



Owner EH&S	DOC. NO. HazMat - ContPlan	REV. 05	DATE 04/01/2020
DOC. TITLE Contingency Plan – Hazardous Waste			

Hazardous Waste Contingency Plan

Plan Review Required – Annual

April 1, 2020

Regulatory Authority(s)

- Environmental Protection Agency (EPA)
- Massachusetts Department of Environmental Protection (MADEP)

Regulations Applicable

- 40 CFR 260 – 40 CFR 265

Noncompliance Enforcement

- Section §3008(a) of RCRA allows EPA to issue an order which may contain a penalty of up to \$37,500 per day for each day of noncompliance for each hazardous waste violation. Penalties are calculated using the [RCRA Penalty Policy](#).

Responsibility(s)

- The overall responsibility for environmental compliance rests with the Board of Trustees and the President of the College.
- For this plan, the following departments and positions within the College shall assume responsibilities applicable to them.
 - Dean of Faculty
 - Chief of Campus Operations
 - Director of Facilities
 - Department of Environmental Health and Safety

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1. Definitions

- **Facility:** All contiguous property and structures, including buildings, tanks, piping and containers used for the treating, storing and disposing of hazardous waste.
- **Generator:** Any person, by site, whose act or process produces hazardous waste identified or listed in part 261 of the RCRA regulations who first generates “hazardous waste”
- **Large Quantity Generator (LQG):** a generator of hazardous waste that could produce 2,204 lbs. / 1,000kg of hazardous, or more than 2.2 lbs. / 1 kg of acutely hazardous waste in one month. LQG’s are required to inspect and manage their waste, must comply with hazardous waste manifest and pre-transport requirements, have the appropriate prevention and preparedness requirements in place, and is responsible for filing biennial hazardous waste reports as required.
- **Main Accumulation Area (MAA):** An on-site hazardous waste accumulation area for the pre-disposal / transport storage of hazardous waste for a period not to exceed 90 days.
- **Resource Conservation and Recovery Act (RCRA):** The waste management program mandated by Congress that gives the federal EPA authority to legally enforce requirements of waste management.
- **Satellite Accumulation Area (SAA):** The location at or near a point of hazardous waste generation where containers, before placement into an MAA are located. The SAA is under the strict control of the process operator (principal investigator / generator) where the waste is being generated.
- **Spill Prevention, Control and Countermeasures Plan (SPCC):** An EPA requirement under the Clean Water Act (CWA) that aids facilities in the prevention of oil into navigable waters or adjoining shorelines. The SPCC requires facilities to submit a response plan and prepare to respond to the worst case oil (all types) discharge or threat there-of.
- **Waste-Like Material:** Any type of waste that gives the appearance of having been abandoned, such as dust covered, rusted or otherwise deemed no longer needed or used.

2. Applicability

- As a “Large Quantity Generator” of hazardous waste, Amherst College is required by the Federal EPA to have a Hazardous Waste Contingency Plan. The plan is designed to specifically address the potential for leaks, odors, spills, fires and explosions that involve or could involve hazardous wastes or the byproducts, constituents and/or off-gassing / release there from. The Contingency Plan is an organized response action that assists in the mitigation activities of a hazardous waste incident.
- The plan has been developed to assist our emergency response agencies, both internally and externally with the proper and immediate mitigation strategies to be used to minimize the risk to health, safety and the environment from explosions, fires and unplanned releases of hazardous waste or the by-products of same to air, soil and water.
- Because Amherst College has a separate Spill Prevention, Control and Countermeasures (SPCC) Program that specifically addresses oil, that section of the Contingency Plan has not been included here-in.



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3. Requirements

3.1 Facility Information

Facility Name: **Amherst College**
 Owner: **Trustees of Amherst College**
 Address: **Converse Hall**
100 Boltwood Ave
Amherst, MA 01002-5000
 County, State: **Hampshire County, Massachusetts**
 Mailing Address: **c/o Environmental Health & Safety**
6 East Drive
Amherst College
Amherst, MA 01002-5000
 Emergency: **(413) 542 – 2111**
 Non-Emergency: (413) 542 – 2291
 (413) 542 – 2254
 Fax Number: (413) 542-5789
 EPA Identification #: **MAD066985367**
 SIC/NAICS Code: **8221**
 Plan Coordinator: **Environmental Health & Safety Office**
 Telephone: (413) 542-8189

3.2 Facilities Description

- Amherst College is a four (4) year liberal arts college with just under 2,000 students and approximately 850 faculty and staff, both full and part-time.
- The campus is just under 1,500 acres in area with approximately 200 buildings that include academic, maintenance, support and on campus residential halls, as well as off-campus faculty houses and apartments.
- Being a liberal arts college, the primary sources of hazardous waste generation would be laboratories, art and theater studios, motor vehicles, oils, paints and other related maintenance activities.
 - Satellite Hazardous Waste Accumulation Areas (SAA's) are located in many areas across campus, including but not limited to laboratories, maintenance areas, golf courses and other similar areas
 - Main Accumulation Areas (MAA's) are located at:
 - New Science Center – Room B010C
 - 25 East Drive Amherst, MA
 - Universal Waste MAA is used for the storage of Computer Monitors and Light Bulbs
 - Humphries/Dakin Barn
 - 62 Snell Street Amherst, MA
- Amherst College Waste Codes would include; D001 – D011, D018, D019, D022, D035, D038, F002, F003, F005 and on very rare occasions a P or U Code.
 - Waste codes specific to Massachusetts would include; MA95, MA97, MA-98 and MA99



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- Amherst College is a Large Quantity Generator of Hazardous Waste resulting from construction and renovation activities that include lead paint abatement activities inclusive of off-campus faculty housing.
 - With the exception of the Universal Wastes, our Hazardous Wastes are shipped off site within 90 days, as we are subject to the requirements of the EPA/MADEP as a Large Quantity Generator.

4. Emergency Response Coordinator

4.1 The Emergency Response Coordinator for hazardous material incident(s);

- 1) **Richard A. Mears** - Environmental Health & Safety, Director
 - 2) **Jason Williams** - Chemical Hygiene Officer (CHO)
 - 3) **Meghan Hertel** - Environmental Health & Safety, Manager
 - 4) **Jason Mahar** - Environmental Health & Safety, Specialist
- Amherst College Police Department is on site 24 hours.
 - The Police Officers are designated First Responders, and have the authority to request the assistance of the ERC at any time through the Amherst College Dispatch Center.
 - The ERC's are available by cell phone, and are requested through the Amherst College Police Dispatch Center.
 - The Amherst College Police Dispatch Center maintains an up-to-date list of all ERC contact information.
 - The Emergency Response Coordinator (ERC), referenced above are the individuals responsible for responding to emergencies involving chemicals. The ERC is on call and responds to this type of emergency in conjunction with the Amherst College Police Department, as well as the Amherst Ambulance and Fire Department.
 - Working with the Amherst College Emergency Management Teams, these individuals have the authority to commit resources needed to respond to hazardous material emergencies at Amherst College and to direct other trained personnel to assist with the implementation of the contingency plan.

4.2 The Emergency Response Coordinator (ERC's) shall be familiar with;

- a) **Contingency Plan** – Content and Responsibilities
- b) **Chemical and Hazardous Waste Characteristics**, including biological, corrosiveness, flammability, incompatibility, radioactivity, toxicological and physical properties
- c) **Emergency Notification Procedures**, including Fire Alarms and College Mass Notification System
- d) **Facility Layout** including building plans and identification of containers and piping
- e) **Hazardous Material Response Companies**, including name and contact information
- f) **Monitoring Equipment** – location and use
- g) **Regulatory Agencies** – how and when to contact
- h) **Response Agencies** – how and when to contact
- i) **Spill Containment Supplies** and location
- j) **Spill Control Measures** – use of supplies and preventing environmental damage



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5. Emergency Services (Local)

5.1 The Amherst Fire (and ambulance) Department is the primary local response agency for fires, medical emergencies, motor vehicle collisions and hazardous material incidents.

- In accordance with the requirements of the Massachusetts General Law, Chapter 148 and the Comprehensive Fire Safety Code, 527 CMR 1, the Authority Having Jurisdiction (AHJ) for explosions, fires, hazardous material incidents, mass casualty incidents, motor vehicle collisions, structural collapse or other similar unsafe conditions is the local fire department, and as such they assume the responsibility of Incident Command in a Unified Incident Command System.
- The Amherst Ambulance and Fire Department are requested through the Amherst College Police Dispatch Center for all events referenced above.
 - Persons requiring assistance for fire, medical or hazardous material incidents are instructed through training to contact the College Emergency Number at (413) 542-2111.
 - After initial evaluation of a hazardous material incident, the Amherst Fire Department can request (if necessary) the assistance of the regional district hazardous material response agency, which is made up of trained members of the local fire departments and equipment, including fully equipped vehicles provided by the Commonwealth of Massachusetts, through the Office of the State Fire Marshall
- The Amherst Fire Department conducts onsite inspections of the college facilities and is provided (at their request) with tours of buildings and locations in which hazardous materials and wastes are located.
- The Amherst Fire Department is provided with a copy of the Tier II Chemical Report, which includes the list of chemicals on site, as well as a specific location.
- The HREPC shall be provided access to this document on the Amherst College Environmental Health & Safety Website
 - On line management of this document will ensure that it will be kept up-to-date and immediately available to all of our Emergency Response Agencies.

5.2 Hampshire County has a Local Emergency Planning Committee (LEPC), otherwise known as the Hampshire Regional Emergency Response Agency (HREPC). The HREPC is made up of members of each of the local emergency response agencies in Hampshire County, including, but not limited to EMS, Fire Departments, Emergency Management Directors and Amherst, Hampshire, Mt. Holyoke and Smith Colleges and University of Massachusetts/Amherst.

- The HREPC is provided with detailed information from the Colleges in a Tier II Chemical Report which identifies the chemicals by name, as well as the location in which the hazardous materials are kept.
- The HREPC shall be provided access to this document on the Amherst College Environmental Health & Safety Website
 - On line management of this document will ensure that it is kept up-to-date and immediately available to our Emergency Response Agencies.



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5.3 Amherst College is required by regulation (310 CMR) to contact the (MADEP) Emergency Response Team when a chemical incident, including oil meets or exceeds a spill of “Reportable Quantity” as defined in (310 CMR).

6. Emergency Equipment / Supplies – Amherst College

6.1 Amherst College has hazardous material and waste emergency equipment in several different locations for the immediate response to an incident involving chemicals, oils and other such hazardous materials, both inside and outside buildings.

6.2 Emergency equipment includes, but is not limited to;

- **Absorbent** (Cellulose-like Material) – Bags
- **Absorbent** (Clay-like / Dry Sweep) - Bags
- **Absorbent Mats**
 - Corrosive Only – Pink
 - Oil Only – White
 - Universal (All Fluids) – Black and Gray
- **Bags** (6 mil)
 - 5 gallon
 - 15 gallon
 - 55 gallon
- **Containers** (1 gallon – 5 gallon)
- **Detection and Monitoring Equipment**
 - Fixed Detection (New Science Center) for CO, CO₂, Particulates, VOC’s
 - Portable Gas Detection Equipment (EH&S/Facilities) for Ammonia, Combustible Gases, 4 Gas Monitors, pH and portable Ion Science Tiger PID
- **Absorbent Socks**
 - Glass
 - Plastic
- **Drain Cover**
 - Storm Drain
- **Drums** (30 and 55 gallon)
 - Metal
 - Plastic
 - Overpack
- **Fans**
 - Exhaust
- **Fire Extinguishers**
 - Carbon Dioxide (CO₂)
 - Dry Chemical (ABC) and
 - Pressurized Water (PW)
- **HEPA Vacuums** (Small Backpack to Larger “wheeled” units)
- **Mercury Vacuum** (Benesi Museum, 2nd Floor)
- **Pipe Wrap Repair Kits** – Mechanical/Plumbing Shop
- **Shovels and Brooms**
 - Plastic (Spark-Proof)



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- **Spill and Utility Containers/Trays**
- **Sodium Bicarbonate**
 - 5 Gallon Container with Scoop
- **Tools (Assorted)**
 - Bung Wrenches

6.3 Emergency equipment and supplies are located at or in the following locations;

- **Amherst Golf Club (Maintenance Garage)** – 365 South Pleasant St
- **Grounds Department (Diesel Tank)** - 40 Dickinson St
- **Hazardous Material Response Vehicle** – M35
- **New Science Center MAA (Room B010C)** – 25 East Drive
- **Seymour Shed** – 155 College St (SE Corner of Building)
- **Tennis Barn (Gasoline Tank)** – 100 East Drive

7. Hazardous Material Response Companies

7.1 Amherst College will utilize the services of our licensed and insured hazardous waste company for assistance with regard to spill cleanup and disposal.

- The company(s) are requested by one of the ERC's through the Amherst College Dispatch Center, and would be called when deemed appropriate by the onsite Incident Commander from the College or the Town of Amherst if the incident scope and/or size warranted their initial response.
- Amherst College Dispatch Center maintains an up-to-date contact list for the hazardous waste and cleanup companies used by the College, which includes;
 - 1) **Triumvirate Environmental**
200 Inner Belt Rd
Somerville, MA 02143
(800) 966-9282
 - 2) **Western MA Environmental**
93 Wayside Ave.
West Springfield, MA 01089
(866) 662-2622

8. Hazardous Material and Waste Locations

8.1 Hazardous materials and wastes, including universal wastes are located at several different sites across the campus, including but not limited to; academic, mechanical, storage and residential buildings including rental apartments and houses.

8.2 Most of the hazardous materials and waste, including universal waste found on site(s) is typically batteries, cleaning agents, light bulbs (non-incandescent), oils, paints and the like. They can be found inside apartments, houses, garages and many other non-chemical type settings.

- These types of materials and wastes are often evaluated during inspections, even within apartment common areas and houses to prevent improper disposal and to reduce the risk of being labeled as “waste-like materials”.
 - If and when identified, these “wastes” are removed from the site and transported back to the appropriate MAA for consolidation



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with other like wastes, or disposed of independently through our “licensed” hazardous waste disposal company

- Wastes generated from the locations referenced above are typically transferred to the Facilities Main Accumulation Area(s)
 - **New Science Center – Room B010C** – 25 East Drive
 - **Universal Waste Building** – 62 Snell Street
- 8.3 Oils of all types, including hydraulic, motor and vegetable, are referenced and handled independently as so referenced in the SPCC Plan, found in the MADEP/EPA section of the Amherst College Environmental Health & Safety (EH&S) website.
- 8.4 Hazardous materials and wastes considered to be more problematic than the materials referenced above, such as chemicals found within the laboratories of Beneski Museum and the New Science Center are collected (as wastes) in individual Satellite Accumulation Areas (SAA’s) within laboratories, which are then transferred to the Main Accumulation Areas (MAA’s) in;
- **New Science Center Room B010C** – 25 East Drive
- 8.5 The characteristic/types of wastes generated in the 3 science centers referenced above include;
- **Corrosive** (acidic and basic)
 - **Ignitable** (combustible and flammable)
 - **Reactive** (explosive, air and water sensitive, oxidizers and reducers)
 - **Toxic** (poison)
- 8.6 “Hazardous Wastes” collected at the New Science Center are collected and properly disposed of within 90 days, using our “licensed” hazardous waste disposal company. See Section 7.
- 8.7 The maximum amount of “hazardous waste” held in the MAA’s referenced above would be;
- **New Science Center B010C** (55 gallon drums)
 - Corrosive 3
 - Ignitable (Combustible only) 9
 - Reactive 0
 - Toxic (asbestos/lead paint) 7
 - Chemical laboratories in Beneski and the New Science Center have Satellite Accumulation Areas (SAA’s) for their respective wastes. These SAA’s are;
 - In secondary (chemically compatible) containment ~ 2’ x 3’
 - Labelled “Hazardous Waste”
 - Inspected weekly in accordance with the requirements of RCRA for;
 - Compatibility
 - Container conditions and volume
 - Dating
 - Labeling
 - Waste removal
- 8.8 Exposure to specific types of “hazardous wastes” are typically laboratory specific, depending on the type research and the chemicals being used. These chemical wastes are found in small amounts within the laboratories, most often in one (1) and four (4) liter containers and present low risk.
- 8.9 Exposure to larger volumes of “hazardous waste” such as in 55 gallon drums is limited to the containers found in the MAA’s, or oils and paint drums located at various location on the campus, such as in mechanical and shop areas.



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- 8.10 Exposure is also possible with regard to older lecture size compressed gas cylinders that are discovered during inspections. Once identified these cylinders are evaluated for use within the department, or properly disposed of utilizing the services of our licensed hazardous waste disposal contractor(s), or the gas cylinder manufacturer.

9. Emergency and Fire Detection, Suppression and Notification Systems

- 9.1 All Amherst College academic and residential buildings are equipped with fire alarm systems that, when activated, sound an alarm that initiates occupant evacuation.
- 9.2 The New Science Center is fully equipped with a fire alarm system, sprinkler system as well as a smoke evacuation system in the atrium.
- 9.3 Beneski is equipped with full fire sprinkler protection throughout the building, as well as smoke detection in common areas and pull stations at every exit door.
- 9.4 In addition to the above alarm and sprinkler systems, Beneski and the New Science Center both have a fire standpipe system for use by the Amherst Fire Department, not the occupants of the building.
- 9.5 Water supplies for the responding fire departments are available through the fire hydrants that are located at the following building specific locations;
- Beneski Museum
 - East Side – 5 East Drive
 - South Side – 14 Barrett Hill Dr.
 - West Side – 15 Fayerweather Dr.
 - New Science Center
 - East Side – 25 East Dr
- 9.6 The New Science Center MAA is equipped with a sprinkler system and has a 2,000 gallon stainless steel storage tank below the room to capture any hazardous waste and/or water used for fire suppression. There is also an automatically activated flood gate that creates another 4,937 gallon secondary containment. The room is equipped with 3 ventilation hoods. Two of the hoods can accommodate two 55-gallon barrels each and one is a lab sized hood. There is an emergency maximum ventilation button by the exit that will ramp up exhaust flow in the event of a spill.
- Emergency notification from this area would come via cell phone or portable radio.
 - Emergency eyewash and shower are located down the hall from this room.
- 9.7 Amherst College also has a Mass Notification System to alert faculty, staff and students of any catastrophic event, including but not limited to; civil disturbances, fires, hazardous material incidents, natural disasters, structural failures etc.
- When any significant event occurs, and the Mass Notification System is used, all faculty, staff and students are simultaneously sent cell (phone and text), and e-mail notifications of the event and what they are required to do, such as evacuate to an alternate location.
 - When the event has been made safe, additional notifications are sent indicating same.

10. Hazardous Waste Contingency Plan Amendments



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10.1 The Hazardous Waste Contingency Plan will be amended as required for any and all of the following reasons;

- Annually, or changes to;
- Emergency Response Personnel
- Equipment and Supplies
- Facilities (building and parts there-of)
- Regulations, or
- Plan Failure



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Appendix(s)



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