Stormwater Pollution Prevention Plan (SWPPP)

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Scope

In accordance with the requirements of the Massachusetts Department of Environmental Protection Stormwater Management Plan (310 CMR 10) and the updated (2012) Federal Environmental Protection Agency (EPA) Clean Water Act (CWA), which includes the National Pollutant Discharge Elimination System (NPDES) General Permit, Amherst College has developed this Stormwater Pollution Prevention Plan (SWPPP) as our general Stormwater Maintenance and Operations Plan, and for construction activities on campus.

Purpose

The purpose of the SWPPP is to reduce the risk of environmental damage to stormwater by controlling erosion, snow and ice removal activities, accidental release of hazardous materials and other solid wastes on campus, as well as at construction sites, and to maintain, through best management practices the stormwater protection systems that serve the college, both long and short term.

Applicability

The SWPPP shall apply to all of Amherst College, including faculty, staff, students, outside contractors and visitors. The College must limit environmental damage by reducing the amounts of potential pollutants that it places upon the ground and roadways during construction activities, management of ice and snow, disposal of wastes and the control of pests and weeds.

Amherst College General Construction Stormwater Permit # MAR12AC43 (Active)
Amherst College New Science Center Stormwater Permit # MAR12AB90 (Inactive)

Responsibilities
It will be the general responsibility of the Amherst College Grounds and Landscaping Supervisor and his/her department to minimize, whenever possible, the negative environmental impact caused by the application of fungicides, herbicides, insecticides, pesticides, calcium and sodium chloride and the newest forms of ice and snow control. The Amherst College Police and Facilities Departments will monitor parking lots and roadways for the accidental and intentional discharge or release of antifreeze, gasoline, oil and other motor vehicle fluids, and will report same to Environmental Health and Safety for clean-up and disposal. Each person on campus is responsible for their own automobiles and any fluids that may be discharged from them.

General Contractor(s) (GC) are responsible for all activities on their construction sites, such as construction vehicles, handling of hazardous materials, use of machinery, performing the required daily and weekly inspections etc. The construction site shall have "approved" stormwater control measures in place to prevent improper runoff of water, and shall properly maintain soil and stockpiles in the designated areas. All personnel working on the construction site(s) will follow the procedures defined in the SWPPP for the handing and storage of hazardous materials and wastes on the site. The project manager/site supervisor will be responsible for both the daily and more comprehensive weekly inspections, as well as the maintenance required for any stormwater control method. Any discharge affecting the stormwater will be reported to the Amherst College Environmental Health and Safety, Design and Construction or Amherst College Police Department, and managed according to the Spill Prevention Control and Countermeasures (SPCC) Policy.

Finally, Amherst College Facilities (Engineering, Grounds and Landscaping) with the assistance of the Landscape Architect and Town of Amherst shall, when installing new or repairing existing parking lots and roadways make every effort to control potential run-off of hazardous materials such as oil into a storm drain or waterway by either diverting water run-off away from points of collection or by installation of environmentally friendly storm drain systems.

**Construction Site Erosion Control**

Contractors working on Amherst College property shall be familiar with the College SWPPP and shall utilize appropriate techniques identified here-in, or by the site engineer to control runoff as referenced in the Amherst College Stormwater Pollution Prevention Plan for Construction Projects, which outlines best management practices for control of stormwater runoff, erosion control, stockpile management and inspection reports.

During construction activities, it is the responsibility of the General Contractor to identify a Stormwater Manager. Stormwater Managers must be competent, having knowledge of stormwater pollution prevention guidelines, erosion and sediments controls, hay bales and silt fences, and the inspection requirements for construction site activities. When a SWPPP deficiency is identified, it shall be corrected immediately.

**Stormwater Requirements for projects (summary)**

- **Daily Inspections** of the construction activities that would be directly related to run-off from the project, including the maintenance of the trap rock entry/exit areas for vehicles, erosion control, stockpiles, as well as the maintenance of catch basins and detention ponds on the site. Problems
identified, such as dirt, mud, salt and sand leaving the site by catch basin or street must be immediately corrected.

- **Weekly Inspections** of the entire site, using either the Amherst College inspection checklist, or a similar "approved" inspection report acceptable to the owner and the Town of Amherst. Inspection reports must be maintained on site, available for review by the owner and regulatory agencies, including the Town of Amherst and MASSDEP.

- **Significant Weather Event Inspections** are formal inspections of the construction site that must be performed after significant rain, wind or other damaging event that would adversely affect the stormwater control measures for the site.

When necessary, the Stormwater Manager, through the General Contractor shall perform required corrective actions, which include, but are not limited to;

- Catch basin cleaning
- Street sweeping
- Construction site housekeeping improvements

Any discharge, release or spill of hazardous material, including hazardous waste on a construction site must be immediately reported to Environmental Health and Safety, through the Amherst College Dispatch Center at (413) 542-2111. Procedures for cleanup and reporting of releases and spills are identified below. Unless there is a significant risk of fire, such as a large gasoline spill, or the release of natural or propane gas, all calls for hazardous materials release should be initially reported to the Amherst College Dispatch Center.

**Stormwater Pollution Prevention Plan (SWPPP)**

**Motor Vehicle Fluid Release**

Amherst College will immediately respond to any release of hazardous material from a vehicle regardless of size or function. Antifreeze, diesel fuel, gasoline, hydraulic fluids and oils will be managed forthwith through clean-up and proper disposal. Any person who observes an improper discharge from a motor vehicle or other piece of equipment must immediately report it to Amherst College Campus Police Dispatch at 542-2111. Amherst College Police will:

1. Notify the Environmental Health and Safety
2. Respond to the incident to insure personal safety and to help minimize environmental damage. If EH&S is unavailable, the Amherst College Police Officer should request the response of the Chemical Hygiene Officer, Jason Williams.
3. Apply speedi-dry or other absorbent material directly to the spilled material

Any vehicle or equipment fluids that have been released must be handled immediately to avoid ground or pavement absorption.
1. Speedi-dry or other absorbent material, which is located in the New Science Center Room B010H or the EH&S Truck, shall be applied directly to the motor vehicle fluid spill.

2. After working the contaminants into the speedi-dry or other absorbent material, the fluid waste must be picked up using the plastic shovel located in the EH&S Truck and placing same into a plastic (4ml) bag which is then bagged again.

3. Tape the bags closed, gooseneck the bag and then tape it again.

4. The bag must now be labeled:
   - **Hazardous Waste**
   - **Gasoline / Oil Soaked Speedi-Dry**
   - **Toxic**

5. The bags must be delivered to the New Science Center Main Accumulation Area Room B010C where it will be placed into a 30 or 55 gallon steel drum that has been already identified for that purpose. From this Main Accumulation Area, the Hazardous Waste will be removed by an outside Chemical Waste Hauler and relocated to a site that is licensed to receive that particular waste.

Amherst College does not permit the washing of vehicles on campus. Stormwater regulations prevent the discharge of contaminated run-off, which includes chemicals and soaps. There are two (2) exceptions;

1. Vehicles can be hosed off (water only), provided the water is not permitted to run into a storm drain or other sensitive area

2. Amherst College has a car wash area that can be used to clean Amherst College vehicles. This car wash is located on the south side of the Central Energy Plant. The car wash has two drains, one for typical stormwater run-off, and the other that discharges to the sanitary sewer with oil/water separator. The person performing the carwashing activities must verify that the drain to "stormwater" is capped during cleaning operations.

**Snow and Ice Treatments**

Amherst College Facilities shall control the amount of hazardous materials, including but not limited to ice melt, salt, sand and discharges from vehicles that enter or have the potential to enter our bordering brooks and ponds. At driveways, parking lots and roads where there is a strong possibility of Storm Water run-off into a brook, river or conservation area, the Facilities Grounds and Landscaping Department shall minimize the amount of chemicals and other surface treatments that could potentially harm the environment. The parking lot to the east of the Service building, as well as Merrill Science Dr. is of particular interest. Storm water run-off from these points into the "sensitive areas" is a very real possibility. Therefore;

1. Salt, sand and other ice and snow control applications must be kept to an absolute minimum.

2. Previously applied salt, sand and ice melt applications shall be monitored and cleaned up as needed (even during the winter months) to minimize the negative environmental impact that will occur if the material is left in place for an extended time.

3. The installation of granite or macadam curbs at locations such as these will help to reduce unwanted stormwater run-off. Sand, salt and other applications to control ice and snow will be held in check until the above referenced treatments have been removed.
Chemical and Pesticide Applications

The Facilities Grounds and Athletics Department shall avoid using fungicides, herbicides, insecticides, and pesticides in and around areas that lead to a storm drain, brook, river or other potential ground water source.

- Only Amherst College Facilities employees who are licensed to apply pesticides and other similar materials will be permitted to do so.

All chemicals, fungicides, herbicides, insecticides and pesticides shall be purchased, stored, mixed, transported and used in accordance with manufacturer’s specifications. If chemicals and pesticides are mixed or otherwise handled outside, the licensed applicator shall insure that they are not located in close proximity to a waterway or storm drain that could inadvertently receive the accidentally discharged materials. Chemicals and pesticides that must be used in and around the conservation area, near a waterway or storm drain shall be mixed, stored, transported and used in accordance with guidelines already established by manufacturer’s specifications for that intended purpose.

If an accidental or intentional release of a chemical, fungicide, herbicide, insecticide or pesticide takes place on or around the Amherst College, the employee that witnesses the occurrence or release must take the following steps:

1. Minimize risk to yourself and others.
   - Do not cause or create a personal illness or injury
   - Instruct persons nearby to evacuate the immediate area and keep others out.
2. Contact the Amherst College Police by phone (542-2111) or radio and report:
   - Your location
   - If anyone is ill or injured
   - Name of the chemical or pesticide, if known
   - How much was discharged
   - If there is an immediate health or environmental risk present
   - Storm drain, sewer, waterway or conservation area close by
   - What (if anything) you are able to do to minimize the environmental damage.
3. The Amherst College Campus Police shall notify;
   - The Amherst College Environmental Health and Safety Director, or
   - An Amherst College Licensed Pesticide Applicator

General Inspection, Maintenance and Operations Plans

Amherst College is responsible for the general inspection, maintenance and operations of our SWPPP, including construction projects that have been completed and turned over to the College.

The routine inspection and maintenance of the Amherst College SWPPP is the responsibility of the following departments;

- Landscaping and Grounds
Mechanical Shop, and
Environmental Health & Safety

The maintenance activities for all stormwater controls are performed in accordance with the requirements of the local, state and federal regulations, which include the Town of Amherst Conservation Commission and the Department of Public Works, as well as the Massachusetts Department of Environmental Protection (MASSDEP), and the Federal Environmental Protection Agency (EPA). Inspections of our parking lots, roads, streets and other paved surfaces are performed daily by the Landscape and Grounds Department, as well as the Amherst College Police Department. Any identified problems are reported to the appropriate department(s) for corrective action. Corrective actions include, but are not limited to removal of catch basin debris, catch basin cleanout and street sweeping.

**Inspections** of the stormwater control systems on campus are SWPPP specific.

- Catch basins are inspected at least twice annually
- Detention and retention areas are inspected daily
- Parking lots, roads, streets and other paved surfaces are inspected daily
- Storm related inspections are performed during and immediately after the weather emergency.

Any deficiencies noted with regard to the above control measures are reported and corrected immediately. Catch basins, detention and retention ponds will be cleaned, mowed or otherwise maintained in accordance with local, state and federal regulations.

Mosquito controls are used where stagnant water sources are located. Larvacide is used according to manufacturer’s specifications and the Amherst College Integrated Pest Management Program (IPM).

Site, parking lot and street sweeping shall occur when necessary, as directed by the department managers. At a minimum, street cleaning must occur at least twice annually, spring and fall. The removed debris shall be collected and then discarded in a manner acceptable to the MassDEP. Dirt, salt, sand and other collected materials shall not be placed within 50' of a potential stormwater run-off area.

Amherst College stormwater protection systems that remain in place to prevent contaminated run-off, such as catch basins, detention and retention ponds, swales and other collection areas must be inspected at least four (4) times annually. Supervisors from the Grounds and Mechanical Shops, as well as the Office of Environmental Health & Safety should initiate when necessary the cleaning of the above protection systems. Catch basins must be cleaned at least twice (2) times annually, unless a more frequent cleaning is required.