

# **Industrial Stormwater Report**

# An Evaluation of the Addition of Vehicle Maintenance Facilities

Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

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Contact: David Ladd, 207-287-5404

## Legislative Directive:

Public Law 2005 Chapter 602 requires the Department to provide a report on the addition, if any, of new facilities or activities currently not covered by Maine's Industrial (Multi-Sector) Stormwater General Permit when the permit is reissued in 2010. The report is to include projected revenue from fees and projected operating costs from extending the Industrial Stormwater Program to address these activities.

# History:

In 2005 the Natural Resources Committee asked the Department if additional categories of industrial activity should be included in Maine's Multi-Sector General Permit. It was recognized at that time by the Department and the Legislature that there are industrial activities that are similar to those regulated by the Multi-Sector General Permit, yet they do not fall under the current regulation. At that time, the Department was not prepared to add any additional categories of industrial activity to its General Permit because of limited staffing levels and limited administrative experience managing a new program.

## Introduction:

The Department's Industrial Stormwater Inspectors have conducted over 1000 field and technical assistance inspections since the program's inception in October of 2005. Through those field inspections, the Department became aware of unregulated vehicle maintenance facilities that are potential sources of significant pollution to Maine's waters. These industrial activities are not covered by Maine's Multi-Sector General Permit ("MSGP") as issued in 2005, but are very similar to those which currently require permit coverage. The common links between the unregulated activities and the currently regulated activities are vehicle maintenance, such as engine repairs, fluid changes, fueling, painting, grinding, sanding, welding and the storage of vehicles, equipment, and materials.

To create an equitable regulatory framework, the Department recommends adding an additional sector of industrial activity which would be designated not by standard industrial classification ("SIC") codes, but by an activity code "VM" for vehicle maintenance

## **Discussion:**

Maine's Multi-Sector General Permit allows the Department to designate otherwise unregulated facilities for permit coverage if they may pose a threat to waters of the State. To date, the Department has designated a total of 30 otherwise unregulated facilities as requiring coverage under Maine's Multi-Sector General Permit. Many are facilities that perform maintenance activities on heavy equipment or large vehicles. Inspecting these facilities and assisting them with the development and implementation of a stormwater pollution prevention plan ("SWPPP"), DEP staff have identified several common issues requiring attention and resolution. They are illustrated here using photographs of vehicle maintenance facilities designated for General Permit coverage since 2005.

BEFORE



Problem: Sediment and salt discharge directly to surface waters, no stormwater controls.



Problem: Ineffective sediment control and stockpile intrusion into the wetland.



Solution: Remove excess gravel and sediment. Establish rock plunge pool



Solution: Install rock lined plunge pool to control sediment from entering the wetland.

In addition DEP staff identified activities associated with vehicle maintenance that are not specifically listed in the current General Permit. Some are illustrated below.



Problem: Stormwater catch basin located in maintenance area drains to the Penobscot River.



Problem: Vehicle and equipment maintenance with no fluid management controls.



Problem: Although an activity is performed inside, the impact to stormwater can still be significant if the material is allowed to be tracked or washed out of a door.



Problem: Outside storage of vehicles and equipment which contain material such as salt shown above, or oily residues from a needed repair, may wash to a water resource during a storm event.

Given identification of common issues and activities, DEP staff attempted to define whether regulation would result in significant environmental benefit. Key to that assessment is an estimate of the number of facilities potentially involved. Two surveys were helpful in collecting relevant data.

#### **Construction Vehicle Maintenance survey:**

In 2007-2008, the Department conducted a phone and field survey of approximately 150 construction companies to determine if they have potential exposure of maintenance activities to stormwater with shallow concentrated flow to waters of the State. Fifty of the 150 sites surveyed were found to have maintenance activities exposed to stormwater with potentially polluted runoff to a wetland or surface water. There are an estimated additional 150 facilities yet to be contacted for information. The Department estimates an additional 25 to 50 of these facilities would have exposure of activities to stormwater and may require permit coverage.

#### **DPW** study:

A Department study of 93 Public Works garages was conducted in 2003 to determine exposure of activities to stormwater with flow to a protected natural resource. 48 of the 93 surveyed (approximately 50%) have potential exposure of material, equipment and maintenance activities to stormwater. Currently, Maine's municipal stormwater program requires a stormwater pollution prevention plan for vehicle maintenance facilities from 28 municipalities and eight state facilities. This would leave approximately 450 Public Works garages that are not regulated by municipal or industrial stormwater requirements. Based on the 2003 survey, potentially 50% of these unregulated facilities have exposure of their activities to stormwater.

#### **Program Recommendation:**

Activities conducted at unregulated vehicle maintenance facilities often pose a serious threat to water quality. These facilities are pervasive and if left unregulated the cumulative impacts will have a significant impact to the State's water quality. Based on extensive field inspections over the past three years along with the surveys and data collection noted above, the Department has determined that vehicle and equipment maintenance facilities that conduct maintenance activities outside and discharge stormwater to waters of the State should be required to obtain an industrial stormwater discharge permit. Vehicle Maintenance facilities include facilities that perform large vehicle or equipment maintenance including but not limited to: fueling, grinding, sanding, welding, painting, power washing, engine and parts maintenance and material or equipment storage. Examples include large construction companies, tractor trailer service facilities, excavation contractors and public works facilities not already covered by the Industrial or Municipal Stormwater Programs.

Not every vehicle maintenance facility would necessarily be subject to permit coverage. A goal of the Industrial Stormwater Program is to work with facility operators so that the facility may qualify for "No Exposure" status or not require permit coverage based on site modifications. There is no fee associated with the No Exposure status, and with some assistance from the Department, a facility may be able to qualify quite easily. A facility qualifies for No Exposure when its industrial activities, materials and operations, are protected by a storm resistant shelter that prevents exposure to rain, snow, snowmelt and run off. In fact, the construction company survey and the

public works survey noted that some facilities would have the ability to qualify for a No Exposure status, and many more would not require any permit coverage once slight site modifications were conducted. Based on this information, the Department estimates that approximately 100-150 facilities would require coverage under a Vehicle Maintenance activity code within the Maine Multi-Sector General Permit.

#### **Projected Revenue And Costs:**

If an additional 100 - 150 facilities require coverage under the Maine Multi-Sector General Permit at the current annual fee of \$300, this expanded program would generate an additional \$30,000 to \$45,000 in annual fees. Currently there are a total of 700 facilities in the program with two full time inspectors and a part time inspector out of the Bangor office; the projected fees would support increasing the part-time position to full time.

#### **Conclusion:**

The industrial stormwater program's primary goal is to provide quality environmental regulation with stakeholder input from the regulated community that does not impede economic development for small businesses. The environmental benefits of this process have been outstanding. Over the past three years, the industrial stormwater inspectors have worked with over 300 Maine businesses to clean up significant pollutant sources without closing any facility. The key to achieving this result is the ability of the program's stormwater inspectors to provide on-site technical assistance to facility operators. The Department recommends that vehicle and equipment maintenance facilities that conduct maintenance activities outside and discharge stormwater to waters of the State be required to obtain an industrial stormwater discharge permit. In order for this program to cover unregulated vehicle maintenance facilities and continue to provide quality environmental regulation and environmental benefit, it will need three full time inspectors.