP Citation(s)
154.1026 Qualified individual and alternate qualified individual	Not Applicable
154.1028 Availability of response resources by contract or other approved means	Not Applicable
154.1029 Worst case discharge	Not Applicable
154.1030 General response plan contents	Not Applicable
(a) The plan must be written in English	Not Applicable
(b) Organization of the plan	Not Applicable
(c) Required contents	Not Applicable
(d) Sections submitted to COTP	Not Applicable
(e) Cross-references	Not Applicable
(f) Consistency with NCP and ACPs	Not Applicable
154.1035 Significant and substantial harm facilities	Not Applicable
(a) Introduction and plan content	Not Applicable
(1) Facility's name, physical and mailing address, county, telephone, and fax	Not Applicable
(2) Description of a facility's location in a manner that could aid in locating the facility	Not Applicable
(3) Name, address, and procedures for contacting the owner/operator on 24-hour basis	Not Applicable
(4) Table of contents	Not Applicable
(5) Cross index, if appropriate	Not Applicable
(6) Record of change(s) to record information on plan updates	Not Applicable
(b) Emergency Response Action Plan	Not Applicable
(1) Notification procedures	Not Applicable
(i) Prioritized list identifying person(s), including name, telephone number, and role in plan, to be notified in event of threat or actual discharge	Not Applicable
(ii) Information to be provided in initial and follow-up notifications to federal, state, and local agencies	Not Applicable
(2) Facility's spill mitigation procedures	Not Applicable
(i) Volume(s) of persistent and non-persistent oil groups	Not Applicable
(ii) Prioritized procedures/task delegation to mitigate or prevent a potential or actual discharge or emergencies involving certain equipment/scenarios	Not Applicable
(iii) List of equipment and responsibilities of facility personnel to mitigate an average most probable discharge	Not Applicable
(3) Facility response activities	Not Applicable
(i) Description of facility personnel's responsibilities to initiate/supervise response until arrival of qualified individual	Not Applicable
(ii) Qualified individual's responsibilities/authority	Not Applicable
(iii) Facility or corporate organizational structure used to manage response actions	Not Applicable

<b>USCG FRP (33 CFR part 154)</b>	<b>ICP Citation(s)</b>
(iv) Oil spill response organization(s)/spill management team available by contract or other approved means	Not Applicable
(v) For mobile facilities that operate in more than one COTP, the oil spill response organization(s)/spill management team in the applicable geographic-specific appendix	Not Applicable
(4) Fish and wildlife sensitive environments	Not Applicable
(i) Areas of economic importance and environmental sensitivity as identified in the ACP that are potentially impacted by a WCD	Not Applicable
(ii) List areas and provide maps/charts and describe response actions	Not Applicable
(iii) Equipment and personnel necessary to protect identified areas	Not Applicable
(5) Disposal plan	Not Applicable
(c) Training and exercises	Not Applicable
(d) Plan review and update procedures	Not Applicable
(e) Appendices	Not Applicable
(1) Facility specific information	Not Applicable
(2) List of contacts	Not Applicable
(3) Equipment lists and records	Not Applicable
(4) Communications plan	Not Applicable
(5) Site-specific safety and health plan	Not Applicable
(6) List of acronyms and definitions	Not Applicable
(7) A geographic-specific appendix	Not Applicable
154.1040 Specific requirements for substantial harm facilities	Not Applicable
154.1041 Specific response information to be maintained on mobile MTR facilities	Not Applicable
154.1045 Groups I- IV petroleum oils	Not Applicable
154.1047 Group V petroleum oils	Not Applicable
154.1050 Training	Not Applicable
154.1055 Drills	Not Applicable
154.1057 Inspection and maintenance of response resources	Not Applicable
154.1060 Submission and approval procedures	Not Applicable
154.1065 Plan revision and amendment procedures	Not Applicable
154.1070 Deficiencies	Not Applicable
154.1075 Appeal Process	Not Applicable
Appendix C Guidelines for determining and evaluating required response resources for facility response plans	Not Applicable
Appendix D Training elements for oil spill response plans	Not Applicable

<b>DOT/RSPA FRP (49 CFR part 194)</b>	<b>ICP Citation(s)</b>
194.101 Operators required to submit plans	Not Applicable
194.103 Significant and substantial harm: operator's statement	Not Applicable
194.105 Worst case discharge	Not Applicable
194.107 General response plan requirements	Not Applicable
(a) Resource planning requirements	Not Applicable
(b) Language requirements	Not Applicable
(c) Consistency with NCP and ACP(s)	Not Applicable
(d) Each response plan must include:	Not Applicable
(1) Core Plan Contents	Not Applicable
(i) An information summary as required in 194.113	Not Applicable
194.113(a) Core plan information summary	Not Applicable
(1) Name and address of operator	Not Applicable
(2) Description of each response zone	Not Applicable
(b) Response zone appendix information summary	Not Applicable
(1) Core plan information summary	Not Applicable
(2) Name, telephone of qualified individual available on 24-hour basis	Not Applicable
(3) Description of response zone	Not Applicable
(4) List of line sections for each pipeline	Not Applicable
(5) Significant and substantial harm determination	Not Applicable
(6) Type of oil and volume of WCD	Not Applicable
(ii) Immediate notification procedures	Not Applicable
(iii) Spill detection and mitigation procedures	Not Applicable
(iv) The name, address, and telephone number of the oil spill response organization, if appropriate	Not Applicable
(v) Response activities and response resources	Not Applicable
(vi) Names and telephone numbers of federal, state, and local agencies which the operator expects to have pollution control responsibilities or support	Not Applicable
(vii) Training procedures	Not Applicable
(viii) Equipment testing	Not Applicable



<b>DOT/RSPA FRP (49 CFR part 194)</b>	<b>ICP Citation(s)</b>
(ix) Drill types, schedules, and procedures	Not Applicable
(x) Plan review and update procedures	Not Applicable
(2) An appendix for each response zone	Not Applicable
194.109 Submission of state response plans	Not Applicable
194.111 Response plan retention	Not Applicable
194.113 Information summary (see 194.107(d)(1)(i))	Not Applicable
194.115 Response resources	Not Applicable
194.117 Training	Not Applicable
194.119 Submission and approval procedures	Not Applicable
194.121 Response plan review and update procedures	Not Applicable
Appendix A Recommended guidelines for the preparation of response plans	Not Applicable
Section 1 Information summary	Not Applicable
Section 2 Notification procedures	Not Applicable
Section 3 Spill detection and on-scene spill mitigation procedures	Not Applicable
Section 4 Response activities	Not Applicable
Section 5 List of contacts	Not Applicable
Section 6 Training procedures	Not Applicable
Section 7 Drill procedures	Not Applicable
Section 8 Response plan review and update procedures	Not Applicable
Section 9 Response zone appendices	Not Applicable

<b>OSHA Emergency Action Plans (29 CFR 1910.38(a)) and Process Safety (29 CFR 1910.119)</b>	<b>ICP Citation(s)</b>
1910.38(a) Emergency action plan	
(1) Scope and applicability	Page 1
(2) Elements	
(i) Emergency escape procedures and emergency escape route assignments	Pages 22-24, Annex 3 Evacuation Routes
(ii) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate	Annex 3 – Pages 1-3
(iii) Procedures to account for all employees after emergency evacuation has been completed	Pages 22-24
(iv) Rescue and medical duties for those employees who are to perform them	Page 25
(v) The preferred means of reporting fires and other emergencies	Pages 8-13
(vi) Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan	Pages 12 - 13
(3) Alarm system	Page 8
(4) Evacuation	Pages 22-24, Annex 3 Evacuation Routes
(5) Training	Annex 5 Pages 1-4
1910.119 Process safety management of highly hazardous chemicals	
(e)(3)(ii) Investigation of previous incidents	Not Provided per Facility's Request
(e)(3)(iii) Process hazard analysis requirements	Annex 3- Pages 12- 20
(g)(1)(i) Employee training in process/operating procedures	Annex 5 Pages 1-4
(j)(4) Inspection/testing of process equipment	Annex 5 – Pages 2-4, Annex 7 – Inspection Logs
(j)(5) Equipment repair	Annex 7 – Page 1
(l) Management of change(s)	Annex 6 – Page 1
(m) Incident investigation	Pages Annex 4 – Pages 1-2
(n) Emergency planning and response	Pages 9-10, and 22-38
(o)(1) Certification of compliance	Not Applicable until 2002
1910.165 Employee alarm systems	
(b) General requirements	
(b)(1) Purpose of alarm system	Pages 8 and 17
(b)(4) Preferred means of reporting emergencies	Pages 9-13
(d) Maintenance and testing	Page 43
1910.272 Grain handling facilities	Not Applicable
(d) Development/implementation of emergency action plan	Not Applicable

<b>OSHA HAZWOPER (29 CFR 1910.120)</b>	<b>ICP Citation(s)</b>
1910.120(k) Decontamination	Page 40
1910.120(l) Emergency response program	
(1) Emergency response plan	
(i) An emergency response plan shall be developed and implemented by all employers within the scope of this section to handle anticipated emergencies prior to the commencement of hazardous waste operations	Pages
(ii) Employers who will evacuate their employees from the workplace when an emergency occurs, and who do not permit any of their employees to assist in handling the emergency, are exempt from the requirements of this paragraph if they provide an emergency action plan complying with section 1910.38(a) of this part	Pages 22-24, Annex 3 Evac Routes
(2) Elements of an emergency response plan	
(i) Pre-emergency planning and coordination with outside parties	Page 13, Annex 3- Pages 4
(ii) Personnel roles, lines of authority, and communication	Pages 8-13
(iii) Emergency recognition and prevention	Page 10, Annex 3 – Pages and Annex 7 – Page 1
(iv) Safe distances and places of refuge	Pages 24
(v) Site security and control	Page 8
(vi) Evacuation routes and procedures	Pages 22-24, Annex 3 Evac Routes
(vii) Decontamination procedures	Page 40
(viii) Emergency medical treatment and response procedures	Page 25
(ix) Emergency alerting and response procedures	Pages 8-13 and 22-38
(x) Critique of response and follow-up	Pages 39-43
(xi) PPE and emergency equipment	Pages 16-21
(3) Procedures for handling emergency incidents	
(i) Additional elements of emergency response plans	
(A) Site topography, layout, and prevailing weather conditions	Page 7
(B) Procedures for reporting incidents to local, state, and federal government agencies	Pages 13-14,26-27, and 41
(ii) The emergency response plan shall be a separate section of the Site Safety and Health Plan	
(iii) The emergency response plan shall be compatible with the disaster, fire, and/or emergency response plans of local, state, and federal agencies	Page 15
(iv) The emergency response plan shall be rehearsed regularly as part of the overall training program for site operations	Annex 5 – Page 1
(v) The site emergency response plan shall be reviewed periodically and, as necessary, be amended to keep it current with new or changing site conditions or information	Pages 40-41
(vi) An employee alarm system shall be installed in accordance with 29 CFR 1910.165 to notify employees of an emergency situation; to stop work activities if necessary; to lower background noise in order to speed communications; and to begin emergency procedures	Page 12
(vii) Based upon the information available at time of the emergency, the employer shall evaluate the incident and the site response capabilities and proceed with the appropriate steps to implement the site emergency	Pages 8-10

<b>OSHA HAZWOPER (29 CFR 1910.120)</b>	<b>ICP Citation(s)</b>
response plan	
1910.120(p)(8) Emergency response program	
(i) Emergency response plan	
(ii) Elements of an emergency response plan	
(A) Pre-emergency planning and coordination with outside parties	Page 13, Annex 3- Pages 4
(B) Personnel roles, lines of authority, and communication	Pages 8-13
(C) Emergency recognition and prevention	Page 10, Annex 3 – Pages and Annex 7 – Page 1
(D) Safe distances and places of refuge	Pages 24
(E) Site security and control	Page 8
(F) Evacuation routes and procedures	Pages 22-24, Annex 3 Evac Routes
(G) Decontamination procedures	Page 40
(H) Emergency medical treatment and response procedures	Page 25
(I) Emergency alerting and response procedures	Pages 8-13 and 22-38
(J) Critique of response and follow-up	Pages 39-43
(K) PPE and emergency equipment	Pages 16-21
(iii) Training	Annex 5 Pages 1-4
(iv) Procedures for handling emergency incidents	Pages 22-38
(A) Additional elements of emergency response plans	
(1) Site topography, layout, and prevailing weather conditions	Page 7
(2) Procedures for reporting incidents to local, state, and federal government agencies	Pages 13-14,26-27, and 41
(B) The emergency response plan shall be compatible and integrated with the disaster, fire and/or emergency response plans of local, state, and federal agencies	Page 15
(C) The emergency response plan shall be rehearsed regularly as part of the overall training program for site operations	Annex 5 – Page 1
(D) The site emergency response plan shall be reviewed periodically and, as necessary, be amended to keep it current with new or changing site conditions or information	Pages 40-41, Annex 6 – Pa
(E) An employee alarm system shall be installed in accordance with 29 CFR 1910.165	Page 12
(F) Based upon the information available at the time of the emergency, the employer shall evaluate the incident and the site response capabilities and proceed with the appropriate steps to implement the site emergency response plan	Pages 8-10
1910.120(q) Emergency response to hazardous substance releases	
(1) Emergency response plan	Pages 8-38
(2) Elements of an emergency response plan	
(i) Pre-emergency planning and coordination with outside parties	Page 13, Annex 3- Pages 4

<b>OSHA HAZWOPER (29 CFR 1910.120)</b>	<b>ICP Citation(s)</b>
(ii) Personnel roles, lines of authority, training, and communication	Pages 8-13
(iii) Emergency recognition and prevention	Page 10, Annex 3 – Pages and Annex 7 – Page 1
(iv) Safe distances and places of refuge	Pages 24
(v) Site security and control	Page 8
(vi) Evacuation routes and procedures	Pages 22-24, Annex 3 Evac Routes
(vii) Decontamination procedures	Page 40
(viii) Emergency medical treatment and response procedures	Page 25
(ix) Emergency alerting and response procedures	Pages 8-13 and 22-38
(x) Critique of response and follow-up	Pages 39-43, Annex 6- Pag
(xi) PPE and emergency equipment	Pages 16-21
(xii) Emergency response plan coordination and integration	Pages 8-10
(3) Procedures for handling emergency response	
(i) The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS)	Annex 3- Page 1
(ii) The individual in charge of the ICS shall identify, to the extent possible, all hazardous substances or conditions present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies	Annex 3 – Pages 12-21
(iii) Implementation of appropriate emergency operations and use of PPE	Pages 22-38
(iv) Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response	Annex 3 – Pages 2-4
(v) The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations	Annex 3 – Pages 2-4
(vi) Backup personnel shall stand by with equipment ready to provide assistance or rescue	Annex 3 - Pages 2-4
(vii) The individual in charge of the ICS shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site	Annex 3 - Page 2
(viii) When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have authority to alter, suspend, or terminate those activities	Annex 3 – Pages 1-4
(ix) After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures	Pages 39-40
(x) When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating	Annex 3 – Page 4
(4) Skilled support personnel	Page 12
(5) Specialist employees	Page 12
(6) Training	Annex 5-Pages 1-4
(7) Trainers	Annex 5 – Pages 1-4

<b>OSHA HAZWOPER (29 CFR 1910.120)</b>	<b>ICP Citation(s)</b>
(8) Refresher training	Annex 5 Pages 1-4
(9) Medical surveillance and consultation	
(10) Chemical protective clothing	Page 21
(11) Post-emergency response operations	Pages 39-43

EPA's Risk Management Program (40 CFR part 68)	ICP Citation(s)
68.20-36 Offsite consequence analysis	Not Applicable
68.42 Five-year accident history	Not Applicable
68.50 Hazard review	Not Applicable
68.60 Incident investigation	Not Applicable
68.67 Process hazards analysis	Not Applicable
68.81 Incident investigation	Not Applicable
68.95(a) Elements of an emergency response program	Not Applicable
(1) Elements of an emergency response plan	Not Applicable
(i) Procedures for informing the public and emergency response agencies about accidental releases	Not Applicable
(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures	Not Applicable
(iii) Procedures and measures for emergency response after an accidental release of a regulated substance	Not Applicable
(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance	Not Applicable
(3) Training for all employees in relevant procedures	Not Applicable
(4) Procedures to review and update the emergency response plan	Not Applicable
68.95(b) Compliance with other federal contingency plan regulations	Not Applicable
68.95(c) Coordination with the community emergency response plan	Not Applicable

Massachusetts Personnel Training (310 CMR 30.516)	ICP Citation(s)
516 (1) Training Program	
(a) Facility personnel assigned to the management of hazardous waste shall successfully complete a program of instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with 310 CMR 30.000 and the conditions of the facility's license. This program shall be directed by a person trained in hazardous waste management procedures and shall include instruction, which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the position in which they are employed.	Annex 5 –Pages 1-4
(b) Personnel new to a facility shall not work in unsupervised positions until they have successfully completed the training requirements of 310 CMR 30.516(l)(a).	Annex 5 – Page 3
(c) Facility personnel shall successfully complete the program required by 310 CMR 30.516(l)(a) within six months of their employment or their being assigned to a position new to them at the facility.	Annex 5 – Pages 1 - 4
(d) Facility personnel shall take part in an annual review of the initial raining required by 310 CMR 30.516(l)(a).	Annex 5 – Page 1
(e). Training records on current personnel shall be kept until closure of the facility. Training records of former personnel shall be kept for at least three years from the date such personnel last –worked at the facility.	Annex 5 – Page 1
(2) Contents of training plan	
(a) The owner or operator shall prepare a written personnel training plan designed to ensure compliance with 310 CMR 30.516(l). To ensure that facility personnel are able to respond effectively to emergencies, the training plan, at a minimum, shall specify how personnel will be familiarized with the properties and hazardous nature of the hazardous waste at the facility and with emergency procedures, emergency equipment, emergency systems, and personnel safety equipment, including where applicable:	Annex 5 – Pages 1-4
1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;	Annex 5 – Page 1
2. Use of automatic waste feed cutoff systems;	Annex 5 – Page 1
3. Communications or alarm systems;	Annex 5 –Page 1
4. Response to fire or explosions;	Annex 5 – Page 1
5. Response to potential ground water or surface water contamination incidents; and	Annex 5 – Page 1
6. Shutdown of operations	Annex 5 – Page 1
(b) Included with the personnel training plan shall be the following documents and records:	
1. The job title for each position at the facility related to hazardous waste management;	Annex 5 – Pages 1-4
2. A written job description for each position listed pursuant to 310 CMR 30.516(2)(b)l. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company locations or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties, of employees assigned to each such position.	Annex 5 – Pages 1-4
2. A written job description for each position listed pursuant to 310 CMR 30.516(2)(b)l. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company locations or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties, of employees assigned to each such position.	Annex 5 – Pages 1-4
4. Records that document that the training or job experience required pursuant to 310 CMR 30.516 has been given. to, and satisfactorily completed by, facility personnel.	Annex 5 – Page 1



Massachusetts Contingency Plan, Emergency Procedures, Preparedness, and Prevention (310 CMR 30.520)	ICP Citation(s)
30.521: Purpose, Content and Implementation of Contingency Plan	
(1) Each owner or operator shall have a contingency plan for each facility. The contingency plan shall be designed to prevent and to minimize hazards to public health, safety, or welfare or the environment from fires, explosions, spills or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.	Core Plan – Pages 8-39
(2) The provisions of the contingency plan shall be carried out immediately whenever there is a potential for, or there actually is, a fire, explosion, or other release of hazardous waste or waste constituents which could threaten public health, safety, or welfare, or the environment	Core Plan – Pages 8-39
(3) The contingency plan shall contain a clear outline of the lines of communication among facility personnel and shall describe the actions facility personnel shall take to comply with 310 CMR 30.521(l) and (2), and the equipment to be used and the actions to be taken to comply with 310 CMR 30.524(6), in response to potential or actual fires, explosions, or any other unplanned sudden or non-sudden release of hazardous waste or, hazardous waste constituents to air, soil, surface water or ground water.	Core Plan – Pages 8-13; Pages 16-21
(4) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in compliance with 40 CFR Part 112 or Part 151, or some other emergency or contingency plan, the owner or operator need only add to that plan whatever is necessary to comply with 310 CMR 30.521.	Not Applicable
(5) The owner or operator shall make every reasonable attempt to make the following arrangements, as appropriate for the type of hazardous waste handled, at the facility and the potential need for the services of the organizations referred to below, and the contingency plan shall describe all of the said arrangements:	
(a) Arrangements to familiarize police departments, fire departments, local boards of health and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility, hazards associated with such wastes, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes.	Annex 3 – Pages 4-6
(b) If more than one police department and/or fire department might respond to an emergency, agreements designating the specific police department and/or specific fire department which shall have primary emergency authority, and agreements with any other police department(s) and/or fire department(s) to provide support to whoever has primary emergency authority;	Not Applicable
(c) Agreements with State' emergency response teams emergency response contractors, local boards of health, and equipment suppliers.	Annex 3 – Pages 4-6
(d) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses, which could result from fires, explosions, or other releases at the facility.	Annex 3 – Page 5
(6) If any organization referred to in 310 CMR 30.521(5) refuses to enter into an arrangement listed therein, the owner or operator shall document the refusal in the facility's operating record and contingency plan and shall promptly so inform the Department.	Not Applicable
7) Each facility shall at all times have an emergency coordinator either on the facility premises, or, to the extent the facility's operations make this option appropriate, on call and available to respond to an emergency by reaching the facility within one hour. The emergency coordinator shall have the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The coordinator shall have access to all parts of the facility. In addition, this individual shall have the authority to spend or use whatever is necessary to carry out the contingency plan.	Annex 3 – Page 3

<b>Massachusetts Contingency Plan, Emergency Procedures, Preparedness, and Prevention (310 CMR 30.520)</b>	<b>ICP Citation(s)</b>
(8) The contingency plan shall list the names, addresses, and the office and home telephone numbers of all individuals qualified to act as emergency coordinator, and this list shall be kept up-to-date. If more than one individual is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates. For new facilities, this information shall be initially supplied to the Department at the time of license application. All facilities shall promptly notify the Department and the organizations listed in 310 CMR 30.521(5)(a) of any change in this information.	Core Plan – Page 12 Addresses not included at request of facility
(9) The contingency plan shall include a list of all emergency equipment, including emergency medical equipment, to be kept and maintained at the facility. This list shall be kept up-to-date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.	Core Plan – Pages 16-21
(10) The plan shall include a description of procedures, structures, or equipment used at the facility to:	
(a) Prevent uncontrolled reaction of incompatible wastes; for example, procedures to avoid fires, explosions, or toxic gases;	Annex 3 –Pages 12-21
(b) Prevent hazards in unloading operations; for example, ramps, special fork lifts, emergency containment equipment;	Annex 3 – Pages 12-21
(c) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment;	Annex 3 – Pages 12-21
(d) Prevent flooding;	
(e) Mitigate effects of equipment failure or power outages;	Core Plan – Page 17
(f) Prevent hazards to public health, safety, or welfare or the environment from fires, explosions, spills, or any other unplanned or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water, and	Core Plan – Pages 26-32
(g) Prevent undue exposure of personnel to hazardous waste (e.g., protective clothing).	Core Plan – Page 21
(11) The plan shall include an evacuation plan for facility personnel if there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, c, evacuation routes, and alternate evacuation routes in case the primary routes were to be blocked by potential or actual releases of hazardous waste or fires.	Core Plan – Page 22 Annex 3 – Attachments
30.522: Copies of Contingency Plan	
A copy of the contingency plan and all revisions to the plan shall be submitted to local police departments, local fire departments, hospitals, local boards of health, the chief executive officer of the community, state and local emergency response teams that may be called upon to provide emergency services, and the Department.	Annex 3 – Pages 4-5
30.523: Amendment of Contingency Plan	
The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:	
(1) The facility license is revised;	Annex 6 – Page 1
(2) The plan fails in an emergency;	Annex 6 – Page 1
(3) The list of emergency coordinators changes;	Annex 6 – Page 1
(4) The list of emergency equipment changes;	Annex 6 – Page 1
(5) There is any change in the operation or maintenance of the facility; or	Annex 6 – Page 1
(6) There occurs any other circumstance, which indicates the need for a change in the contingency plan.	Annex 6 – Page 1

<b>Massachusetts Contingency Plan, Emergency Procedures, Preparedness, and Prevention (310 CMR 30.520)</b>	<b>ICP Citation(s)</b>
30.524: Standards for Emergency Prevention and Response	
(1) Design and Operation of Facility. Facilities shall be designed, constructed, maintained, and operated to prevent and to minimize the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.	Annex 7 – Pages 1- 6
(2) Required Equipment. All facilities shall be equipped with at least the following, unless the Department determines in writing that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	
(a) An internal communications or alarm system capable of providing immediate emergency instruction, by voice or signal to facility personnel;	Core Plan – Pages 8-9
(b) A device, immediately available at all areas of operations, such as a telephone or a hand-held two-way radio, call box, or other instrument capable of summoning emergency assistance from, and which is acceptable to, local police departments, fire departments, or Federal, State or local emergency response teams;	Core Plan – Page 8
(c) A portable fire extinguisher, fire control equipment, including special extinguishing equipment, such as that using foam inert gas, or dry chemicals; spill control equipment; and decontamination equipment; and	Core Plan – Pages 16-21
(d) Water at adequate volume and pressure to supply water hose streams or foam producing equipment or automatic sprinklers or water spray systems.	Core Plan – Page 17
(e) Clear markings identifying all exits so that everyone in the facility during an emergency can quickly find their way out of the facility during the emergency.	Core Plan – Page 17
(f) An up-to-date written list containing the following information, a copy of which list shall be prominently posted near the telephones at the site of accumulation.	
1. The name(s) and telephone number(s) of the emergency coordinator(s).	Core Plan – Page 12
2. The location(s) of the fire extinguisher(s) and spill control material(s), and, if present, the fire alarms.	Core Plan – Pages 16-21
3. The telephone number of the fire department or, if there is a direct alarm system, instructions on how to activate it, or both.	Core Plan – Page 13
4. Evacuation routes, where applicable.	Core Plan – Pages 22-24 Annex 3 – Attachments
(3) Testing and Maintenance of Equipment, all facility communications or alarm systems, protection equipment, spill control equipment, and decontamination equipment shall be tested and maintained as necessary to ensure its proper operation in time of emergency.	Core Plan – Page 43
(4) Access to Communications or an Alarm System.	Core Plan – Page 8
(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, the owner or operator shall ensure that all personnel involved in the operation always have immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee, unless the Department has determined that such a device is not required pursuant to 310 CMR 30.524(2).	Core Plan – Page 16
(b) If, at any time, only one employee is on the premises while the facility is operating, the owner or operator shall ensure that the employee always has immediate access to a device prescribed in 310 CMR 30.524(2)(b), unless the Department has determined that such a device is not required pursuant to 310 CMR 30.524(2).	Core Plan – Page 16

<b>Massachusetts Contingency Plan, Emergency Procedures, Preparedness, and Prevention (310 CMR 30.520)</b>	<b>ICP Citation(s)</b>
(5) Required Aisle Space. The owner or operator shall maintain sufficient aisle space to allow the unobstructed movement of personnel. fire protection equipment. spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless the Department determines in writing that aisle space is not needed for any of these purposes.	Core Plan – Page 16
(6) Emergency Procedures.	
(a) Whenever there is an imminent or actual emergency, the emergency coordinator at the facility or then on call, if having an emergency coordinator on call is authorized by the Department pursuant to 310 CMR 30.521(7) and 30.800, shall immediately:	
1. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel,	Core Plan – Page 8
2. Notify the Department, and	Core Plan – Page 10
3. Notify other appropriate State or local agencies with designated response roles if their help is needed.	Core Plan – Page 10
(b) Whenever there is a fire, explosion, or other release, the emergency coordinator shall:	
1. Immediately identify the character, exact source, amount, and extent of all released materials, and concurrently,	Core Plan Pages 10, and 33-36
2. Assess possible hazards to public health, safety, or welfare, or the environment that may result from the fire, explosion, or other release. This assessment shall consider both direct and indirect effects of the fire, explosion, or other release, e.g. the effects of any hazardous surface water run-off from water or chemical agents used to control fire or heat-induced explosions.	Core Plan Pages 33-36, and 41-43
(c) If the emergency coordinator determines that the facility has had a fire, explosion, or other release which could threaten public health, safety, or welfare of the environment, the emergency coordinator shall:	
1. Immediately notify appropriate officials as identified in the facility contingency plan if the emergency coordinator's assessment indicates that evacuation of local areas may be advisable. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated; and	Core Plan - Pages 10 and 41-43
2. Immediately notify the Department and either the government official identified in the facility's contingency plan as the on-scene coordinator for that geographical area (in the applicable regional contingency plan pursuant to 40 CFR Part 15 10), or the National Response Center using its 24-hour toll free telephone number 800-424-8802. The report shall include the name and telephone number of the individual reporting; the name and address of the facility-, the time and type of incident (eg., release, fire); the name(s) and quantity of material(s) involved, to the extent known; the extent of injuries, if any-, and the possible hazards to public health, safety, or welfare, or the environment outside the facility.	Core Plan – Pages 10 and 41-43
(d) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, runoff, and other releases do not occur, recur, or spread off the site or to other hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	Core Plan – Pages 33-34 and 41-43
(e) If the facility stops operations in response to a potential or actual fire, explosion, or other release,	
1. The emergency coordinator shall monitor for leaks, pressure buildup, gas generation, and ruptures in valves, pipes, or other equipment, wherever this is appropriate.	Annex 7 – Pages 2-3
2. The emergency coordinator shall, immediately after an emergency, provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a fire, explosion, or other release at the facility. Unless the owner or operator can demonstrate pursuant to 310 CMR 30. 100 that the recovered material is not hazardous waste, the owner or operator also becomes a generator of hazardous waste and shall manage it in compliance with all applicable requirements of 310 CMR 30.000.	Core Plan – Pages 41-43

<b>Massachusetts Contingency Plan, Emergency Procedures, Preparedness, and Prevention (310 CMR 30.520)</b>	<b>ICP Citation(s)</b>

3. The emergency coordinator shall ensure that, in the affected area(s) of the facility:	
a. no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	Core Plan – Pages 41-43
b. all emergency equipment and systems listed in the contingency plan are cleaned, recharged, reactivated, and fit for their intended use before facility operations are resumed.	Core Plan – Pages 41-43
4. Operations shall not be resumed at the facility until the owner or operator notifies the Department and appropriate local authorities that the facility is in compliance with 310 CMR 30.524(6)(e)3. -and the Department determines in writing that there is no longer a threat to public health, safety, or welfare, or the environment.	Core Plan – Pages 41-43
(f) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within seven days after the incident, the owner or operator shall submit a written report of the incident to the Department. The report shall include:	Core Plan Pages 41-42 Annex 4
1. The name, address, and telephone number of the owner or operator;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
2. The name, address, and telephone number of the facility;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
3. The date, time, and type of incident (e.g., fire, explosion);	Core Plan – Pages 41-42; Annex 4- Pages 1-2
4. The name and quantity of material(s) involved;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
5. The extent of injuries, if any;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
6. An assessment of actual or potential hazards to public health, safety, welfare, or the environment, when this is applicable;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
7. The estimated quantity and the disposition of recovered material that resulted from the incident;	Core Plan – Pages 41-42; Annex 4- Pages 1-2
8. The differences between the emergency response activities actually taken and those prescribed in the contingency plan and the reasons for each such difference; and	Core Plan – Pages 41-43; Annex 4- Pages 1-2
9. Proposed measures to prevent similar incidents in the future.	Core Plan – Pages 41-43; Annex 4- Pages 1-2