Standard Operating Procedures *Town of Dracut* *Department of Public Works* **Operations and Maintenance of Municipal Vehicles and Equipment**	**SOP Number:** 16	**Issue Date:** June 30, 2020

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Introduction

Regular maintenance of both municipal vehicles and heavy equipment not only prolongs the life of municipal assets but also helps reduce the potential for leaking of fluids associated with normal wear and tear. Potential pollutants include fuels, oil, antifreeze, brake fluid, solvents, and battery acid. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of leaks from vehicles and equipment.

The Town of Dracut undertakes various procedures in regards to its municipal vehicles and equipment.

The Town of Dracut has created an inventory of all municipal vehicles and equipment and update this inventory annually (refer to the attached vehicles and equipment inventory template).

Procedures

The Town of Dracut will implement the following procedures for municipally owned and operated vehicles and equipment to reduce the discharge of pollutants from the MS4:

Vehicle and Equipment Maintenance

Vehicle Storage

- Monitor vehicles and equipment for leaks and use drip pans as needed until repairs can be performed.
- When drip pans are used, avoid overtopping.
- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Store and park vehicles on impervious surfaces and/or under cover or indoors whenever possible.

Vehicle Maintenance

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Sweep and pick up trash and debris as needed.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.

Fueling

- Fueling areas owned or operated by the municipality must be covered.
- Fueling areas should be evaluated to ensure that pollutants (e.g., gasoline or oil) do not enter the MS4.

Material Management

- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Hazardous waste must be labeled and stored according to hazardous waste regulations.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.
- Do not wash or hose down storage areas unless there is prior approval to collect and discharge the water into the sanitary sewer. Use dry cleanup methods whenever possible.
- Keep lids on containers. Store them indoors or under cover to reduce exposure to rain.
- Inspect and maintain all pretreatment equipment, including interceptors, according to the manufacturer's maintenance schedule and at least once per year.
- Proper spill protocol should be followed to prevent chemicals from entering the stormwater system.

Parts Cleaning

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available then capture parts cleaning fluids.
- Recycle cleaning solution. Never discharge waste to the sanitary sewer or storm sewer.
- Use steam cleaning or pressure washing of parts instead of solvent cleaning. Cleaning equipment must be connected to an oil/water interceptor prior entering the sanitary sewer.
- When using solvents for cleaning, drain parts over the solvent tank to avoid drips to the floor. Catch excess solutions and divert them back to tank. Allow parts to dry over the hot tank.

Vehicle and Equipment Washing

Vehicle washing can result in the discharge of nutrients, sediment, petroleum products, and other contaminants to a surface water body or to a stormwater system. The MS4 Permit does not authorize the discharge of municipal vehicle washing byproducts into the MS4.

Outdoor Vehicle Washing Procedures

Outdoor washing of municipal vehicles should be avoided unless wash water is contained in a tight tank or similar structure. Where no alternative wash system is available, and full containment of wash water cannot be achieved, adhere to the following procedures:

- Avoid discharge of any wash water directly to the storm drainage system or surface water (e.g., stream, pond, or drainage swale)
- Minimize the use of water to the extent practicable.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of a biodegradable, phosphate-free detergent is preferred.
- Do not use solvents except in dedicated solvent parts washer systems or in areas not connected to a sanitary sewer.

- Do not power wash, steam clean, or perform engine or undercarriage cleaning.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems should not be used within wellhead protection areas or within other protected resources.
- Impervious surfaces discharging to the storm drainage system should not discharge directly to a surface water unless treatment is provided. The treatment device should be positioned such that all drainage must flow through the device, preventing bypassing or short-circuiting.
- Periodic sweeping and/or cleaning should be completed to prevent accumulation from forming on the washing area.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.
- Heavily soiled vehicles or vehicles dirtied from salting or snow removal efforts should follow the SOPs in the "Heavy Equipment Washing Procedures" below.

Indoor Vehicle Washing Procedures

- Vehicles and equipment should be washed inside whenever possible to reduce runoff to the stormwater system.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.
- Dry cleanup methods are recommended within garage facilities. Do not wash down floors and work areas with water.
- Bring smaller vehicles to commercial washing stations.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Heavy Equipment Washing Procedures

- Mud and heavy debris removal should occur on impervious surfaces or within a retention area.
- Maintain these areas with frequent mechanical removal and proper disposal of waste.
- Impervious surfaces with engineered storm drain systems should not discharge directly to a surface water.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface waterbodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Engine and Steam Washing Procedures

- Do not wash parts outdoors.
- Maintain drip pans and smaller containers to contain motor oils, hydraulic lubricants, greases, etc. and to capture and collect spills or noticeable leaks observed during washing activities, to the extent practicable.
- Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of a biodegradable, phosphate-free detergent is preferred.
- Avoid cleaning with solvents except in dedicated solvent parts washer systems. Make use of pressure washing and steam cleaning.
- Recycle clean solutions and rinse water to the extent practicable.
- Wash water should discharge to a tight tank or a sanitary sewer via an oil/water separator. Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.

Employee Training

- Employees who perform work on/with municipal vehicles or equipment are trained on these procedures and the proper operation of related equipment.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.

Attachments

1. Inventory of Municipal Vehicles and Equipment

Inventory of Municipal Vehicles and Equipment

Equipment Number	Make	Description	Additional Equipment	Primary Use
TK-1	INTL 7300	10-YARD DUMP TRUCK	6.8-YARD SALT SPREADER and 11' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-2	INTL 4700	6-YARD DUMP TRUCK	6.8-YARD SALT SPREADER and 10' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-4	FRHT 10850	CABO CHASSI	6.8-YARD SALT SPREADER and 11' ANGLE PLOW	SALTING AND PLOWING
TK-5	FRHT 11450	10-YARD DUMP TRUCK	6.8-YARD SALT SPREADER and 11' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-6	CHEVY SILVERADO 3500	2-YARD DUMP TRUCK	1.7-YARD SALT SPREADER and 9' ANGLE PLOW	CEMETARY DEPARTMENT, SALTING, AND PLOWING
TK-7	INTL 7400	10-YARD DUMP TRUCK	10-YARD SALT SPREADER and 11' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-8	CHEVY K2500	9' UTIIL BODY	8' ANGLE PLOW	GENERAL USE AND PLOWING
TK-9	INTL 400SER	8-YARD DUMP TRUCK	11' SIDECAST PLOW	GENERAL USE AND PLOWING
TK-10	CHEVY GMT400	9' FLAT BED	9' ANGLE PLOW	GENERAL USE AND PLOWING
TK-11	CHEVY SILVERADO 3500	8' PICK UP	8' ANGLE PLOW	GENERAL USE AND PLOWING
TK-12	FRHT 11450	10-YARD DUMP TRUCK	6.8-YARD SALT SPREADER and 11' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-14	CHEVY CHASSI 3500	FLAT BED	9' ANGLE PLOW	GENERAL USE AND PLOWING
TK-18	CHEVY SILVERADO 3500	2-YARD DUMP TRUCK	9' ANGLE PLOW	GENERAL USE AND PLOWING
TK-21	INTL 7400	14-YARD DUMP TRUCK	10-YARD SALT SPREADER	GENERAL USE AND SALTING
TK-24	INTL 400SER	11-YARD DUMP TRUCK	6.8-YARD SALT SPREADER and 11' ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING
TK-27	CHEVY SILVERADO 2500 HD	PICK UP	8' ANGLE PLOW	GENERAL USE AND PLOWING
TK-28	FORD F350	2.5-YARD DUMP TRUCK	1.9-YARD SALT SPREADER and 9'ANGLE PLOW	GENERAL USE, SALTING, AND PLOWING

Equipment Number	Make	Description	Additional Equipment	Primary Use
TK-34	HOLDR UTIL	.75-YD DUMP TRUCK	.5-YARD SALT SPREADER, 5' PLOW AND SNOW BLOWER, and FLAIL BRUSH CUTTER	SALTING AND PLOWING SIDEWALKS AND CUTTING BRUSH IN THE ROADWAY
TK-35	HOLDR UTIL	.75-YD DUMP TRUCK	.5-YARD SALT SPREADER, 5' PLOW AND SNOW BLOWER, FLAIL BRUSH CUTTER, and 6' POWER BROOM	SALTING AND PLOWING SIDEWALKS, CUTTING BRUSH IN THE ROADWAY, AND SWEEPING SIDEWALKS
TK5-2	CHEVY SILVERADO 3500	9' UTIL BODY	8' ANGLE PLOW	SEWER DEPARTMENT AND PLOWING
TK-13	DEERE 624J	3-YARD BUCKET	12' SNOW PUSHER	GENERAL USE, SALTING, AND PLOWING
TK-15	DEERE TC44H	2-YARD BUCKET	12' ANGLE PLOW	GENERAL USE AND PLOWING
TK-17	JCB BACKHOE	1.25-YARD BUCKET	10' ANGLE PLOW	GENERAL USE AND PLOWING
TK-22	DEER 54415	3-YARD BUCKET	12' ANGLE PLOW	GENERAL USE AND PLOWING
TK-30	DEERE 312GR	6000 LB MACHINE	14.6 CUFT BUCKET	GENERAL USE AND SNOW REMOVAL
CAR 2	CHEVY TRAVERSE	UTIL		DPW DIRECTOR
CAR 3	FORD ESCAPE	UTIL		STORMWATER MANAGER
TK3	CHEVY SILVERADO	PICK UP		REPAIR SHOW TOOL TK
TK16	FORD F250	PICK UP		GENERAL FOREMAN
TK20	CHEVY 2500	PICK UP		DPW FOREMAN
TK23	CHEVY SILVERADO	PICK UP		REPAIR SHOW TOOL TK
S-1	FORD F350	PICK UP		SEWER DEPARTMENT DIRECTOR
26	JOHN DEERE 4600	TRACTOR	MOWER DECK and FR BUCKET BACKHOE	PARK MOWING AND MAINTENANCE
29	JOHN DEERE 4220	TRACTOR	MOWER DECK and FR BUCKET	PARK MOWING AND MAINTENANCE