



# Container Storage Area Contingency Plan

This contingency plan is required under Federal Resource, Conservation and Recovery Act (RCRA 40CFR264/265) regulations and analogous Connecticut hazardous waste regulations, for the Wesleyan University Hazardous Waste Container Storage Area (CSA).

Version 3: November 28, 2005

Dept. of Environmental Health & Safety

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## 1.0 INTRODUCTION

This contingency plan is required under Federal Resource, Conservation and Recovery Act (RCRA 40CFR266) regulations and analogous Connecticut hazardous waste regulations, for the Wesleyan University Hazardous Waste Container Storage Area (CSA). It is required for Large Quantity Generators of Hazardous Waste.

### 1.1 Location

The CSA is located at:

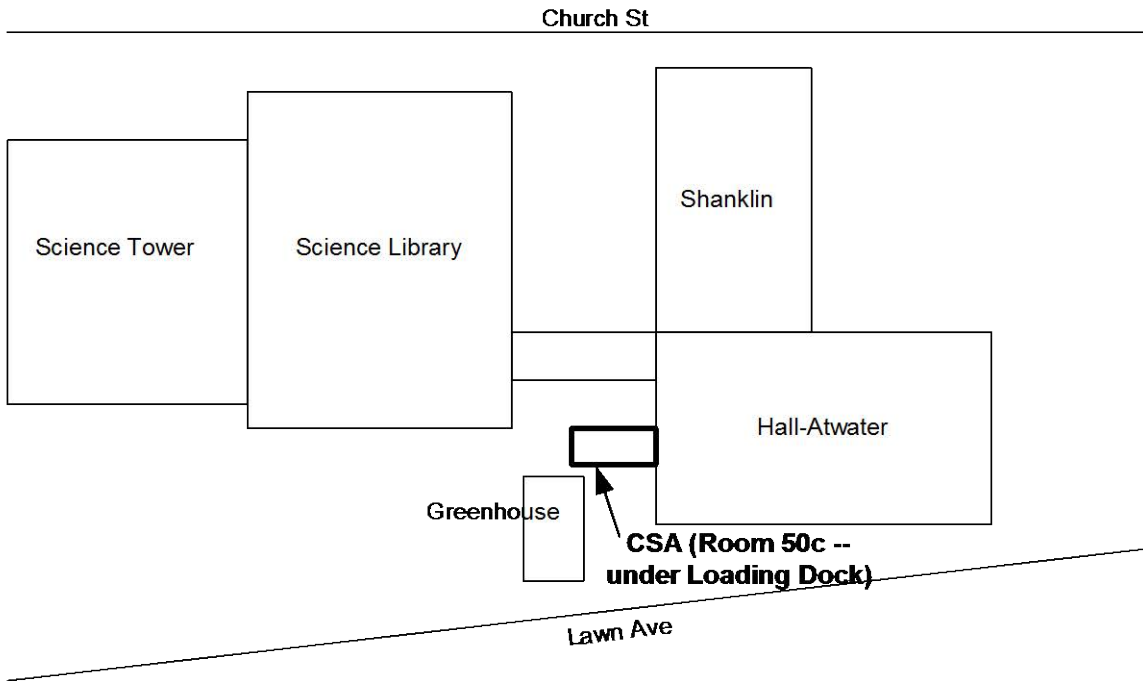
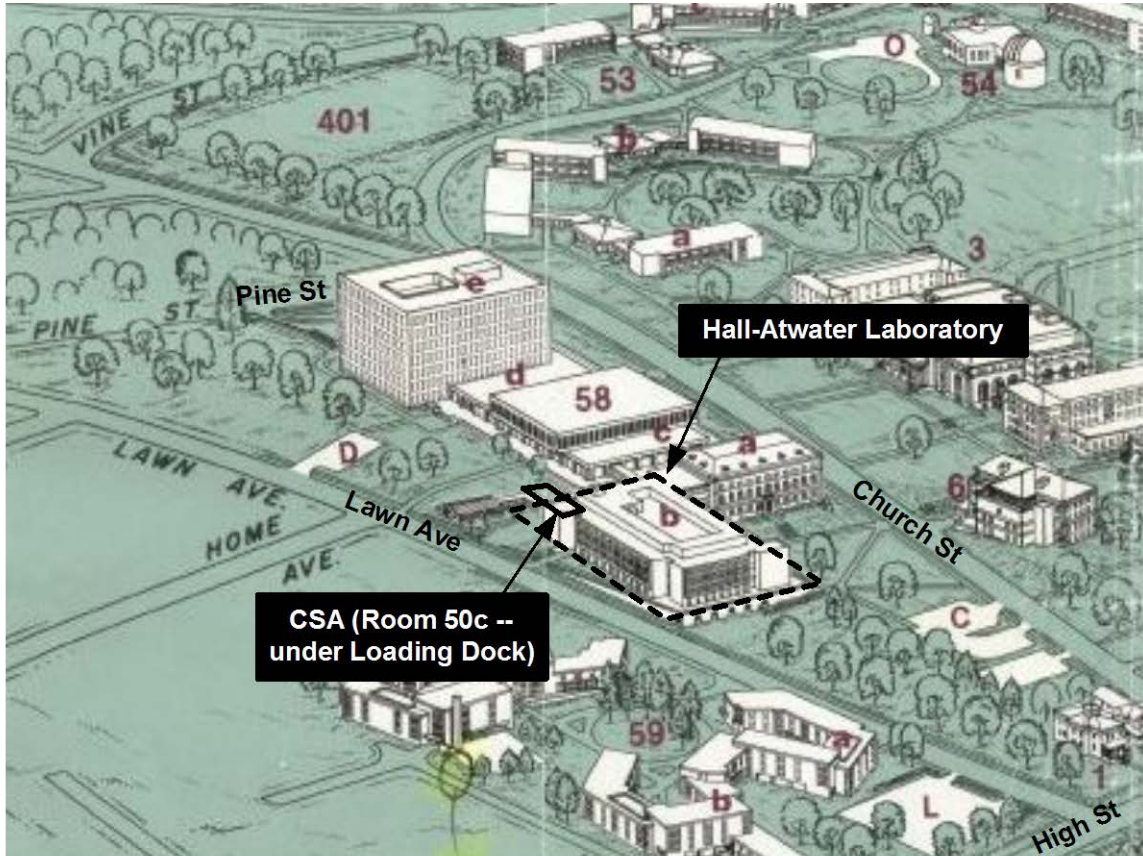
Chemistry Department  
Hall-Atwater Laboratory, Room 50C  
Lawn Ave.  
Middletown, CT 06457

### 1.2 Setting

The Hall-Atwater Laboratory is on the campus of Wesleyan University, between Church Street and Lawn Avenue on the north and south, and between High Street and Pine Street on the east and west. The CSA is on the ground floor of the building on the southwest corner of the facility, below the loading dock. The surrounding area contains University classroom buildings, science library, dormitories and residential housing. A map of the area is shown on **Figure 1**.



Figure 1. Hall-Atwater Laboratory (bldg. 58b) and Surroundings





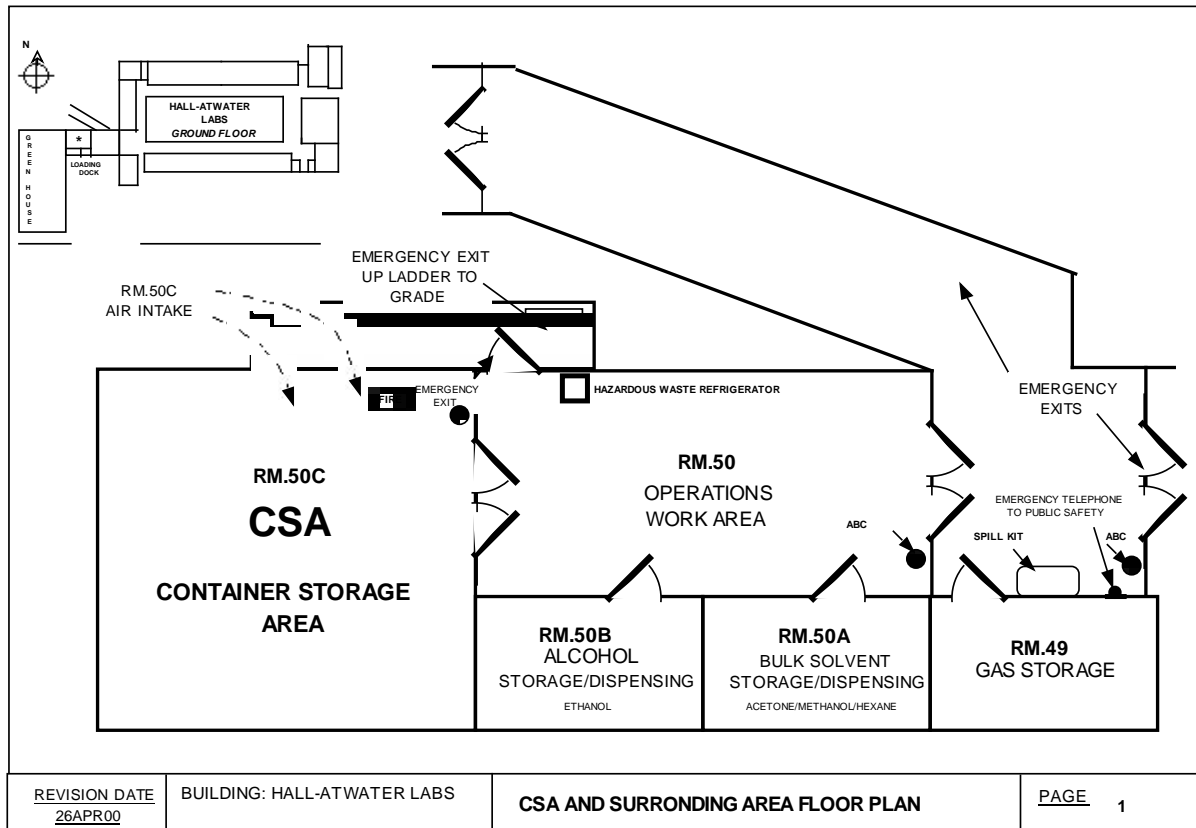
### 1.3 Description of CSA

A diagram of the CSA floor plan is shown on **Figure 2**. Room 50C is the CSA. A locked chemical storage refrigerator is located in Room 50. It is used as a CSA for hazardous waste that may be unstable at room temp. Room 50 is a foyer used as a staging area for lab packing of wastes by the disposal contractor. The hazardous waste refrigerator is inspected under the CSA protocol and inspection guide. The CSA has exhaust ventilation with floor level pickup (for vapors heavier than air) and explosion-proof lighting and electrical circuits. Fire extinguishers are located in the room 50 complex foyer and in the hall outside room 49. A direct dial phone to Public Safety is located in the hall outside Room 49. The CSA has a CO<sub>2</sub> fire protection system. Wastes in the CSA are held for a maximum of 90 days. All waste containers are placed into appropriate secondary containment on shelves, separated into categories and incompatibles are segregated. Periodically, compatible wastes will be aggregated from several containers into one.

CSA floor drains and floor drain cleanouts have been sealed with concrete, the floor has been sealed with an epoxy material to inhibit its porosity and the door threshold has been raised 1" and sealed to create secondary containment of the room itself.

After a cleanout by a waste contractor, a label is placed on the first waste container added to start the 90-day clock, as well as a label of a different color to mark the first Extremely Hazardous Substance entering the room; the container date is notated on the door of the room as well.

**Figure 2. CSA Floor Plan and Emergency Equipment Locations**





## 1.4 Waste Generation

Wesleyan University teaching laboratories and research laboratories use a variety of reactants, solvents and other hazardous chemicals or materials. Residual reactants, unused chemicals, or chemicals past their shelf life result in generation of hazardous wastes -- mainly waste liquids, spent solvents or organic and inorganic solids or sludge. The Chemistry, Biology, Molecular Biology and Biochemistry Departments (in Hall-Atwater and Shanklin Laboratories) generate small amounts of such hazardous wastes on a regular basis. Laboratory protocols specify collection of compatible wastes in small satellite accumulation containers at the points of generation in each laboratory, as shown in **Figure 3**. Inorganic acids, are neutralized and disposed down the sink, all other lab-generated wastes are collected and retained in the CSA for pickup and disposal by a licensed hazardous waste contractor.



**Figure 3. Laboratory Satellite Accumulation Area**



**Figure 4. Radioactive Waste Decay-Out Room**



**Figure 5. Biomedical Waste Storage**

Biomedical and radioactive wastes also are generated by laboratory activities, but these are handled under different procedures and not within the CSA. Radioactive wastes (predominantly P-32 and S-35) are held in a secure decay-out room as shown on **Figure 4** for 10 half-lives prior to disposal, to assure that activity has dropped below required levels. Mixed waste is rare, but if it is generated, it is first subject to appropriate decay-out, and then transferred to the CSA for disposal.

Biomedical wastes are held in a separate storage area as shown on **Figure 5**, for pickup and disposal by a licensed biomedical waste contractor. Spills or other emergencies involving radioactive or biomedical wastes are subject to regulations other than RCRA, are handled under different procedures, and therefore *are not covered in this RCRA contingency plan*.

Several other University departments (Center for the Arts, Earth Sciences, Physical Plant) occasionally generate small quantities of RCRA hazardous waste, which are collected and aggregated in the CSA.



## 1.5 Generator Status

Wesleyan University is classified as a Large Quantity Generator (LQG) of RCRA hazardous wastes. In accordance with 40CFR262.34(a-c) you are considered an LQG if you generate more than 2,200 lbs (1,000 kg) of hazardous waste or more than 2.2 lbs (1 kg) of acute hazardous waste in any given calendar month.

## 2.0 PURPOSE OF PLAN

The purpose of this contingency plan is to minimize possible hazards to human health or the environment due to fire, explosion or release of RCRA hazardous wastes from the CSA to the interior of the Hall-Atwater building, or to the air, soil or water outside the CSA.

This plan is meant to be a guidance document for emergency responders and personnel who enter the CSA in daily routines or emergency situations.

This plan is provided to all local emergency providers for the express interest in maintaining a safe working atmosphere for the employees, students and staff of Wesleyan University and the safety all of emergency responders coming into Wesleyan University.

## 3.0 SCOPE

This plan covers RCRA hazardous wastes held in the CSA (Hall-Atwater Room 50C), and emergency preparedness and response actions to be taken by Wesleyan personnel in the event of a fire, explosion or release escaping the CSA. It **does not** cover:

- The small satellite accumulation points in each laboratory (these are typically under vented lab hoods, and are subject to standard lab protocols for chemical accidents and spills);
- Inventories of hazardous chemicals stored in the stockroom or in labs;
- Radioactive decay-out room or biomedical waste storage room, or any storage of these wastes.

## 4.0 GENERAL RESPONSIBILITIES

There is one primary Emergency Coordinator (EC) and two alternates. The primary EC is responsible for this plan. The EC on duty or on call at the time of the emergency is responsible for implementing this plan. All other laboratory staff personnel in the various Departments are responsible for reacting to an emergency according to the procedures prescribed in the plan, and for evacuating themselves and their students from areas near the CSA if directed by the EC, or if a hazardous condition is apparent.

In the context of the OSHA requirements, the EC (including alternates) is classified as a *Hazmat Technician Level*, and all other personnel are classified as a *First Responder - Awareness Level*.



## 5.0 EMERGENCY COORDINATOR (EC)

### 5.1 Function and Job Description

The EC, acting at the time of the emergency, is in charge of all initial actions taken to respond to the emergency. Each EC carries a Nextel Radio/Digital Cellular Phone, and Wesleyan Public Safety has the specific numbers. The EC shall:

1. Contain the release
2. Keep it from spreading
3. Prevent exposures
4. Has the authority to commit Chemistry Department resources to the degree needed to deal with the emergency
5. Continues in the above role until the Fire Department arrives
6. Upon arrival of the Fire Department, relinquishes his control to the Incident Commander for the Fire Department (the senior fire official on the scene), and acts as liaison to the Incident Commander for information and advice.

The primary EC administers the plan, conducts periodic reviews of the plan to keep it current, and makes periodic inspections of emergency equipment to ensure everything needed in an emergency is available and operable.

EC's also train laboratory staff personnel in basic emergency response actions at the *First Responder - Awareness Level*, during the annual hazardous waste safety training. The training materials for laboratory staff personnel are found in the Environmental Health and Safety Office Cady Building 170 Long Lane.

### 5.2 Qualifications

Each EC must be familiar with the CSA and adjacent building layout, laboratory operations and activities generating hazardous wastes, the location and chemical nature of the wastes stored in the CSA, and their behavior in a fire or when released to the atmosphere. They must have at least two years experience in the safe handling of hazardous materials. They must have a respirator, be properly qualified in its use, and be fit-tested annually.

In addition to this general background, each EC must have at least 24 hours of initial training in hazardous materials incidents to qualify at the *Hazmat Technician Level*. After this initial training, they must have 8 hours of refresher training each subsequent year to maintain proficiency.

### 5.3 List of Emergency Coordinators

There is one primary Emergency Coordinator, and two qualified alternates, as listed on **Table 1** (page 22).

## 6.0 EMERGENCY RESPONSE PROCEDURES

There are eight individual response procedures covering different emergency event scenarios. These procedures are attached to this plan, and are part of it. Each is kept to simple 1-page instructions per emergency event, for clarity in training and for simplicity if the plan has to be implemented.



# Emergency Response Procedure 1

## NOTIFICATION FOR A CSA EMERGENCY

### All Personnel

- There are two primary means for notification in an emergency: a Local *fire alarm* is triggered if the fire suppression system is activated, or the EC or a laboratory instructor makes a verbal announcement.
- On seeing a fire, explosion or release of dangerous material in or near the CSA, leave the location, and direct any students or staff to also leave the area. Close doors behind you.
- If you haven't heard an announcement or an alarm, pick up the nearest phone in a safe location near an exit on the way out, and advise **Public Safety (911)** of the accident and its location (Hall-Atwater, Room 50).
- Stay away from the accident location, unless you have been given a function to perform specifically at the direction of the EC.
- Hearing a fire alarm or an evacuation message, evacuate the building by the nearest safe exit (**See ERP 2**). Open interior doors cautiously. Do not open fire doors.

### Emergency Coordinator (EC)

- Report to the accident location if safe to do so.
  - Evaluate the situation and determine the necessary response actions.
- Decide on whether general evacuation, or evacuation of specific parts of the building, is appropriate.
- Pick up the nearest phone in a safe location and advise **Public Safety (911)** that the building (or section of the building) is being evacuated.





## Emergency Response Procedure 2

### EVACUATION OF THE CSA AREA

#### All Personnel

- On hearing a fire alarm or an evacuation message, evacuate the CSA area by the nearest safe exit. Go to the closest outside door; do not travel through the building. **Figure ERP2-1** on the reverse shows the interior evacuation routes from the CSA area. Open doors cautiously, if smoke or fumes are present, use another exit
- On seeing a fire, explosion or accidental release of dangerous material, leave the CSA area. Close doors behind you. Pick up the nearest phone in a safe location near an exit on the way out, and advise Public Safety (911) of the accident and its location (Hall-Atwater, Room 50).
- Take coats and personal belongings only if they are immediately accessible. Do not go elsewhere in the building.
- Proceed immediately to the primary rally point, which is the entry hall of Shanklin. **Stay clear of all spills, vapors, fumes or smokes.** **Figure ERP2-2** on the reverse shows the outside evacuation routes and rally points.
  - If the primary rally point is affected by smoke from a building fire, proceed to the secondary rally point, which is the Olin Memorial Library across Church Street to the north.
- **It is essential to report to the rally point. All laboratory staff personnel and students evacuated must be accounted for.** Do not leave the rally point until you have been logged down and have permission to leave.
- Do not return to the building, and do not attempt to retrieve your belongings, until the EC or other person in charge has determined that it is safe to do so.

#### Emergency Coordinator (EC)

- Evaluate the accident situation and determine the necessary response actions.
- Decide on whether general evacuation, or evacuation of specific areas around the CSA, is appropriate.
- Pick up the nearest phone in a safe location and advise Public Safety (911) that the building (or part of it) is being evacuated.
- Remind personnel being evacuated of the primary and secondary rally points.
- Advise the Fire Department on arrival, of any laboratory staff personnel or students who may still be in the affected area.

#### Public Safety

- Ask the EC (or other caller) if the Fire Department should be called. If uncertain, do it.
- If the caller was not the EC, page the EC's in the order listed until one calls back. Advise the EC of the situation.

#### Laboratory Staff Personnel

- At the rally point, account for staff, students and visitors known to be in the CSA or affected areas of the building.
- Advise the EC (or Fire Department Incident Commander) of any personnel unaccounted for.



### Emergency Response Procedure 2 (cont.)

Figure ERP2-1. Interior Evacuation Routes from CSA Area

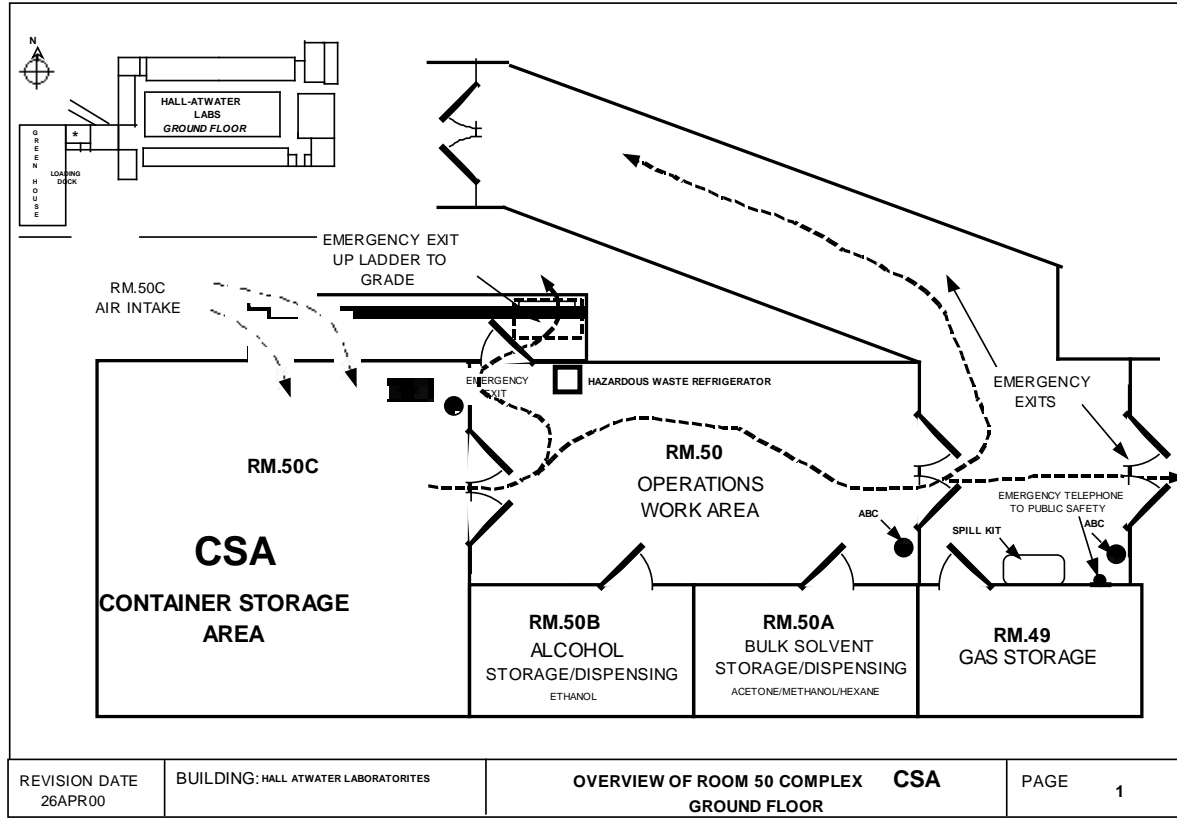
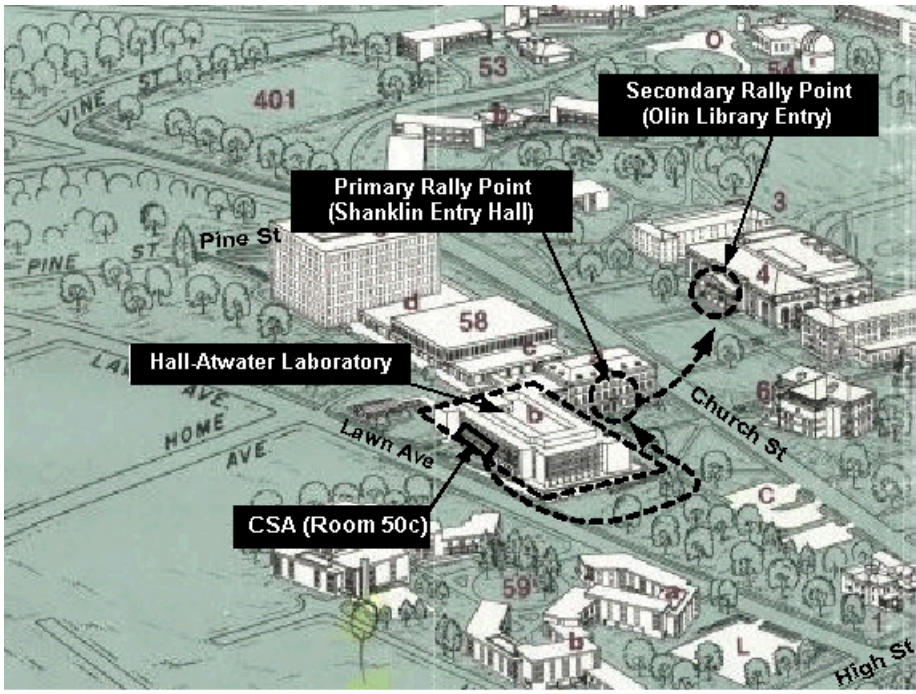


Figure ERP2-2: Rally Points for Evacuation from CSA Area





## Emergency Response Procedure 3

### FIRE IN THE CSA WITH POSSIBLE OR ACTUAL CONTAINER INVOLVEMENT

#### *All Personnel*

- On hearing a fire alarm or an evacuation message, evacuate the CSA area by the nearest safe exit. Proceed immediately to the primary rally point. **(See ERP 2 for evacuation.)**  
**Stay clear of all spills, vapors, fumes or smokes.**
- On seeing a serious fire or explosion in or near the CSA area, pick up the nearest phone in a safe location and advise Public Safety of the accident and its location (Hall-Atwater, Room 50).
- *Do not* stay around the scene of a fire unless you are specifically requested to help by the EC.

#### *Emergency Coordinator (EC)*

- Call Public Safety (911) and advise Dispatch that the Fire Department is needed.
- Order a general evacuation of the building. **(See ERP 2 for evacuation.)**
- Approach the fire scene cautiously. Avoid opening doors more than necessary. Make observations from other doors, windows or points of access. If necessary to open any door, do it cautiously. Evaluate the situation, but from a protected position and only if it is safe to do so. Identify the nature, source, amount and area extent of the released material to the degree possible.
- Note the location of any victims of fumes or explosions. Do not attempt rescue unless it can be done safely, and unless you have a backup observer and respiratory protection, and are sure there is sufficient oxygen available in the air.
  - Assess potential hazards to human health or the environment, including possible toxic gas generation and surface water runoff.
- If the fire involves electrical equipment, shut off the circuit breaker for that equipment, or for that section of the building if it is possible to do it safely.
- Stand by for Fire Department arrival, outside the Area in a safe place.
- Brief the Fire Department Incident Commander on the situation. Advise him of the approximate amount of flammable or hazardous material at risk of burning.
- Position absorbent pads or booms from the spill kits to intercept the drainage paths for spill runoff. **See ERP 5** for releases to the environment.
- Call the agencies as indicated in the emergency response procedure for reporting releases.
- Note any drainage paths taken by the fire-fighting water, for reference during the recovery phase.
- If anyone is overcome by exposure to vapors or smoke, or by direct contact, follow **ERP 8** for injuries.

#### *Laboratory Staff Personnel*

- If an evacuation is ordered, follow the **ERP 2** for evacuation. Shut down any ongoing experiments to the degree feasible.
- Provide assistance and equipment to the EC as directed.



## Emergency Response Procedure 4

### SPILL CONTAINED INSIDE THE CSA

#### All Personnel

- On hearing a fire alarm or an evacuation message, evacuate the CSA area by the nearest safe exit. Proceed immediately to the primary rally point. (See **ERP 2** for evacuation.) **Stay clear of all spills, vapors, fumes or smokes.**
- Advise the EC immediately of all spills discovered in the CSA area, including those of a small or housekeeping nature.
- *Do not* converge on the scene of a spill unless you are specifically asked to help by the EC.

#### Emergency Coordinator (EC)

- Evaluate the situation and determine the necessary response actions. If there is a potential for the initiation or spread of a fire or release, shut down all CSA operations and activities.
- Decide on whether a general building evacuation, or evacuation of specific areas of the building, is appropriate. (See **ERP 2** for evacuation.)
- Call Public Safety (911) if the situation is serious, or has the potential for a fire or explosion to develop.
- If spill qualifies as MAJOR (see Chemical Hygiene Plan) immediately call the "On-Call Spill Response Contractor" listed in **Table 6**.
- If **Minor spill**, contain the spill as close to the source as is safely possible. Construct a dike of absorbent socks, pads or pillows as appropriate from an emergency spill kit. If **Major spill**, contain downstream contamination by constructing a dike of absorbent socks, pads or pillows from a safe distance.
- Ground all drums or metal containers being used for clean up of volatile compounds. Do not allow powered hand trucks or forklifts to be operated in the cleanup area.
- Scoop or sop up the diked liquid (as appropriate depending on viscosity). Containerize liquids and solids (absorbent socks, pads or pillows) separately to the degree feasible. Move containers out of the spill area as they are filled, and disposed of properly.
- If cleaning up a solvent spill, assure prompt action by all involved personnel to minimize evaporation to the degree possible, and to minimize any permeation through the concrete floor (which may be permeable to several solvents). Evaporation will occur to some degree with most solvents while cleanup is in progress, especially if ventilation is needed to reduce vapor levels for safety purposes. However, evaporation is *not* to be used as a cleanup method.

#### Laboratory Staff Personnel

- If the alarm sounds or an evacuation is ordered, follow the emergency response procedure for evacuation.
- Provide assistance and equipment to the EC as directed.



## Emergency Response Procedure 5

### RELEASE TO THE ENVIRONMENT

#### All Personnel

- On hearing a fire alarm or an evacuation message, evacuate the CSA area by the nearest safe exit. Proceed immediately to the primary rally point. (See **ERP 2** for evacuation.) **Stay clear of all spills, vapors, fumes or smokes.**
- On seeing a release involving spills of solvents or escape of vapors or dust or other airborne chemicals to the environment, pick up the nearest phone in a safe location and advise Public Safety of the release and its location with respect to the CSA and the Hall-Atwater building.
- *Do not* stay around the scene of a release unless you are specifically requested to help by the Emergency Coordinator.

#### Emergency Coordinator (EC)

- Decide on whether general evacuation, or evacuation of specific areas of the Hall-Atwater building, is appropriate. (See **ERP 2** for evacuation.)
- Call Public Safety (911) if the situation appears serious, or has the potential for a fire or explosion to develop.
- If a **Minor Spill**, Put on gloves and protective clothing as appropriate.
- Contain the spill as close to the source as is safely possible. Construct a dike of absorbent socks, pads or pillows as appropriate from an emergency spill kit.
- If the spill is on public property (Lawn Avenue or Church Street), ask Public Safety for police support to direct and control traffic and prevent exposures or accidental ignition.
- To the degree feasible, turn any damaged container to a position to stop the leak, and pack the container in a suitable over-pack or transfer the contents to an intact container.
- Identify the nature, source, amount and area extent of the released material.
- Assess potential hazards to human health or the environment, including possible toxic gas generation and surface runoff toward a catch basin.
- For any Major spills, or spills in rainfall or snowmelt runoff running down Lawn Avenue or Church Street toward a catch basin, or across a parking lot toward a catch basin, dike around the basin with an absorbent boom from an emergency spill kit.
- Take the same action for water runoff from fire-fighting, provided it can be done safely without interfering with Fire Department operations.
- Call the agencies as listed in **ERP 7** for reporting releases.
- If Fire Department personnel want to wash down a spill area, advise them to reconsider it and refer them to the DEP. (It may be better environmentally to soak up certain spills with absorbents and sand, and to clean the residual from the pavement, than to wash a spill into the soil or a storm drain.)
- Note the path taken by the spill, and sketch it for reference during the recovery phase.
- If anyone is overcome by exposure to vapors or by direct contact, follow **ERP 8** procedure for injuries.



## Emergency Response Procedure 6

### POWER FAILURE IN THE CSA AREA

#### All Personnel

- Emergency lighting will come on. Loss of power will not affect any fire protection equipment or evacuation routes.
- Await instructions from your supervisor, laboratory instructor, or EC.

#### Emergency Coordinator (EC)

- Examine the CSA to check for any potentially hazardous conditions left unattended, and take appropriate actions.
- Verify that any open containers in the CSA have been closed.
- Close and lock the CSA door for the duration of the power outage.



# Emergency Response Procedure 7

## REPORTING EMERGENCIES AND RELEASES

Emergency Coordinator (EC)

- In addition to the emergency calls to Public Safety (911), *and as soon as possible after the immediate emergency response steps have been taken*, report an emergency by phone as appropriate to the agencies shown below, as appropriate.
- Use **Figure ERP7-1** below, as a format for quickly collecting and organizing information for this phone report. Before making any report, try to get as much information as is readily available. Don't delay reporting overly long just because the information is incomplete. Not all of the information will be required by all the agencies, but try to assemble it all so you have it handy.
- Make sure the post-emergency recovery actions are taken, per Emergency Plan Section 7. Particularly, within 24 hours after the emergency, mail or fax the DEP follow-up report. Save the fax transmittal receipt along with the report, or mail the report to DEP registered, return receipt requested.

Type of Emergency	LEPC* 911 (Dispatch)	DEP* 424-3338	NRC* 1-800- 424-8802	SERC* 424-4856
Fire with no hazardous material/waste involvement	Immediately call Middletown 911 if help is needed. If not, report to non-emergency number as a courtesy.			
Fire or explosion involving hazardous materials/wastes	Mandatory immediate report	Mandatory immediate report, if any release gets outside building (including airborne)	Mandatory report within 24 hours, if any release gets outside building and exceeds reportable quantity (RQ)	Mandatory immediate report, if any release gets outside building (including airborne)
Large spill, but totally contained inside CSA or building	Discretionary immediate report (activated Emergency Plan)	Discretionary immediate report (report if release is possible)		
Release of hazardous materials/wastes to environment	Mandatory immediate report	Mandatory immediate report	Mandatory report within 24 hours, if release exceeds reportable quantity (RQ)	Mandatory immediate report

- LEPC = Local Emergency Planning Committee
- DEP = Department of Environmental Protection
- NRC = National Response Center
- SERC = State Emergency Response Commission



### Emergency Response Procedure 7 (cont.)

	What to Say	Example Entries
<b>WHO</b>	<ul style="list-style-type: none"> <li>My name is _____. I'm the Emergency Coordinator at Wesleyan University.</li> <li>My call-back phone number is _____, area code 860.</li> </ul>	<ul style="list-style-type: none"> <li>Give your name. (Also, jot down the name of the person you're speaking with.)</li> </ul>
<b>WHERE</b>	<ul style="list-style-type: none"> <li>The emergency is located at _____, on the Wesleyan campus in Middletown, Connecticut.</li> <li>Our EPA ID number is CTD 012345678.</li> </ul>	<ul style="list-style-type: none"> <li>Give the precise location of the accident or spill or other problem.</li> <li>EPA ID number only needed if incident involves hazardous waste.</li> </ul>
<b>WHAT</b>	<ul style="list-style-type: none"> <li>I'm reporting a _____.</li> <li>The chemical involved is _____.</li> <li>This is a _____.</li> <li>The CAS number is _____.</li> <li>The UN/NA number is _____.</li> <li>This _____ above the federal RQ for this chemical.</li> <li>It's in a _____ form.</li> </ul>	<ul style="list-style-type: none"> <li>Spill to ground, spill to waterway, chemical fire, escape of chemical vapors, internal spill incident, etc.</li> <li>Proper chemical name.</li> <li>Hazardous chemical or hazardous waste, or both.</li> <li>State it if you know it.</li> <li>State it if you know it.</li> <li>Is, is not, may be.</li> <li>Solid (pellets), powder, liquid, compressed gas.</li> </ul>
<b>WHEN</b>	<ul style="list-style-type: none"> <li>The release began on _____ at _____.</li> <li>It is expected to continue for _____ more hours.</li> </ul>	<ul style="list-style-type: none"> <li>Date and time.</li> <li>Estimate of duration.</li> </ul>
<b>HEALTH EFFECTS</b>	<ul style="list-style-type: none"> <li>_____ injuries have been reported at the facility.</li> <li>The chemical _____ moved offsite.</li> <li>The probability the chemical will migrate offsite is _____.</li> <li>This _____ a possible serious public health threat.</li> <li>The nature of the threat is _____.</li> <li>Nearby campus buildings and residences have been advised to _____.</li> <li>The health risks from exposure are: _____.</li> <li>The medical / first aid measures are: _____.</li> </ul>	<ul style="list-style-type: none"> <li>None, number.</li> <li>Has, has not, may have.</li> <li>High, moderate, low.</li> <li>Is, is not (if you know).</li> <li>Airborne exposure, contact.</li> <li>Shelter, evacuate, standby for advisory, take no action.</li> <li>Eye and skin irritation, dizziness.</li> <li>Remove victim to fresh air, remove contaminated clothing, flush eyes, wash skin.</li> </ul>
<b>ENVIRONMENTAL EFFECTS</b>	<ul style="list-style-type: none"> <li>This _____ a possible serious environmental contamination problem.</li> <li>The nature of the problem is _____.</li> </ul>	<ul style="list-style-type: none"> <li>Is, is not (if you know).</li> <li>Deposition of fire byproducts on lawns or gardens, surface water contamination.</li> </ul>





## Emergency Response Procedure 8

### INJURIES FROM CHEMICAL EXPOSURES IN THE CSA

#### All Personnel

- From the nearest phone, call Public Safety (911).
- Administer first aid, if qualified.

#### Emergency Coordinator

- If victim is not breathing, give CPR. If a victim is overcome by exposure to fumes, move to fresh air.
- Do not move a victim with an apparent back or neck injury from a fume area; instead ventilate the area to remove fumes, and then give the victim oxygen if available.
- Avoid contact with any chemical spilled on victim's clothing.
- Call 911, ask for an Emergency Medical dispatch. Information on materials to which the victim was exposed should be provided to the dispatcher, along with a callback number for follow-up questions from the hospital.
- For skin or eye contact, flush with water for 15 minutes.
- For resinous solutions or coatings, remove from skin and flush with water for 15 minutes.
- With gloves on, remove the victim's contaminated clothing/or and shoes.
- Keep the victim quiet and try to maintain normal body temperature if the area is cool.



## 7.0 POST-EMERGENCY RECOVERY

### 7.1 CSA Cleanup Activities

#### Emergency Coordinator

After the emergency has been controlled, the EC will undertake the following cleanup activities as appropriate:

- Direct any cleanup activities required in the CSA or adjoining areas, and document progress in a daily log.
- Ensure that all personnel or contractors wear personal protective equipment as appropriate to the cleanup.
- Establish that all emergency equipment has been returned to the proper level of preparedness.
- Verify that all cleanup debris has been contained and collected before resuming normal operations.
- Arrange for sampling of catch basins into which solvents or fire-fighting runoff water containing solvents may have collected.
- Arrange for sampling of soil, surface water or groundwater in adjacent outside areas as needed.
- Act as liaison for any DEP spill investigations required.
- Ensure an appropriate supply of waste drums and labels for cleanup debris, unless, the cleanup is being conducted by a contractor.
- Assure that drums are properly stored and labeled, including a separate tag or label which identifies that they contain spill cleanup debris, and whether the debris is solid, liquid or mixed materials.
- Oversee the proper management and disposal of hazardous waste debris from the cleanup.
- Keep a separate log record of all spill cleanup drums or containers generated as a result of the emergency.
- Review the events of the emergency to assess whether the plan should be revised.

### 7.2 Follow-up Release Reports

Upon activation of this contingency plan or having an actual release to the environment triggers several follow-up reporting requirements. Send the letters to the agencies as listed in **Table 2** (page 23), as appropriate. The DEP has a prescribed format for a 24-hour follow-up report, as shown in **Table 3** (page 24). This and the other agency reports required are *in addition to* the immediate phone reporting requirements listed in the emergency response procedures.

## 8.0 EQUIPMENT PREPAREDNESS INSPECTIONS

### 8.1 Description of Emergency Equipment

Fire protection within the CSA is provided by an automatic overhead CO<sub>2</sub> sprinkler system. A fire alarm sounds if the system activates. A status (pressure) indicator for the system is present. The EC or a trained representative using **Table 4** (page 28) on a monthly basis and annually by the University's insurance carrier and/or outside fire system contractor inspects the system annually.



Portable fire extinguishers (dry chemical, CO<sub>2</sub> and Halon) are placed at selected locations around the CSA area as indicated on **Figure 2** (page 4). These are inspected monthly by the EC or trained representative and recharged or replaced annually by a contracted service.

Crash carts with absorbent materials, pads, pillows and socks, and a diversionary boom, are kept in multiple locations in the Hall-Atwater building. They are checked monthly and supplies are replenished as needed.

Durable personal protective equipment are maintained by the EC to whom issued. Disposable equipment (protective clothing and gloves) sufficient to handle a CSA emergency is kept in the spill kit outside Room 50 as well as a working copy of this plan. Extra personal protective equipment is available in the Sciences Stock Room located in Hall-Atwater room 054.

There is an emergency telephone that connects directly to Public Safety upon lifting the receiver. It is located outside Room 50 and is checked monthly by the EC or trained representative for operability.

## 8.2 Emergency Equipment Inventory & Capabilities

A list of the emergency equipment is provided in **Table 4** (page 28). This table is also the checklist used by the EC for monthly inspections. **Table 4** (page 28) also outlines the emergency equipment inventory capabilities and limitations.

## 9.0 TRAINING PROGRAM

All training for proper personnel response to an emergency in the CSA is specified in the Emergency Response Training Program. Briefly, the program consists of specific levels of training based on need to know. All training is documented and records are retained in the EHS office Cady Building 170 Long Lane.

### 9.1 Emergency Coordinator Training

The primary and alternate EC's receive at least 24 hours of initial training from an outside consultant, school, course or other source qualified to teach hazardous materials emergencies. The degree of this training is consistent with the OSHA requirements for *First Responder – Hazmat Technician Level*. EC's also receive 8-hour refresher training annually as needed to maintain currency. Records of training are kept in the Environmental Health and Safety Office Cady Building 170 Long Lane.

### 9.2 Laboratory Instructors and All Other Personnel

Other University personnel engaged in laboratory work that generates hazardous wastes into the CSA are trained annually. This training corresponds to the OSHA *First Responder - Awareness Level* and is conducted by EC's. Newly hired laboratory staff personnel and technical assistants receive this training along with basic laboratory emergency response training before being allowed to work unsupervised in any laboratory. Records of training are kept in the Environmental Health and Safety office Cady Building 170 Long Lane.



## 10.0 ARRANGEMENTS WITH LOCAL AUTHORITIES

### 10.1 Middletown Fire and Police Departments

Public Safety is notified of an emergency by dialing **911 or 3333** on campus phones. Public Safety may call in the Middletown Police Department and/or Fire Department as appropriate. Both these departments have been given a copy of this contingency plan.

### 10.2 Emergency Medical Services

Public Safety calls an ambulance, on request of the Emergency Coordinator. The ambulance service notified of this CSA Contingency plan is Hunter Ambulance.

The Middlesex Memorial Hospital in Middletown is the designated medical emergency room for serious injuries; the hospital has been given a copy of this contingency plan.

### 10.3 Local Emergency Planning Committee (LEPC)

No emergency operations are conducted by the Middletown LEPC over and above those conducted by the Fire and Police Departments. However, notifications and preparedness planning are LEPC functions and the Middletown LEPC has been given a copy of this contingency plan.

### 10.4 Spill Cleanup Contractors

Hazardous materials spill cleanup contractors are available on emergency notice via the DEP or Fire Department. The University on-call Contractor for spill cleanup is Fleet Environmental Services, Inc. Bethel CT 800-562-7611. The company has been given a copy of this contingency plan.

## 11.0 ADMINISTRATION OF THE PLAN

### 11.1 Amendments to the Plan

The plan is amended when:

- List of EC's changes, or other key contacts outside the University change. This includes phone and address changes, as well as names of personnel.
- List of emergency equipment changes.
- Plan fails in an emergency.
- Regulations governing the scope and extent of the plan are revised.
- Any change is made in CSA operations or maintenance practices that substantially increases the risk or extent of an emergency.
- Any other circumstance that could increase the risk or extent of an emergency.

A letter indicates minor revisions to pages after the revision number (e.g., Revision 2a), with the date of the change. Major revisions of the entire plan are given the next sequential revision number. Copies of revised pages or the entire revised plan are mailed to all holders of the plan (return receipt requested), with instructions on how to make the changes. The instruction / transmittal form is provided as **Table 5** (page 29).



## 11.2 Copies of the Plan

The agencies receiving copies of this contingency plan and changes thereto are listed in **Table 6** (page 30).

## 11.3 Periodic Plan Reviews

The plan is reviewed annually by the primary EC for any need to amend or update it, using the checklist shown in **Table 7** (page 31). Each change notice sent out to plan recipients asks them to send in any changes they have made within their own organizations or operations that should be reflected in the plan.

## 11.4 Pertinent References or Documents

This plan is written to conform to the requirements of various State and Federal regulations dealing with hazardous materials and hazardous wastes. These requirements (and interpretations thereof) are not part of this plan, but are maintained separately by the EC for reference.

The following additional references were used in the preparation of this plan:

- Guidebook for Initial Response to Hazardous Materials Incidents, US Department of Transportation, Washington, DC, Booklet #P-5800.4.
- Hazardous Materials Response Handbook, National Fire Protection Association, Quincy, MA.
- Various Material Safety Data Sheets from laboratory chemical manufacturers.



**Table 1**

**LIST OF EMERGENCY COORDINATORS (EC)**

**Attention all Wesleyan University Staff, Employees and Students: If there is a Chemical/Oil emergency after hours (8am-4:30pm Mon-Fri), dial 911 or 3333, this contacts the Wesleyan University Public Safety Dispatcher. They will locate the Emergency Coordinator on call.**

**Public Safety Dispatcher:** Call an Environmental Health & Safety Department Emergency Coordinator in the sequence below, until one responds. Call office or home phone numbers if there is no response to the cell phone. Leave a message on the Office Voice Mail and it will automatically page the individual.

Name	Cell Phone	Office Phone	Home Phone	Home Address
Don Albert	(Nextel) 860-982-1098 174*30123*3	860-685-2729	860-345-4367	Morris Hubbard road Higganum, CT 06441
Bill Nelligan	(Nextel) 860-982-1096 174*30123*2	860-685-2771	860-423-4646	502 Beaumont Highway Lebanon, CT 06249
Jeff Gilarde	(Verizon) 860-539-5328	860-685-3473	860-267-7601	Coughlin road Cobalt, CT 06414



**Table 2**

**LIST OF AGENCIES FOR EMERGENCY FOLLOWUP LETTERS**

<b>Agency Getting Letter</b>	<b>Deadline for Letter</b>	<b>Content of Letter</b>	<b>For Details See</b>
DEP, copy to LEPC and SERC	Within 24 hours	<ul style="list-style-type: none"> <li>• Prescribed DEP form(see Table 3 pg 29)</li> </ul>	CGS 22a-450
LEPC, copy to SERC and NRC	"as soon as practicable" after release	<ul style="list-style-type: none"> <li>• Facility/respondent identification</li> <li>• Date, time, type of incident</li> <li>• Response actions taken</li> <li>• Health risks from release</li> <li>• Medical treatment needed</li> </ul>	40 CFR 355.40 (b)(3)
DEP, copy to EPA Region 1	Within 15 days	<ul style="list-style-type: none"> <li>• Facility/respondent identification</li> <li>• Date, time, type of incident</li> <li>• Name/quantity of material</li> <li>• Extent of any injuries</li> <li>• Assessment of actual or potential hazards to health or environment</li> <li>• Quantity/disposition of recovered material</li> <li>• Statement that emergency plan was implemented</li> </ul>	40 CFR 265.56(j); 22a-449(c)-105(a)(2)
EPA Region 1, copy to DEP	Before resuming operations	<ul style="list-style-type: none"> <li>• Facility/respondent identification</li> <li>• Date, time, type of incident</li> <li>• Cleanup is complete</li> <li>• No incompatible hazardous wastes are stored together</li> <li>• The plant emergency equipment is all back in operation</li> </ul>	40 CFR 265.56(i)

Note 1: LEPC = Local Emergency Planning Committee  
 DEP = Department of Environmental Protection  
 NRC = National Response Center  
 SERC = State Emergency Response Commission

Note 2: The DEP 15-day letter can also satisfy the LEPC / SERC / NRC requirement. Make sure the regulation is properly referenced and the information is complete.

**For Oil spills in excess of 42 Gallons, notification to the EPA SPCC division must be reported.**



Table 3

EMERGENCY FOLLOWUP REPORT FORM FOR DEP (Originals are located in the EHS Office)



CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION  
79 ELM STREET  
HARTFORD, CT 06106-5127

**Bureau of Waste Management  
Emergency Response Unit**

**REPORT OF PETROLEUM OR CHEMICAL PRODUCT DISCHARGE, SPILLAGE OR RELEASE**

1. When did the incident occur? Date \_\_\_\_\_ Time \_\_\_\_\_:  
Month / Day / Year
2. Where did the incident occur? \_\_\_\_\_  
\_\_\_\_\_
3. How did the incident occur? (Describe the cause) \_\_\_\_\_  
\_\_\_\_\_
4. Under whose control was the chemical or petroleum product at the time of the incident?  
Name: \_\_\_\_\_  
Mailing & street address: \_\_\_\_\_  
Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_
5. Who is the owner of the property onto which the spill occurred?  
\_\_\_\_\_  
If this is a corporate property or property owned jointly, who represents the owner?  
Corporate property  Property owned jointly   
Name: \_\_\_\_\_  
Mailing & street address: \_\_\_\_\_  
Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_
6. When was the incident verbally reported to the Department of Environmental Protection?  
Date \_\_\_\_\_ Time \_\_\_\_\_: \_\_\_\_\_ DEP Spill Case # \_\_\_\_\_  
Month / Day / Year
7. Who reported the incident and who were the representing?  
Name: \_\_\_\_\_





**Table 3 (cont.)**

Mailing & street address: \_\_\_\_\_

Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_

8. What were the chemicals or petroleum released, spilled or discharged? Give an exact description of each of the materials involved in the incident, including the chemical names, percent concentrations, trade names, etc.

If the chemicals are Extremely Hazardous substances or CERCLA hazardous substances they must be identified as such and include the reportable quantity (RQ). Please attach a Material Safety Data Sheet (MSDS) for each chemical involved.

What were the quantities of chemicals that were released, spilled or discharged to each environmental medium (air, surface, water, soil, ground water)? [NOTE: Connecticut General Statutes requires the reporting of any amount of any substance or material released to the environment].

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Did any of the chemical(s) travel beyond the property line? [NOTE: Materials that enter the ground water are considered to have gone beyond the property line.]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. What actions were taken to respond to and contain the release, spill or discharge?

\_\_\_\_\_  
\_\_\_\_\_



**Table 3 (cont.)**

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11. What actions are being taken to prevent reoccurrence of an incident of this type? (Attach additional sheets if necessary)

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12. Were there any injuries as a result of the incident? If so, list the names of exposed individuals, their addresses, phone numbers and describe their injuries. (Attach additional sheets if necessary)

Name: \_\_\_\_\_  
Mailing & street address: \_\_\_\_\_  
Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_

13. What is the appropriate advice regarding medical attention necessary for exposed individuals?

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14. Are there any known or anticipated health risks, acute or chronic, associated with the release of this chemical or medical advice that should be communicated?

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15. Was the incident completely cleaned up by the time this report was submitted? If not, what are the anticipated remedial actions and their duration?

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**Table 3 (cont.)**

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16. CERTIFICATION: I hereby affirm that the foregoing statement is true to the best of my knowledge.

Signature	Title	Date
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Print Name	Telephone
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Street Address / P. O. Box	City / Town	State & Zip
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This form may be reproduced or computerized as long as it contains all of the information requested and is on an 8½ x 11 white paper, black type format. For serious incidents the questions may be answered in narrative format which must include the preparer's affidavit.

MAIL TO:

**State of Connecticut  
Department of Environmental Protection  
Bureau of Waste Management  
Emergency Response Unit  
79 Elm Street  
Hartford, CT 06106-5127**

**Telephone: 860-424-3024 Routine Calls  
860-424-3338 Emergency 24 Hours  
1-866-337-7745 Toll Free Number**



**Table 4**  
**CSA EMERGENCY EQUIPMENT INVENTORY AND MONTHLY CHECKLIST**

Item	Description / Function	Location	Capabilities
<b>CO<sub>2</sub> system</b>	Kidde CO <sub>2</sub> / Fire Suppression System	Ceiling valves, cylinders Rm. 50	Carbon dioxide extinguishers protect areas where class B (flammable liquids and gases) or Class C (energized electrical equipment) fires could occur
<b>First aid station</b>	First Aid Kit / Basic first aid	Inside "Spill response box" outside Rm. 49 & Loading Dock	For cuts, scratches and abrasions that do not require Emergency Medical attention.
<b>Absorbent Dikes or Booms</b>	2 each 5"X10' Dikes for Aggressive Fluids Pig Product #HA1010	In "Spill response box" outside rm. 49 & Loading Dock	A universal tubular absorbent dike featuring polypropylene pulp, capable of absorbing and containing large spills of solvent, acid or caustic liquids. Each 10'-long Dike absorbs 9 gallons of acids and bases, as well as other oil- and water-based liquids
<b>Oil-sorbent Pulp</b>	1 each 5# bag for Aggressive Fluids Pig Product #HA8010	In "Spill response box" outside rm. 49 & Loading Dock	Polypropylene pulp in loose form for cleaning up aggressive chemicals, this material soaks up solvents, acid or caustic liquids. Each 5# bag absorbs approximately 5 Gallons.
<b>Pillows</b>	40 each 8"X8" Pillows for Aggressive Fluids Pig Product# PIL302	Inside "Spill Response Box", Outside rm. 49	An absorbent pillow for emergency response to spills of acids, bases and caustic liquids; also to be used when a spilled liquid is unknown. Each 8" x 8" Pillow absorbs 30 oz. of acids and bases, as well as other oil- and water-based liquids
<b>Pillows</b>	20 each 12"X6" Pillows for Aggressive Fluids Pig Product #	In "Spill response box" outside rm. 49	An absorbent pillow for emergency response to spills of acids, bases and caustic liquids; also to be used when a spilled liquid is unknown. Each 12" x 6" Pillow absorbs 60 oz. of acids and bases, as well as other oil- and water-based liquids
<b>Enviro Bond Polymer</b>	1 each 5 gal Polymer for Water Based Fluids Product # 300A	In "Spill response box" outside rm. 49	Enviro Bond 300, Encapsulates aqueous solutions such as water, acids, caustics, bases, bodily fluids and water soluble hydrocarbons such as engine coolant (glycol) and methanol
<b>Enviro Bond Polymer</b>	1 each 5 gal Polymer for Hydrocarbon Based Fluid Product # 403	In "Spill response box" outside rm. 49	ENVIRO-BOND™403 will absorb and bond crude oils, diesel fuel, gasolines and many other hydrocarbons it is also hydrocarbon specific, it will not work on water soluble hydrocarbons such as acetone, naphtha, glycols, etc.
<b>Tyvek Suits</b>	2ea Large/ Hooded	In "Spill response box" outside rm. 49 & Loading Dock	Not chemically protective, abrasion and water resistant.
<b>Nitrile Gloves</b>	1 Box Large	In "Spill response box" outside rm. 49 & Loading Dock	Consult Glove Chemical Resistance chart in the Sciences Stockroom before selecting gloves for each spill.
<b>Bags</b>	6 each 6mil Poly Bags	In "Spill response box" outside rm. 49& Loading Dock	Recommended for use with heavy metal parts, protruding products and sharp objects. Use to contain spill socks, booms and pads for disposal.
<b>Labeling Kit</b>	1 each Hazardous Waste Labeling Kit	In "Spill response box" outside rm. 49 & Loading Dock	Wesleyan University specific Hazardous waste labels.
<b>Portable Fire Extinguisher</b>	CO <sub>2</sub> 20lb / Fire Suppression	Wall Mount in rm. 50	Carbon dioxide extinguishers protect areas where class B (flammable liquids and gases) or Class C (energized electrical equipment) fires could occur
<b>Portable Fire Extinguisher</b>	CO <sub>2</sub> 20lb / Fire Suppression	Wall Mount Outside rm. 49	Carbon dioxide extinguishers protect areas where class B (flammable liquids and gases) or Class C (energized electrical equipment) fires could occur
<b>Emergency Phone</b>	Direct line to Public Safety / 911	Wall Mount Outside rm. 49	No Dialing Necessary.



Table 5

**CONTINGENCY PLAN TRANSMITTAL FORM LETTER**

To:	_____	Transmittal #:	_____
	_____	Date:	_____
	_____		

Re: Revision to Wesleyan University Hazardous Waste CSA Contingency Plan

_____	Please insert into your copy of the Contingency Plan the enclosed page(s) marked Revision _____, and remove and discard the pages they replace.
_____	Please discard your entire copy of the Contingency Plan, and replace it with Revision _____ enclosed.

Please sign the receipt below and return it to us to indicate you have received the material. Thank you.

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To:	Donald Albert Chemistry Department Wesleyan University Middletown, CT 06457
From:	_____ _____ _____

I have received your transmittal number \_\_\_\_\_, dated \_\_\_\_\_, providing revisions to the Wesleyan University Hazardous Waste CSA Contingency Plan.

\_\_\_\_\_  
Print Name                      Signature                      Date



Table 6

LIST OF AGENCIES RECEIVING THE PLAN

<b>Agency</b>	<b>Address &amp; Contact</b>
<b>Wesleyan Public Safety</b>	208 High Street Middletown, CT. 06459 Attn: Director of Public Safety 860-685-2345
Middletown Police Department	Office of Emergency Coordinator 169 Cross Street Middletown, CT. 06457 860-347-6941
<b>Middletown Fire Department</b>	Middletown Fire Marshall Middletown Fire Headquarters 533 Main St. Middletown CT. 06457 860-343-8012
<b>Middletown LEPC</b>	Local Emergency Planning Committee C/O Middletown Fire Dept. 533 Main Street Middletown, CT. 06457 860-343-8012
<b>Hunter's Ambulance Service</b>	Emergency Coordinator David Lowell 540 West Main Street Meriden, CT 06451 1-800-262-4782
Middlesex Memorial Hospital	Emergency Coordinator Jackie Nelson Middlesex Hospital Emergency Room 28 Crescent Street Middletown, CT. 06457 860-344-6000
<b>Fleet Environmental (Spill Contractor)</b>	3 Trowbridge Drive Bethel, CT 06801 Attn: Jeff Graves 1-800-562-7611



Table 7

ANNUAL CONTINGENCY PLAN REVIEW CHECKLIST

Date of this review: \_\_\_\_\_  
Reviewer: \_\_\_\_\_

<u>CRITERIA</u> <i>(Did any of these occur in the past year?)</i>	<u>CHANGE</u>	
	<u>Yes</u>	<u>No</u>
The list of Emergency Coordinators changed, or other key contact changed. <i>This includes phone and address changes, as well as names of personnel.</i>	<input type="checkbox"/>	<input type="checkbox"/>
The list of emergency equipment changed.	<input type="checkbox"/>	<input type="checkbox"/>
The plan failed in an emergency.	<input type="checkbox"/>	<input type="checkbox"/>
The regulations governing the scope and extent of the plan were revised.	<input type="checkbox"/>	<input type="checkbox"/>
A significant change was made in the physical layout of a process or a portion of the plant.	<input type="checkbox"/>	<input type="checkbox"/>
A change was made in plant operations or maintenance practices that substantially increases the risk or extent of an emergency.	<input type="checkbox"/>	<input type="checkbox"/>
A circumstance arose that could increase the risk or extent of an emergency.	<input type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_ There are no changes since the last emergency plan review.

\_\_\_\_\_ Changes have occurred and the plan must be modified as follows:

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