Hazardous Materials Storage and Handling

A hazardous material is any biological, chemical, or physical material with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous materials can be released to the environment in a variety of ways. When hazardous materials come into contact with rain or snow, the pollutants are washed into the storm sewer system and to surface waterbodies and/or groundwater. Hazardous materials associated with municipal facilities and their operations include, but are not limited to, oil, gasoline, antifreeze, fertilizers, pesticides, and de-icing agents and additives.

Municipally owned or managed facilities where hazardous materials are commonly stores and handled include:

- North Ave: vehicle and equipment storage and maintenance facility
- Nahant St. Yardwaste Site: public works materials storage yard
- Broadway: Water Treatment Plant

Minimizing or eliminating contact of hazardous materials with stormwater can significantly reduce pollution of receiving waters. Proper hazardous material handling and storage also contributes to employee health, an organized workplace, and efficient operations. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help prevent stormwater pollution resulting from the handling and storage of hazardous materials. If services are contracted, this SOP should be provided to the contractor. The contract should also specify that the contractor is responsible for compliance with all applicable laws.

Procedures:

Handling, Loading, and Unloading

- Avoid loading and unloading materials in the rain. If necessary, provide cover.
- Retrace areas where materials have been transferred to identify spills. If spills are found, immediately clean them up. Follow Spill Prevention, Control, and Countermeasure (SPCC) procedures.
- Time delivery and handling of materials during favorable weather conditions whenever possible (e.g., avoid receiving loads of sand during windy weather).
- Inspect containers for material compatibility and structural integrity prior to loading/unloading any raw or waste materials.

- Use dry cleanup methods (e.g., squeegee and dust pan, sweeping, and absorbents as last step) rather than hosing down surfaces.

Material Storage

- Confine material storage indoors whenever possible. Cover floor drains, in the case of a spill. Floor drains lead to oil water separator before leading to sanitary sewer system.
- Confine outdoor material storage to designated areas that are covered, on impervious surfaces, away from high traffic areas, and outside of drainage pathways.
- Store containers on pallets to facilitate leak inspection, mitigate contact with vermin, and prevent contact with wet floors that can cause corrosion.
- Store materials and waste in materially compatible containment units.
- Keep hazardous materials in their original containers.
- Clearly label all storage containers with the name of the chemical, the expiration date, and handling instructions.
- Provide secondary containment for storage tanks and drums with sufficient volume to store 110 percent of the volume of the material.
- Provide sufficient aisle space to allow for routine inspections and access for spill cleanup.
- Inspect storage areas for spills or leaks and containment units for corrosion or other failures.

Waste Treatment, Disposal, and Cleanup

- Maintain regular schedule with Safety Clean for the pick-up and disposal of waste materials.
- Recycle leftover materials whenever possible.
- Substitute nonhazardous or less-hazardous materials for hazardous materials whenever possible.
- Protect empty containers from exposure to stormwater and dispose of them regularly to avoid contamination from container residues.

Employee Training

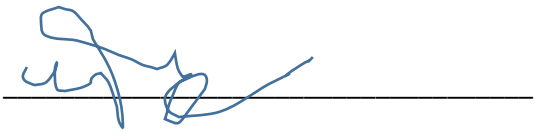
- Employees who handle and use hazardous materials are trained twice annually on these procedures.
- Employees are trained annually on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Revising the SOP

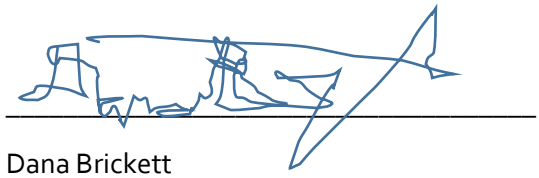
- These procedures are reviewed annually and updated as needed.

Effective

1/1/2020



Dennis Gorman
Fleet Supervisor



Dana Brickett
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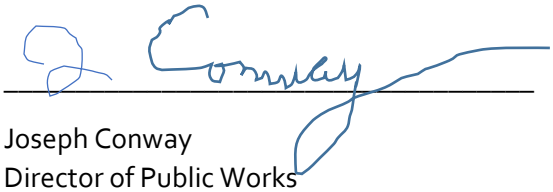

Joseph Conway
Director of Public Works