

# The Regulation of Industrial Stormwater Discharges by the Maine Department of Environmental Protection

### A Report to the Maine Legislature's Joint Standing Committee on Natural Resources

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Prepared by: Don Witherill & David Ladd

Department of Environmental Protection, Division of Watershed Management



Scrap Metal Recycling Facility

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#### Introduction

Stormwater has been a concern for many years. That concern historically centered on problems due to stormwater quantity; i.e. flooding. More recently, however, impacts to the quality of surface waters have been associated with stormwater runoff. Particularly for small streams and lakes, the Maine Department of Environmental Protection is finding that polluted stormwater runoff is one of the greatest contributors to water quality impairment.

In October 2005, the Maine Department of Environmental Protection (DEP) took over permitting authority from the U.S. Environmental Protection Agency (EPA) for the regulation of stormwater discharges from industrial activities. These discharges are regulated through the National Pollutant Discharge Elimination System (NPDES) Program of the federal Clean Water Act. Maine now refers to the program as the Maine Pollutant Discharge Elimination System (MEPDES) Program.

In the first regular session of the 122<sup>nd</sup> Legislature, and prior to initiating our administration of the program, DEP asked the Maine Legislature for authority to charge a fee to industrial facilities needing permit coverage for their stormwater discharges. The Legislature passed Public Law Chapter 157, "An Act to Ensure Financial Solvency in Maine's Air and Wastewater Licensing Programs," which authorized the DEP to charge a one-time fee of up to \$350 for general permit coverage of stormwater discharges (see Appendix 1). The law requires the DEP to report back to the Legislature by January 30, 2006 with an examination of the following:

- 1. The fee assessed for each industry category;
- 2. The fees, if any, that should be assessed after September 30, 2006;
- 3. Whether additional categories of industries should be assessed the fee;
- 4. Whether the fee should be assessed based on the industrial activity performed; and
- 5. Whether public entities should be assessed the fee.

The Joint Standing Committee on Natural Resources is authorized to report out legislation dealing with fees for general permit coverage for industrial stormwater discharges to the Second Regular Session of the 122nd Legislature.

#### Recommendation

The Department requests continued authority to assess a fee of up to \$300 and create two (2) Environmental Specialist II (ESII) inspector positions funded by dedicated revenues using existing position authority in the Department. The amount actually charged would be determined by the amount of permittees enrolled in the program and would be reviewed on a biennial basis. In 2006, the fee will be \$250.

#### **Discussion of Stormwater Multi-Sector General Permit Fees**

**Background:** In October and November of 2005, the DEP sent two separate mailings to more than 4,000 Maine businesses, alerting them that their industrial activity may be subject to the requirements of the MEPDES Industrial Stormwater Program. As of January 10, 2006, there were 557 Notifications of Intent (NOIs) filed for coverage under the Multi-Sector General Permit. An additional 495 had certified that they have "no exposure" of pollutants to stormwater. DEP conducted training seminars for Maine Auto Recyclers and Maine Marine Trade Associations on how to comply with Maine's industrial stormwater permit, and conducted similar information meetings in conjunction with Maine Aggregate and Maine Pulp and Paper Associations. In the 12 weeks the DEP has been administering the industrial stormwater program, it has added approximately 230 new permittees and determined that over 400 new facilities have no exposure to pollutants. There are still another 1,400 potentially regulated entities that have not yet contacted the DEP, which leaves their status unresolved. Follow-up contact and/or inspections will be scheduled in 2006 for these 1,400 facilities.

The fee assessed for each industry category: In the first year of the program, DEP set the fee for all activities requiring coverage under the general permit at \$300. The fee was set at this level to cover initial start-up costs for the DEP to take over the permit program from EPA, with the anticipation of continuing this program permanently. Such start-up costs included the two large mailings; setting up a new database to track permit-related information; and staff time to answer questions through telephone calls or site inspections. Staff involved in the program's start-up phase included two temporary Conservation Aide positions, plus a number of existing staff (see Table 1).

No fee was assessed to industrial activities that qualify for "No Exposure" of pollutants under the general permit. Facilities that qualify for the No Exposure Certification are not required to meet the standards of the general permit because the storage of materials and their industrial activities are covered and are not affected by rain and snow melt.

As of early January 2006, the DEP generated gross revenue of \$162,900 as a result of NOI fees collected. Indirect costs of 16.25% have resulted in \$136,428 being available for the industrial stormwater program. The two Conservation Aide positions cost approximately \$23,000 through December 2005. In addition, staff members from other program areas of the DEP were temporarily assigned on a part-time basis to assist the program by answering phone calls and conducting field determinations. Staff answered over 2,200 phone calls and conducted over 430 field inspections in this start-up phase of the program (see Appendix 2 for photos of some sites encountered). Most of these staff work in other programs related to water quality. For the most part, their services have been paid by their existing programs and not by industrial stormwater permit fees. Table 1 outlines the positions, number of employees, hours, and costs by position for these temporary assignments.

Position	Number of Employees	Hours	Cost
Environmental Specialist IV	7	1148	42,446
Division Director	1	120	5,729
Biologist I	3	216	7,137
Env. Specialist III	4	456	15,686
Environmental Specialist II	1	15	522
Biologist III	1	12	558
Assistant Engineer	1	16	606
Environmental Engineer I	1	16	618
Senior Environmental Engineer	1	6	256
Clerk IV	1	620	15,518
Database Development Staff	4	1470	77,281
Data Entry Staff	5	50	2,151
Totals		4,145	168,508

### Table 1. DEP Staff Resources Involved in Start-Up of the Stormwater Multi Sector General Permit

The fees, if any, that should be assessed after September 30, 2006: The

Department requests authority to charge an annual fee up to \$300. This fee would support two full-time inspectors (approximately one per 300 permittees). The two inspectors would be ES IIs and would report to the Stormwater Program Coordinator, who is also responsible for other aspects of the MEPDES Stormwater Program (general permits for municipal separate storm sewer systems and construction activities). The cost of these positions for FY 07 will run approximately \$60,000 per year for each ES II (\$55,000 for personal services, plus \$5,000 for support), for a total cost of approximately \$120,000.

The fees would not entirely support the program, however. The Stormwater Coordinator ( a General Fund position ) will be dedicating approximately 50% of his time to this program, and there is expected to be administrative support for the program from a General Fund clerk typist position. This program will also receive ongoing assistance from staff in the marine program and NPDES compliance staff who will be working with specific sectors of industrial activity with which they already routinely interact. These positions are funded by the General Fund and dedicated funds (Maine Environmental Protection Fund – Water Licenses, Over Board Discharge) and are expected to total approximately \$75,800 annually (see Table 2).

Position	Funding Source	% of time	Expected annual value
ES II	MEPF Water	3	\$1,916
ES IV (SW Coord)	General Fund	50	\$43,000
ES IV	General Fund	3	\$2, 792
ES IV	Overbrd Discharge	20	\$17,413
Clerk IV	General Fund	20	\$10,696
Total			*\$75,817

## Table 2. Expected DEP Staff Contributing Time To The Industrial Stormwater Program, But Not Funded By Stormwater Fees

\* (does not include minor contributions from other staff amounting to less than \$1,000)

While the annual fee is clearly an added cost to businesses that are subject to the program, the Department has made a significant change that will largely off-set the cost increase. While EPA did not charge a fee for filing under their Multi-Sector General Permit, the agency did require that permittees in 17 out of 27 Sectors covered by the Multi-Sector General Permit conduct analytical benchmark monitoring for certain water quality parameters on a quarterly basis in permit years two and four of the five year permit cycle, as well as periodic visual monitoring.

Upon assuming this program from EPA, DEP staff evaluated the methods by which this data was collected and concluded that quality assurance for such monitoring is low for many of the smaller facilities and that the validity of the data collected is questionable. Therefore, the Department has discontinued the requirement for the quarterly analytical monitoring. The average cost in Maine for such stormwater sampling has been \$150 per quarter in permit years two and four, or \$1,200 per five year permit cycle. This cost covered the lab analysis, but did not include the cost of staff time involved in collecting the samples. By eliminating this cost, there will be

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little difference in the overall cost of the program for most permittees, even with an annual fee.

In order to effectively administer our general permit, instead of analytical monitoring, the Department will be conducting compliance inspections of all facilities. These facility inspections will be announced and will focus on technical assistance and permit compliance. A typical inspection will include a review of the facility's Stormwater Pollution Prevention Plan ("SWPPP") including visual monitoring data and the facility's quarterly inspection reports.

This "Plan" review will be followed be a site inspection with facility staff to evaluate potential pollutant sources and their associated Best Management Practices ("BMPs"). Technical assistance will be provided on site to address pollutant source runoff issues. Facility inspections will usually take between two and ten hours depending on the size of the facility. All permitted facilities will be inspected twice during the five year permit cycle. In some cases, inspections may lead to enforcement action. Enforcement will require additional staff resources, and will be undertaken by existing staff within the Department.

The Department feels that an inspection-based program is the most effective way to administer this program to achieve environmental results.

**Should additional categories of industries be assessed the fee?** No, the Department currently has a full workload and is not proposing to add any additional categories of industries to the program during the first 5-year cycle of the Multi-Sector General Permit. We will re-evaluate whether any additional categories should be added when the permit is up for renewal in 2010. After conducting some initial inspections, Department staff concluded that some activities will not have a significant impact on stormwater. Therefore, staff developed guidance to exclude activities from requiring permit coverage unless a significant discharge from the site has been documented:

- Log Storage and Handling: (SIC 2411): The Department will only regulate permanent round log storage sites; temporary log storage areas will not require coverage. Fuel wood harvesting (fire wood) and saw mills will not require coverage if the operation occupies less than two acres, including access roads, storage of logs, storage of cut wood split wood, and buildings and machinery associated with this process.
- Wood and Kitchen Cabinet Makers: (SIC 2434): The Department considers this activity to be *de minimus* and will not regulate this activity under Maine's MSGP.
- Auto Salvage Yards: (SIC 5015): DEP will not require coverage for facilities with fewer than 15 cars on site.
- General Warehousing and Storage: (SIC 4225): Self-Storage facilities will not require coverage.
- Water Transportation: Facilities with gas docks are not regulated as marinas, unless they also are involved in boat storage and maintenance.
- **Boat Sight-Seeing Operations:** We will not require coverage for sight-seeing/excursion operations involving fewer than two vessels.

• Land Transportation: Local Trucking without Storage (SIC 4212) covers trucking timber, and log trucking. Maine's MSGP will not require coverage for operations with fewer than 5 vehicles.

Should the fee be assessed based on the industrial activity performed? No, for the initial fee, the Department has concluded that a single fee rate is preferable to a sliding scale based on the type of activity performed. A sliding scale could be used for the annual fee, but it would have to be based on some threshold such as size of the site, gross revenue of the business or the amount of pollutants discharged. The size of the business property may not reflect the amount of exposure of pollutants to stormwater that occurs. In a survey of other states during the winter of 2005, only one state, Washington, was found to base its annual fee on the amount of revenue produced by the business. While Maine could structure a similar program, it would be more complicated and would not guarantee that the fee correlates with the size of an environmental impact.

**Should public entities be assessed the fee?** Yes, the cost for inspections and other administrative activities is not significantly different for those sites. The Department proposes to continue assessing the fee to public entities. Currently 44 federal, state, municipal, or quasi-municipal facilities have filed notices to comply with Maine's industrial stormwater program. This represents less than 10 percent of the total number of NOIs filed to date.

#### Conclusion and recommendations.

A field-based program that has reached over 600 businesses with technical and compliance assistance will continue to provide solid environmental results. Based on extensive fieldwork in the fall of 2005 we know that the facilities subject to this permit program have significant potential to affect Maine's water quality.

The early stages of Maine's administration of this program have resulted in the addition of more than 220 additional businesses filing NOIs for coverage under the general permit, as well as over 400 "No Exposure" certifications, for a net gain of more than 630 businesses from when EPA administered the program. This number will continue to grow as more determinations are made in the coming year. We conducted over 430 site inspections from mid October to the end of December 2005, when snow cover limited the effectiveness of these inspections.

The Department requests continued authority to assess a fee and create two (2) Environmental Specialist II inspector positions funded by dedicated revenues using existing position authority in the Department. The amount actually charged would be determined on a biennial basis and will be \$250 in 2006.

#### Appendix 1

#### Excerpts from CHAPTER 157 H.P. 218 - L.D. 293

#### An Act To Ensure Financial Solvency in Maine's Air and Wastewater Licensing Programs

Sec. 3. One-time fee for general permit coverage for industrial storm water discharges. Until September 30, 2006, the Department of Environmental Protection may assess a one-time fee of up to \$350 for general permit coverage for industrial storm water discharges.

Sec. 4. Report. The Department of Environmental Protection shall prepare a report on the fees assessed for general permit coverage for industrial storm water discharges pursuant to section 3 of this Act. The report must include an examination of:

1. The fee assessed for each industry category;

2. The fees, if any, that should be assessed after September 30, 2006;

3. Whether additional categories of industries should be assessed the fee;

4. Whether the fee should be assessed based on the industrial activity performed; and

5. Whether public entities should be assessed the fee.

The Commissioner of Environmental Protection shall submit the report to the Joint Standing Committee on Natural Resources no later than January 30, 2006. The Joint Standing Committee on Natural Resources may report out legislation dealing with fees for general permit coverage for industrial storm water discharges to the Second Regular Session of the 122nd Legislature.

Effective September 17, 2005.

#### Appendix 2

#### Industrial Sites encountered October-December field season

#### 1. Auto Salvage Site

#### **Problems:**

- Vehicles placed in and directly adjacent to a freshwater wetland;
- Leaking, unlabeled barrels, evidence of spills & leaks
- Cracked & leaking batteries



#### Solutions:

- Pull vehicles out of wetland & properly drain fluids
- Implement good housekeeping
- Label barrels & remove fluids, clean up batteries
- Develop & implement a SWPPP

#### 2. Auto Salvage/Crushing Site

#### Problems:

- Fluids not removed prior to crushing
- Original soil material in salvage lot
- No buffers or stormwater BMPs installed

Oily sheen & sediment from auto salvage/auto crushing operation



#### Solutions:

- Remove fluids prior to crushing
- Install gravel in salvage yard to prevent sedimentation
- Develop & implement a SWPPP

#### 3. Concrete Manufacturing Facility

#### Problems

- Disposing excess concrete in and adjacent to freshwater wetland
- Discharging process water into freshwater wetland
- No stormwater pollution prevention plan



#### Solutions

- Remove concrete in and adjacent to freshwater wetland
- Establish vegetative buffer adjacent to freshwater wetland
- Construct a series of detention ponds
- Redirect process water to detention ponds
- Reuse excess concrete to produce pre-cast concrete blocks
- SWPPP has been developed and is currently being implemented

#### 4. Auto Salvage Site

- This site has been in compliance with the MSGP since 1995
- Vehicles brought on-site are processed in a garage
- Utilizes proper fluid management and recycling
- Hazardous materials are labeled and properly disposed of
- Barrels containing fluids are all properly labeled



All salvage vehicles are located above grassy slope. This is among the best managed Auto salvage operation in the State, and is fully in compliance with Maine's MSGP. Detention ponds & vegetative buffers catch & filter the runoff from Sun Auto Salvage Operation in Norridgewock, preventing pollutants from discharging into the Kennebec River

