MAINE TURNPIKE AUTHORITY

2008 PROGRESS REPORT
ON IMPLEMENTATION OF THE STORMWATER
MEMORANDUM OF AGREEMENT

Prepared by:
Maine Turnpike Authority

Submitted on:
June 26, 2009

think blue
clean water starts with you!

Stormwater Protection in Maine

Maine Turnpike Authority

2360 CONGRESS STREET
PORTLAND, MAINE 04102

GERARD P. CONLEY, SR., PORTLAND, CHAIRMAN
LUCIEN B. GOSSELIN, LEWISTON, VICE CHAIRMAN
DOUGLAS A. VOLK, PORTLAND, MEMBER
RICHARD E. VALENTINO, SACO, MEMBER
THOMAS B. FEDERLE, ESQ., MANCHESTER, MEMBER
DIANE M. DOYLE, SACO, MEMBER
GREGORY G. NADEAU, LEWISTON, MEMBER EX-OFFICIO

PAUL E. VIOLETTE
EXECUTIVE DIRECTOR
NEIL R. LIBBY
DEPUTY EXECUTIVE DIRECTOR
CHIEF FINANCIAL OFFICER
PETER S. MERFELD, P.E.
CHIEF OPERATIONS OFFICER

VIA USPS MAIL – RETURN RECEIPT REQUESTED

June 26, 2009

Mr. Don Witherill
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

SUBJECT: Maine Turnpike Authority (MTA)
Memorandum of Agreement (MOA) for Storm Water Management
2008 Annual Progress Report

Dear Don:

MTA is pleased to submit the 2008 Annual MOA Progress Report for your review. A total of one (1) hard copy with five (5) digital CD copies have been enclosed for distribution to appropriate Department personnel.

Please do not hesitate to contact me at (207) 871-7771 ext. 359 to discuss this report, should you have any questions.

Respectfully,

John M. Branscom
Environmental Services Coordinator
Maine Turnpike Authority

Enclosure: 2008 Progress Report on Implementation of the Stormwater MOA

Cc: Peter Newkirk, Maine Department of Transportation
Peter Merfeld, MTA
Steve Tartre, MTA
Wes Jackson, MTA
Lauren Carrier, MTA
Bob Driscoll, HNTB
Sharon Newman, PretiFlaherty
Robyn Saunders, GZA

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of this Progress Report is to comply with the requirements in the Stormwater Memorandum of Agreement (MOA) currently dated November 14, 2007 and adopted by the Maine Department of Environmental Protection (DEP), Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA). This report includes information and data on construction projects and activities accomplished in 2008; projects and activities anticipated in 2009; and a list of staff or designees who provided oversight with respect to erosion and sedimentation control and stormwater control.

The intent of the MOA is to achieve stormwater quantity and quality controls reasonably consistent with the standards set out by the DEP in Chapter 500 – Stormwater Management Rules, and the requirements of the Maine Pollutant Discharge Elimination System (MEPDES) General Permit for Construction Activity issued pursuant to 06-096 CMR 529 (2)(a)(2)(i) and Part IV (D)(6) and (7) of the General Permit for the Discharge of Storm Water from MaineDOT and MTA Municipal Separate Storm Sewer Systems (MS4s).

The MOA reflects the specific technical concerns associated with linear transportation projects undertaken by or under the supervision of MaineDOT and MTA, and specifies the stormwater quantity and quality standards that apply to those projects. As part of the conditions established under the MOA, MaineDOT and MTA are not obligated to (1) obtain a permit; (2) obtain DEP approval under Chapter 500; or (3) file a Notice of Intent for a MEPDES General Permit for Construction Activity. A copy of the current Stormwater MOA is located in **Appendix A**. The MOA was updated in November 2007 with a significant coordinated effort among MTA, MaineDOT, and DEP. These changes to the MOA and associated operating criteria are reflected in this 2008 annual report.

II. ACTIVITIES ACCOMPLISHED

a. Training

MTA in-house highway maintenance supervisors and foremen, as well as engineers, consultants, and contractors who are certified by the Maine Department of Environmental Protection's (DEP) Nonpoint Source Program (NPS) or are Professional Engineers (PEs) experienced with stormwater requirements are listed in **Table 1** of **Appendix B**.

In 2008, MTA continued to place a high priority on stormwater training for employees in several internal departments which include:

- Highway & Equipment Maintenance. MTA's Highway Maintenance Supervisors and Foremen are certified through the DEP's Nonpoint Source (NPS) Program in 2008; and
- Engineering & Building Maintenance. MTA's Engineering Staff (e.g., inspectors and managers) are certified through the DEP's NPS Program in 2008, as well.

The Turnpike has attended DEP and MaineDOT training sessions and workshops through 2008, and also plans to continue to attend joint training and workshop sessions in 2009 in order to learn and share knowledge on erosion and sediment control practices and promote multi-agency interaction. In addition, MTA is currently updating their internal stormwater training program for 2009 to focus on permit requirements including Chapter 500, MS4s, and Maine Construction General Permit (MCGP).

b. Contracted Projects

In 2008, MTA awarded thirteen (13) construction projects, as seen in **Table 2** of **Appendix B**. Seven (7) of these projects are considered to be linear construction projects, of these MOA applicability and subsequent reporting is required for only three (3) projects[1].

Table 3 of **Appendix B** summarizes the permanent stormwater Best Management Practices (BMPs) installed as part of the three (3) projects in 2008 managed under the MOA. In addition, nine (9) MOA managed construction projects awarded in 2007 that remained under construction in 2008 are listed in **Table 3** with each associated permanent BMPs. As seen in **Table 3**, a significant number of the BMPs installed in 2007 and 2008 were associated with upgrades to existing infrastructure, including bridge, pavement, and guardrail rehabilitation.

c. MTA Highway Maintenance Department Construction Projects

MTA's Highway Maintenance Department completed four (4) small construction projects which incorporated permanent BMPs. **Table 4** of **Appendix B** provides a summary of MTA Highway Maintenance Department construction projects with an inventory of permanent BMPs completed in 2008.

d. Post Construction Maintenance and Inspection

Operations & Maintenance (O&M)

A summary of the O&M tasks accomplished in 2008 is presented in **Table 5** of **Appendix B**. The most common maintenance activities accomplished by MTA's Highway Maintenance Department in 2008 included sweeping of paved (impervious) surfaces, such as roadways, toll plazas, service plazas, crossovers, maintenance yards, and commuter parking lots. MTA continues to inspect 100% of the catch basins and associated culverts; repairs and catchment cleanouts are subsequently performed as needed. Similar to previous years, approximately 50% of the catch basins contained enough sediment to require cleaning.

The Highway Maintenance crews use weekly summary reports and transfer the data relating to storm water or soil and erosion control activities to a quarterly O&M

[1] The remaining projects, listed in **Table 2** are considered non-linear projects (e.g., service plaza facilities and administrative building), therefore MOA coverage is not applicable.

Summary Table similar to the format of **Table 5**. The Environmental Services Coordinator conducts a periodic review of the O & M Summary Tables at each Highway Maintenance Facility to track progress throughout the year.

Inspections

In 2008, HNTB (MTA's primary construction contractor) conducted a thorough inspection of the Turnpike. This inspection (generally referred to as the "Annual Inspection") covers pavement, cut sections, embankments, bridges, roadway lighting, drainage structures, signs, pavement markings, toll plazas, utility buildings, service areas, maintenance areas and other facilities.

Upon completion of the inspection process, HNTB submits to MTA a report that provides advice and recommendations as to the proper maintenance, repair, and operation of the Turnpike during the ensuing fiscal year.

A detailed Annual Inspection Report was transmitted to the Authority's Executive Director in October 2008. Below is a summary of information contained within the Annual Inspection Report relative to storm water quality and quantity control.

> *The roadway surface drainage system consisting of drainage ditches, catch basins, and cross culverts was inspected and found to be in fair-to-good condition. Catch basin repair is typically included as part of the pavement rehabilitation projects. This practice appears to be adequate to maintain the catch basins in fair-to-good condition. Routine ditch and sideslope repairs are required for proper upkeep of the highway. Turnpike maintenance forces routinely clear debris from drainage ditches and regrade the surrounding areas as necessary. All ditches will continue to be evaluated and recommendations for reconstruction will be made as required.*
>
> *Numerous rivers and streams pass under the turnpike through box culverts and culvert pipes. All box culverts and pipes 60 inches in diameter are inspected every year. Pipes 36 to 54 inches in diameter are inspected on a five-year cycle. Pipes 36 inches in diameter and larger were inspected in 2008 (a total of 416 individual culvert ends), and were found to in satisfactory condition.*
>
> *Additionally, the Maine Turnpike mitigated several slopes and drainage system failures within its highway maintenance forces in 2008. The locations include MM 24 Median and NB Slope, MM 10.5 NB & SB, MM 0.3 eastbound Falmouth Spur, MM 40.2 NB, MM 46.8 NB, MM 48, MM 50 Forest Avenue, and MM 94.2.*

In addition to the HNTB inspections and surveys in 2008, MTA continued implementing its Stormwater Program Management Plan (SPMP) as required by the NPDES Phase II Municipal Separated Storm Sewer System (MS4) Permit/Program. This SPMP identifies the municipalities and receiving waters to which MTA may discharge within approximately 14.5 miles of Urbanized Areas (UAs) as indicated in the 2000 Census. In support of the SPMP's six minimum control measures, MTA continues to make progress with the measurable goals established in MTA's SPMP, which include (but are not limited to) implementing an illicit discharge detection and elimination (IDDE) program; developing a storm sewer system map of all outfalls within UA; conducting annual dry weather and opportunistic inspections; and assessing the contents during clean out of catch basins.

III. ACTIVITIES AND CONSTRUCTION PROJECTS PLANNED FOR 2009

a. Training

In addition to continuing to maintain certification for key employees with the DEP's NPS Training Program in 2008, MTA will continue to operate a Storm Water Pollution Reduction Training Program for MTA employees. This training program complies with MTA's NPDES Phase II MS4 Stormwater Program Management Plan (SPMP) for two Minimum Control Measures (MCMs) to include: Public Education and Outreach, and Pollution Prevention (P2)/Good Housekeeping for Municipal Operations.

As seen in the representative training curricula included in **Appendix C**, MTA will continue to train employees in Erosion Prevention and Sedimentation Control, as well as in the following areas:

- impacts of non-stormwater discharges;
- job-specific responsibilities associated with the SPMP;
- indicators of illicit connections or illegal dumping;
- dry weather and opportunistic inspection procedures;
- notification and/or response procedures upon suspicion of illicit connection or discharge; and
- procedures to prevent/reduce storm water pollution from the activities specified in *Part IV(H)6(a)(ii)* of the Permit under the Pollution Prevention (P2)/Good Housekeeping MCM.

b. Contracted Projects

In 2008, MTA efforts were focused on bridge repair/maintenance project and smaller scale linear projects with operations and maintenance components, as opposed to the larger Turnpike Widening effort that was completed in 2004. In 2009, MTA will primarily focus on upgrades to buildings (e.g. Saco toll and Litchfield/West Gardiner materials storage building), bridge repair/maintenance projects, pavement rehabilitation, and other small scale projects. These projects that will be managed in accordance with the existing MOA are summarized in **Table 6** of **Appendix B.**

c. MTA Highway Maintenance Department Projects

MTA has no specific plans to perform any new construction projects, which involve permanent BMPs along the Turnpike (such as installation of sediment traps/catch basins, permanent check dams, etc.). Anticipated construction projects to be performed by MTA Highway Maintenance are likely to be improvements to existing infrastructure and are anticipated to have limited land disturbance at the existing facilities.

d. Operations & Maintenance

HNTB will continue to perform the Annual Inspection of MTA, which includes infrastructure (e.g., bridges, buildings, roadways, etc.) as well as permanently installed BMPs (e.g., drainage structures, vegetated buffers and other erosion control measures).

MTA's Highway Maintenance Department employees primary focus is to perform routine and as-needed O & M Best Management Practices (BMPs). These proposed BMPs (shown in **Table 7**) will include the removal of sand from guard rails and other ancillary facilities (e.g., parking lots, median crossovers, toll facilities, etc.), as well as routine sweeping of paved areas.

IV. STORMWATER MOA OVERSIGHT

Stormwater MOA compliance and oversight is provided for the Turnpike by the following MTA and HNTB personnel:

MTA Management Staff:
Peter Merfeld, P.E., Chief Operations Officer
Steve Tartre, P.E., Director of Engineering and Building Maintenance
William Franklin, Deputy Director of Engineering and Building Maintenance
Scott McConihe, Resident Engineer
Gerry Ouellette, Resident Engineer
Scott Warchol, Project Coordinator
Wes Jackson, Director of Highway & Equipment Maintenance
William Wells, Deputy Director of Highway & Equipment Maintenance
Roger Mathews, Highway Division Supervisor
Andy Perry, Highway Division Supervisor
Dale Cook, Foreman at Gardiner and Litchfield Highway Maintenance Facility
Rick Dionne, Foreman at Auburn Highway Maintenance Facility
Gary Montague, Foreman at Gray Highway Maintenance Facility
Bill Thompson, Foreman at South Portland Highway Maintenance Facility
Jim Sotir, Foreman at Kennebunk Highway Maintenance Facility
Roger Cabana, Foreman at York Highway Maintenance Facility
John Branscom, Environmental Services Coordinator

HNTB, Inc.
Roland Lavallee, P.E
Bob Driscoll, P.E.
Lori Driscoll, P.E.
Tim Cote, P.E.
Charles Myers, P.E..
Clayton Hoak, P.E.
Walter Fagerlund, P.E.
Donald Ettinger, P.E.
Lauren Meek, P.E.
Dale Mitchell, P.E.
Ron Affonso
Trevin Cobb
Mark Desenberg
Jamie Waugh

V. CONCLUSION

MTA will continue to apply the appropriate engineering design and building practices for construction projects to successfully meet the requirements of the current Stormwater MOA. MTA management is committed to post-construction operations and maintenance, and increased education for its employees. MTA will carefully manage stormwater and erosion control issues to protect the environment and comply with the current MOA.

APPENDIX A

STORMWATER MOA

MEMORANDUM OF AGREEMENT FOR STORMWATER MANAGEMENT BETWEEN THE MAINE DEPARTMENT OF TRANSPORTATION, MAINE TURNPIKE AUTHORITY AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

The Maine Department of Environmental Protection (hereinafter DEP), the Maine Department of Transportation (hereinafter MaineDOT), and the Maine Turnpike Authority (hereinafter MTA) agree as follows:

WHEREAS, projects involving state transportation systems developed by or under the supervision of the MaineDOT or MTA must meet the storm water requirements set forth in a Memorandum of Agreement between the DEP, MaineDOT and MTA; and

WHEREAS, DEP, MaineDOT and MTA recognize the unique characteristics, benefits and impacts of state transportation systems, including without limitation roads and railroads; and

WHEREAS, DEP, MaineDOT and MTA agree that the intent of this Memorandum of Agreement is to achieve stormwater quality and quantity controls reasonably consistent with the standards set out by the DEP in Chapter 500 Stormwater Management Rules; and

WHEREAS, those objectives will be achieved by a comprehensive stormwater management program that applies to any project developed, administered, supervised, or overseen by MaineDOT or MTA which otherwise would have required a stormwater permit or been subject to the standards of Chapter 500, but for the exemption in 38 M.R.S.A. §420-D(7)(G), and that applies to all other MaineDOT and MTA projects located in the organized territory which would not have required a storm water permit or not have been subject to the standards of Chapter 500; and

WHEREAS, comprehensive stormwater management as part of MaineDOT and MTA projects in the organized territory will result in substantial environmental benefits for all

watersheds and in particular those direct watersheds of lakes most at risk from new development or urban impaired streams.

NOW, THEREFORE, MaineDOT and MTA will adopt the following requirements for stormwater management,

1. Applicability.

This Memorandum of Agreement (MOA) applies to MaineDOT and MTA projects that would be required to meet the requirements of the Stormwater Management Law if not for the exemption in Title 38 MRSA §420-D(7)(G). It does not apply to projects requiring a permit pursuant to the Site Location of Development Law.

This MOA addresses the specific technical issues associated with state transportation system projects undertaken by or under the administration, supervision, or oversight of MaineDOT and MTA, and specifies the storm water quality and quantity standards which will apply to those projects. MaineDOT and MTA have agreed to adopt standards that are based on the type of project and the project location with respect to direct watersheds of lakes most at risk from new development and urban impaired streams, as set forth in Chapters 500 and 502 of the Maine Stormwater Management Rules.

No state transportation system project constructed pursuant to the requirements of this MOA is required to get a permit or DEP approval pursuant to the Maine Stormwater Management Law.

2. Definitions.

A. Roads. All roads, highways, bridges, bike paths, interchanges and intersections.

B. Construction site operator. The contractor's designated on-site supervisor or MaineDOT or MTA's designated on-site supervisor if there is no outside

contractor.

C. State transportation system. 1) (a) MaineDOT and MTA administered or supervised state or state aid highways along with associated sidewalks, paths, trails and/or bridges; (b) MaineDOT administered or supervised marine highways, airports, and rail lines along with associated sidewalks, paths, trails and/or bridges, and 2) any associated facilities essential to the safe and efficient operation of those state transportation systems, including but not limited to highway maintenance facilities, transit/rail stations, toll plazas, ferry terminals, cargo ports, intermodal transportation centers, weigh stations, rest areas, visitor information centers, service plazas, and park-and-ride lots as well as parking lots and other infrastructure serving those facilities.

D. Linear portion of a project. All rail lines, roads, highways, bridges, or similar transportation corridors, along with associated interchanges, scenic turnouts, access ramps, airport runways and taxiways, weigh stations, toll facilities, intersections, sidewalks, trails, paths and similar associated facilities including associated parking and building area of up to 5,000 square feet.

E. Non-linear portion of a project. All portions of a state transportation system that are not linear. Examples of a non-linear portion of a project include, but are not limited to, maintenance facilities, intermodal transportation centers, transit/rail stations, and airport terminals, hangers and aprons.

3. Specific Provisions to Comply with Chapter 500 Standards.

All state transportation system projects undertaken by or under the administration, supervision, or oversight of MaineDOT and MTA shall comply with the requirements of Chapter 500 and 502 as follows.

A. Basic Standards. All projects shall meet the Basic Standards described in Section

4(A) of Chapter 500, through implementation of best management practices described in the MaineDOT's Best Management Practices for Erosion and Sedimentation Control (hereinafter the MaineDOT BMP Manual) as may be updated from time to time.

B. General Standards. For projects that are large enough to trigger the General Standard threshold in Chapter 500:

(1) A linear portion of a project located in the direct watershed of a lake most at risk from new development or in the watershed of an urban impaired stream, shall meet the General Standards to the extent practicable as determined through consultation with and agreement by DEP, except that redevelopment of existing impervious area may qualify for the exception in Section 4(B)(3)(e).

(2) A linear portion of a project associated with an existing travel corridor constructed prior to July 19, 2007,[1] and not located in either the direct watershed of a lake most at risk from new development or in the watershed of an urban impaired stream, shall not be required to meet the General Standards.

(3) A linear portion of a project that is not associated with an existing travel corridor shall meet the General Standards to the extent practicable as determined through consultation with and agreement by DEP.

(4) A non-linear portion of a project shall meet the General Standards, except that redevelopment of existing impervious area may qualify for the exception in Section 4(B)(3)(e) of Chapter 500.

C. Phosphorus standard. Projects triggering the Phosphorus standard shall instead apply the General Standards in accordance with Section 3(B) of this MOA.

[1] July 19, 2007 is the date the first MOA with this language became effective.

D. Urban impaired stream standard. A linear or non-linear portion of a project that is not associated with an existing travel corridor, is located within the watershed of an urban impaired stream, and triggers the Urban Impaired Stream Standard, shall meet the Urban Impaired Stream Standard in Chapter 500, Section 4(D), to the extent practicable as determined through consultation with and agreement by DEP. MaineDOT and MTA may use mitigation credit measures within the same watershed as that portion of a project in order meet the requirements of Chapter 500, Section 4(D).

E. Flooding standard. For a state transportation system project that triggers the thresholds of the Flooding Standard, MaineDOT and MTA shall apply design and engineering measures to the extent practicable such that project drainage avoids adverse impacts to offsite property resulting from project-related peak flow.

The following additional requirements of Chapter 500 shall be met through review, reporting and recordkeeping undertaken by MaineDOT and MTA pursuant to Section 4 of this MOA: project notification and submittal requirements of Ch. 500(7)(B), Ch. 500(7)(E)(1-6), Ch. 500(8)(C)(1 through 3), Ch. 500(8)(D)(1-6), and Ch. 500(8)(E)(1-2); the pre-application meeting requirements of Ch. 500(8)(A); the recording requirements of Ch. 500(11); and the re-certification requirements of Ch. 500, Appendix B(4). DEP agrees that MaineDOT and MTA have demonstrated the qualifications of their respective staff to perform the maintenance activities required pursuant to Ch. 500, Appendix (B)(3) and therefore, meet the intent of that requirement without contracting with third-parties.

4. Interagency Review.

As part of the annual Interagency Review MaineDOT and MTA agree to provide DEP with a list of all projects started in the 12 months since the last Interagency Review meeting and a list of projects anticipated for the next 12 months. The DEP, MaineDOT

and MTA also agree to hold interagency meetings as necessary, but at least annually, to identify, discuss and resolve any issues which may have arisen regarding interpretation and implementation of the MOA. MaineDOT and MTA each shall keep records of their projects that would otherwise trigger the stormwater rules requirements, including: the project location; a description of other work done in the watershed; a description of any alternative stormwater management measures installed and their relative performance, if known; a description of each instance where, pursuant to Section 3(B)(1) and 3(D) of this MOA, the General Standards were not fully applied because it was determined to not be practicable to do so and the extent to which the General Standards were not met; a list of facilities or state transportation systems that have undergone site inspections; and a list of staff or designees who provided oversight with respect to erosion and sedimentation control and stormwater control. As part of this annual review MaineDOT and MTA shall provide DEP with a report on maintenance surveys and activities.

Dated: 10/31/07

By: _____
David A. Littell, Commissioner
Maine Department of Environmental Protection

Dated: 11/06/07

By: _____
David Cole, Commissioner
Maine Department of Transportation

Dated: 11/14/07

By: _____
Gerard P. Conley, Sr., Chairman
Maine Turnpike Authority

APPENDIX B

TABLES 1 – 7

TABLE 1 - LIST OF TRAINED PERSONNEL

Maine Turnpike Authority

This table provides a list of all MTA trained personnal provided for 2008 to employees providing stormwater and sedimentation control oversight on projects. In addition, the table lists employees who are NPS certified or are PE's experienced with stormwater requirements

Name (Last, First)	Company	Maine P.E. with stormwater experience	DEP Erosion Control Certified	Other Training Attended
IN-HOUSE PERSONNEL				
Dionne, Rick	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Cabana, Roger	MTA			Pollution Prevention (SPCC/Stormwater Phase II)
Cook, Dale	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Franklin, Bill	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II) Conference on Better Roads and Parking: Design and Construction Maintenance
Jackson, Wes	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Lachance, Scott	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Mathews, Roger	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
McConihe, Scott	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Merfeld, Peter	MTA	Y		
Montague, Gary	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Ouellette, Gerry	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Perry, Andy	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Sotir, James	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Tartre, Stephen	MTA	Y	Y	
Thomspon, Bill	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Warchol, Scott	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
Wells, Bill	MTA		Y	Pollution Prevention (SPCC/Stormwater Phase II)
PRIMARY CONTRACTOR PERSONNEL				
Affonso, Ron	HNTB		Y	
Cobb, Trevin	HNTB		Y	
Cote, Tim	HNTB	Y		
Driscoll, Bob	HNTB	Y		
Driscoll, Lori	HNTB	Y		
Desenberg, Mark	HNTB		Y	
Ettinger, Donald	HNTB	Y		
Fagerlund, Walter	HNTB	Y		
Hoak, Clayton	HNTB	Y		
Lavallee, Roland	HNTB	Y		
Meek, Lauren	HNTB	Y		
Mitchell, Dale	HNTB	Y		
Myers, Charles	HNTB	Y		
Waugh, Jamie	HNTB		Y	

TABLE 2 - LIST OF CONSTRUCTION PROJECTS

Maine Turnpike Authority

This table provides a summary of construction contracts and solicitations issued in 2008

Contract Number	Approximate Location	Description	Linear or Non-linear Project	MOA Applies
2008.01	New Gloucester	Mayall Road Underpass Reconstruction	Linear	Y
2008.02	Gray/Sabattus/Farmingdale/Hallowell	Bridge Painting	Non-linear	N
2008.03	York/Scarborough/Gray	Bridge Repair	Non-linear	N
2008.05	Gray/Auburn/Litchfield/West Gardiner	Bridge Repair	Non-linear	N
2008.08	Gray & Lewiston/Sabattus	Paving and Guardrail Improvements	Linear	Y
2008.09	West Gardiner	Paving Interchange and Ramps	Linear	N

Contract Number	Approximate Location	Description	Linear or Non-linear Project	MOA Applies
S2008.51	Various locations on Turnpike	Design, Furnish and Install Roadway Pavement Sensor Systems	Non-linear	N
S2008.52	Sanford	New Dam Road - Wetland Compensation Site	Non-linear	N
S2008.53	New Gloucester	Toll Disaster Recovery and Office Addition	Non-linear	N
S2008.54	West Gardiner	West Gardiner Service Plaza - Entrance Sign	Non-linear	N
S2008.56	Saco	Flag Pond Road - Snow Plow Ramps	Linear	Y
S2008.58	Wells	Pavement Rehabilitation - SB Roadway - Lane 2 only- MM 18.7 to MM 19.9	Linear	N
S2008.59	West Gardiner	West Gardiner Service Plaza - Toll Kiosk	Non-linear	N

TABLE 3 - BMPs ASSOCIATED WITH PROJECTS IN 2008

Maine Turnpike Authority

This table is an inventory of permanent BMPs installed by the MTA contracts and soliciations between 2007 and 2008 (listed by project)

Contract Number	Project Location/Description	Year of Installation	Sediment Trap	Rip Rap Downspout	Culvert Inlet Protection (Stone)	Culvert Outlet Protection (Stone)	Slope Stabilize (x1000SF)	Vegetated Buffer (x1000 SF)	Stone Ditch Protection (x1000SF)	Permanent Stone Check Dam	Catch Basin or Holding Tank	Other*
2007.01	Portland Congress Street Underpass Reconstruction	2007		2		3			0.42		3	
2007.02	Gray, New Glouster & Saco Paving and Guardrail Improvements	2007			1	2					52	
2007.03	West Gardiner West Gardiner Service Plaza & Route 126 water & sewer and Roadway Improvements	2008				1			6.33		5	7
2007.04	West Gardiner West Gardiner Service Plaza/Rest Area	2008			1	1					8	
2007.07	Portland Administration Building	2008			1	7					17	2
2007.09	Kennebunk Pavement Rehabilitation at Kennebunk Service Plazas**	2007									10	
2007.10	Cumberland & Gray Pavement Rehabilitation at the Service Plazas**	2007									12	
2007.11	Auburn South Main Street Underpass Bridge Rehabilitation	2007		4	3	1			0.69		2	
2007.12	West Gardiner West Gardiner Westland Mitigation Site	2008			1	1				1		
2008.01	New Glouster Mayall Road Underpass Reconstruction	2008			5	4			2.71			
2008.08	Gray, Lewiston & Sabattus Paving and Guardrail Improvements***	2008									81	
S2008.56	Saco Flag Pond Road - Snow Plow Ramps	2008			2	2						
	All Projects Total:		**0**	**6**	**14**	**22**	**0**	**0**	**10**	**1**	**190**	**9**

* Contract 2007.03 and Contract 2007.07 the other represents Underground Soil Filter Basins

** MOA not applicable

*** Contract 2008.08 - catch basins are all existing and adjusted or modified, no new installations

TABLE 4 - INVENTORY OF PERMANENT BMP's

Maine Turnpike Authority

This table is a summary of MTA Highway Maintenance Department new construction/installation projects accomplished in 2008

Approximate Location	Project Description	Sediment Traps/ Catch basins (Qty #)	Rip Rap Down spout (Qty#)	Culvert Inlet Protection (stone) (Qty#)	Slope Stabilization (x1000SF)	Veg. Buffer (x1000SF)	Perm. Check Dam (Qty#)	Outer Perimeter Barkgrindings Barrier (#LF)
York HMF	Drainage Improvements							
Kennebunk HMF	MM 24 Median Strip				4.5			
South Portland HMF	MM 38.9 SB, MM 40.2 NB				1.8			
	Forest Ave Bridge							
Gray HMF	MM 46.8 NB				0.3			
Auburn HMF	MM 73NB Slope Washout				1.6			
	Access road widening							

TABLE 5 - SUMMARY OF MTA HIGHWAY MAINTENANCE DEPARTMENT 2008 O&M

Maine Turnpike Authority

This table is a summary of MTA Highway Maintenance Department and Engineering department Operations and Maintenance (O&M) accomplished in 2008

Highway Maintenance Facility	Location	Repair/Redo Ditching (Total Linear Miles)	Culvert /Downspout Repair /Maintenance (Qty. #)	Catch Basin Repair /Maintenance (Qty.#)	Remove Sand from Guard Rails (#Linear Miles)	Slope and/or ROW Repair/Mulching (#SF)	Inspect Catchments[1] (Total # inspected)	Catchments cleaned out (Total # cleaned out)	Street Sweeping (# linear Miles)	Sweeping of Ancillary Facilities[2] (# Facilities/Year)	Litter Picking (#Miles)
York HMF	Kittery to Wells	0	1	0	40	1,512	241	150	45	16	80
Kennebunk HMF	Wells to Saco	0	0	0	36	15,525	229	80	36	18	36
South Portland HMF	Saco to Falmouth	0	10	0	29.4	6,150	140	66	95	24	160
Gray HMF	Falmouth to New Gloucester	0.1	0	0	28.6	3,978	152	30	28.6	12	28.6
Auburn HMF	New Gloucester to Sabattus	0	4	1	40	160	209	125	40	30	80
Litchfield and Gardiner HMF	Sabattus to Augusta	0	6	5	44.2	4,806	256	100	90	70	177
TOTALS	**Kittery to Augusta**	**0.1**	**21**	**6**	**218.2**	**32,131**	**1,227**	**551**	**334.6**	**170**	**561.4**

NOTES:

[1] Catchments include catch basins, sediment traps, vegetated swales, detention ponds, etc.

[2] Ancillary facilities include parking lots, median crossovers, interchanges, service plazas, maintenance yards, etc.

TABLE 6 - ANTICIPATED CONSTRUCTION CONTRACTS FOR 2009

Maine Turnpike Authority

This table is a summary of anticipated construction contracts to be issued in 2009

Contract Number	Approximate Location	Description
2009.01	Saco/Scarborough	2009 Pavement Rehabilitation (Mile 35.5 to 43.3)
2009.02	Falmouth	Bridge Rehabilitation (Falmouth Spur - Blackstrap, MCRR)
2009.03	Lewiston	Bridge Rehabilitation (Route 196-Lisbon Street)
2009.04	undetermined	Bridge Painting
2009.05	West Gardiner	Guardrail Modifications
2009.06	Litchfield/West Gardiner	Material Storage Buildings
2009.07	Saco	Saco Toll Modifications
S2009.51	York	York Railing Repair
S2009.53	Various Locations	Traffic Count Stations

TABLE 7 - SUMMARY OF PROPOSED O&M FOR INSTALLED BMPs

Maine Turnpike Authority

This table is a summary of the proposed O&M of permantently installed BMPs throughout MTA for 2009

Project ID	Location	Repair/Redo Ditching (#Miles Linear Total)	Culvert Repair (Qty. #)	Catch Basins to be Repaired (Qty.#)	Remove Sand from Guard Rails (#Linear Miles)	Slope /Right of way Repair/Mulching (#SF total)	Inspect Catch Basins, Sediment Traps And Veg. Swales and detention Ponds (Total % to be Inspected)	Catch Basins, Sediment Traps; and Detention Ponds to be Cleaned out (% of Total)	Street Sweeping (# linear Miles)	Sweep Park Lots; Maint. Yards; Median Cross Overs; Toll Plazas; Interchanges, Service Plazas; MISC. (# Times Sweep/Year)	Litter Picking (# Miles)
Median & Mainline NB & SB; & Facilities	Kittery to Augusta	1-2	25-50	50-75	180-200	* As Needed	100%	50 - 60%	180-200	1-2	223

* Includes O&M performed by both MTA Highway Maintenance and contractors (e.g., HNTB)

APPENDIX C

REPRESENTATIVE STORMWATER TRAINING CURRICULUM

MAINE TURNPIKE AUTHORITY REFRESHER TRAINING
FOR
SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC),
STORM WATER POLLUTION PREVENTION (SWPP)
AND
EROSION AND SEDIMENTATION CONTROL (ESC)

May 2008

AGENDA

7:30 AM	CONVENE
7:30-8:45	SPCC Training Topics

Specific Facility Information

- Oil Storage Locations
- Drainage Features and Spill Pathways

Three Goals of SPCC Program

1. Spill Prevention
2. Spill Control
3. Spill Countermeasures

15 MINUTE BREAK

9:00-10:30	Stormwater and ESC Training

MS4 Best Management Practices at Maintenance Facilities

Requirements of MTA Stormwater Management Permit and Program

1. Good Housekeeping
2. IDDE Program (e.g., Catch basin and outfall inspections)

ESC Practices for Earthwork Projects

10:30-1045	Test and Evaluation
10:45	ADJOURN

MAINE TURNPIKE AUTHORITY
ANNUAL ENVIRONMENTAL TRAINING

- *OIL SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC)*
- *STORMWATER POLLUTION PREVENTION*
- *EROSION & SEDIMENTATION CONTROL*

Prepared and conducted by
GZA GeoEnvironmental, Inc.

PROGRAM OVERVIEW:
SPCC Training

- Introduction
- Identify and review facility-specific SPCC Plan information
- Discuss three goals of SPCC Program and how they are achieved at your Maintenance Facility
- Notification and Reporting

PROGRAM OVERVIEW : Storm Water Training

- Introduction
- Best Management Practices (BMPs) at your Maintenance Facilities
- Requirements in Urbanized Areas (UAs) along Turnpike
  - MTA's Municipal Separate Storm Sewer System (MS4) program
  - Illicit Discharge Detection and Elimination Program
    - Catch Basin (CB) cleanouts and assessments
    - CB and Outfall inspections

PROGRAM OVERVIEW : Erosion and Sedimentation Control

- Changes to applicable rules and MaineDOT's BMP Manual
  - Chapter 500 Stormwater Management Law
  - New BMP Manual given to Foreman 4/17/08
- Changes to Best Management Practices (BMPs) when conducting earthwork projects
  - Regardless of size
  - All projects included

SPCC Regulatory Background

- EPA's Oil Pollution Prevention Regulations (40 CFR 112)
- Code of Maine Regulations (CMR)
  - Chapter 800 and 801 – Identification and Remediation of Oil and Hazardous Matter
- Facilities that store more than 1,320 gallons oil (petroleum products) in aboveground storage are subject
- MTA has developed SPCC Plans for all maintenance facilities as a best management practice (BMP)

Enforcement

- EPA conducts unannounced inspections and may assess penalties up to $27,500 per day
  - Aggressive Enforcement Program!!
- DEP may also inspect facilities

TYPICAL SPCC PLAN: Table of Contents

TYPICAL SPCC PLAN: Table of Contents

TYPICAL SPCC PLAN: Table of Contents

MOST IMPORTANT PARTS OF SPCC PLAN

- FIGURE 2
  - Oil Storage Locations
  - Drainage Features (described in Table 5)
- APPENDIX B THROUGH APPENDIX F
  - App B – Emergency Spill Info (see Table 3)
  - App C – Notification Info
  - App D – Spill Report Form (update Table 4)
  - App E – Oil Delivery Info
  - App F – Inspection Forms
    - » Monthly
    - » Quarterly
    - » Corrective Actions
  - ALL THE INFORMATION ABOVE IS SPECIFIC TO YOUR INDIVIDUAL MTA MAINTENANCE FACILITY!!

10

OIL STORAGE LOCATIONS

Where are quantities of oil stored or handled at your Maintenance Facility?

Review Handout: Figure 2 from SPCC Plan

If there was a release from these locations, where would the spill go?

11

EXTERIOR DRAINAGE FEATURES

Which of these EXTERIOR DRAINAGE FEATURES are present at your Maintenance Facility?

- **Outdoor drainage area(s)**
  - Identified on Figure 2
- **Direct Discharge: Storm Drains**
  - Such as catch basins and other stormwater conveyances
- **Indirect Discharge: Surface drainage to nearby streams or wetland**
  - Sheet flow surface drainage to nearby stream/wet areas from the site

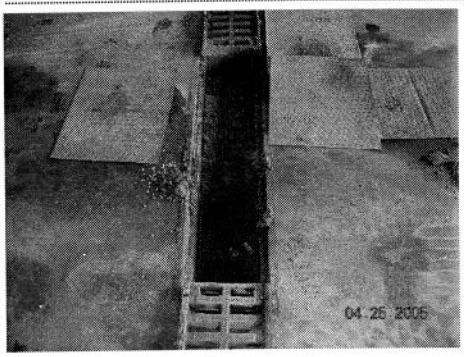
12

INTERIOR DRAINAGE FEATURES

Which of these INTERIOR DRAINAGE FEATURES are present at your Maintenance Facility?

- Facility floor drains/trench drains in garage areas
  - Most MTA garages are all connected through solids settling chambers and oil/water separators to underground wastewater holding tanks
    - contains spills from garage areas
- Holding tank wastewater pumped and disposed as industrial wastewater
  - contamination - additional disposal $$$
  - may change in hazardous waste generator status

INTERIOR DRAINAGE FEATURES:
Floor trench drains



INTERIOR DRAINAGE FEATURES:
Be careful of what goes down the drain!

INTERIOR DRAINAGE FEATURES:
Cleanup = $$$$

DRAINAGE FEATURES:
Potential Spill Pathways

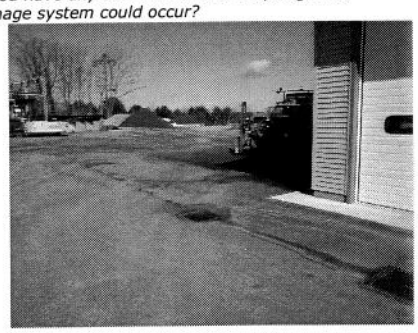
"Why is it so important to identify all oil storage locations and drainage features?"

...because oil can enter the "navigable waters" by one or more of the following potential spill pathways:

- Direct spillage into drainage system
- Spillage into a floor drain or other conduit that discharges into the streams
- Overland flow to streams

DRAINAGE FEATURES:
Potential Spill Pathways

Do you have any areas where direct spillage into drainage system could occur?

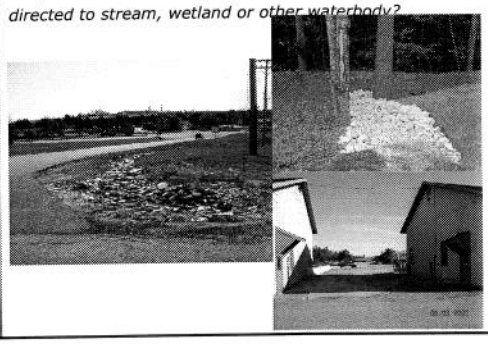


DRAINAGE FEATURES:
Potential Spill Pathways

Do you have any direct conduits to environment?

DRAINAGE FEATURES:
Potential Spill Pathways

Do you have any areas where overland flows may be directed to stream, wetland or other waterbody?



POSSIBLE SPILL SCENARIOS

Likely to occur	Less likely to occur	Unlikely to occur
▫ Minor overfills ▫ Spillage from drums	▫ Leaking/failure of piping or pumps (assuming proper inspections and maintenance is done) ▫ Leaking/failure of drums/tanks (assuming proper inspections and maintenance is done)	▫ Catastrophic failure of AGT ▫ Catastrophic failure of delivery truck tanks

more likely ⟷ **less likely**

At your facility, what are the most common types of spills?

SPCC PROGRAM GOALS

THREE GOALS

1. **SPILL PREVENTION**
   - Prevent spills before they happen
2. **SPILL CONTROL**
   - Control spills before they reach the environment
3. **SPILL COUNTERMEASURES**
   - Establish response procedures in the event of a spill

32

SPCC PROGRAM GOALS

How do we achieve the three (3) SPCC Goals?

1. **SPILL PREVENTION**
   - Installation of required equipment/systems
   - Preventive and routine maintenance
   - Security
   - Best management practices for oil storage/handling
   - Training
   - Inspection and corrective action
2. **SPILL CONTROL**
   - Secondary containment
   - Monitoring of leak detection systems
3. **SPILL COUNTERMEASURES**
   - Quick spill response activities/training
   - Spill control equipment and materials
   - Emergency response assistance

33

SPCC PROGRAM GOALS: Spill Prevention

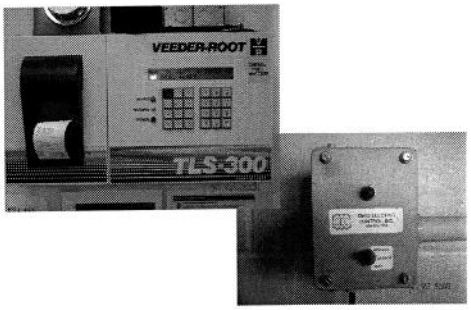
Installation of required equipment

- ***TANK MONITORING AND ALARM SYSTEMS***
- Veeder-Root monitoring systems on ASTs at several MTA maintenance facilities
  - Inventory monitoring
  - Leak detection
- Level alarms and overfill protection on ASTs, USTs, and holding tanks
- Routine checks and preventive maintenance on monitoring/warning systems

34

SPCC PROGRAM GOALS:
Spill Prevention

Installation of required equipment/systems



SPCC PROGRAM GOALS:
Spill Prevention

Preventive and routine maintenance

SPCC PROGRAM GOALS:
Spill Prevention

BMPs for oil storage and handling

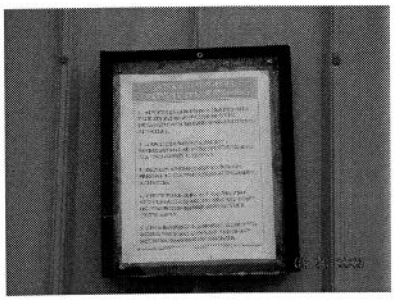
LOADING/UNLOADING PROCEDURES –
NOTICE FOR DELIVERY DRIVERS

1. **Must obtain authorization from SPCC-trained MTA facility representative prior to unloading**
2. **SPCC-trained MTA facility representative must be present during all unloading activities.**
3. **Driver must remain with vehicle at all times during unloading**
4. **Valves, hose connections, and outlets must be closed/disconnected and secure before vehicle is moved after unloading**
5. **Spill response equipment at fuel pump island**

Fuel/petroleum delivery vendors should be familiar with MTA's SPCC plans and loading/unloading requirements – POSTED!

SPCC PROGRAM GOALS:
Spill Control

BMPs relating to oil storage and handling



SPCC PROGRAM GOALS:
Spill Control

BMPs relating to oil storage and handling

SPCC PRGORAM GOALS:
Spill Prevention

- **ANNUAL TRAINING**
  - **Initial training - 2002**
  - **Annual updates and reviews for significant changes (e.g., new tank installation)**
  - **New employees or changes in job duties**

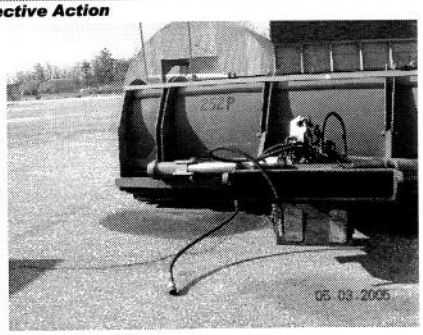
SPCC PROGRAM GOALS: Spill Prevention

INSPECTIONS – REQUIRED MONTHLY*

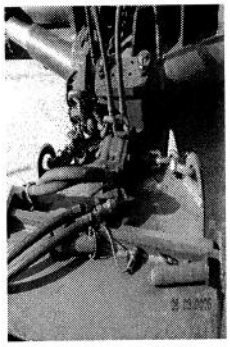
- Tanks/Containers/Equipment are checked for the following:
  - signs of spills or leakage
  - good condition (i.e., not rusted, dented, etc.)
  - properly closed
  - fuel lines not leaking
  - containers or equipment are placed for easy access
  - proper labeling of drums, tanks, containers
  - secondary containment in good condition
  - accumulation of material within secondary containment
  - CORRECTIVE ACTIONS TO BE NOTED ON INSPECTION FORM
  - RECORDS TO BE MAINTAINED ON-SITE IN SPCC PLAN

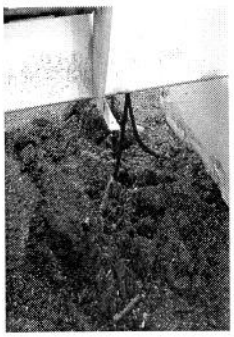
SPCC PROGRAM GOALS: Spill Prevention

Corrective Action



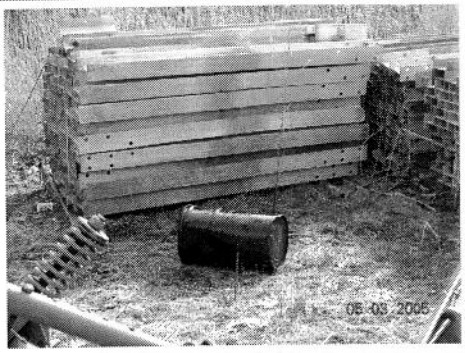
Corrective Actions?





Corrective Action = capping hoses

Corrective Actions?



SPCC PROGRAM GOALS

How do we achieve the three (3) SPCC Goals?

1. **SPILL PREVENTION**
   - Installation of required equipment/systems
   - Preventive and routine maintenance
   - Security
   - Best management practices for oil storage/handling
   - Training
   - Inspection and corrective action
2. **SPILL CONTROL**
   - Secondary containment
   - Monitoring of leak detection systems
3. **SPILL COUNTERMEASURES**
   - Quick spill response activities/training
   - Spill control equipment and materials
   - Emergency response assistance

Achieving Spill Control

- Respond immediately to alarms.
- Provide secondary containment for all tanks and containers:
  - Oil drums/containers are stored on "spill pallets".
- Perform regularly scheduled tests on monitoring systems to ensure that they are operational, including leak detection and overfill protection.
- Employ temporary containment systems during transfers.
- Report all spills and unusual observations to Supervisors before they become problems!!!

SPCC PROGRAM GOALS: Spill Control

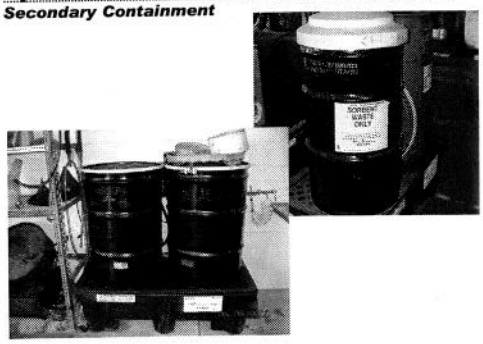
- Leak detection systems
- Monitoring and inspections
- Secondary containment
- Spill response equipment and supplies
- Security
- BMPs during transfers and operations with high spill potential

SPCC PROGRAM GOALS: Spill Control

Secondary Containment

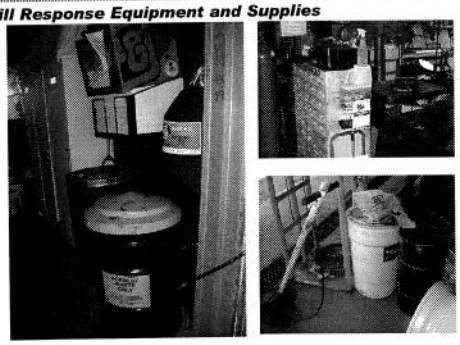
SPCC PROGRAM GOALS:
Spill Control

Secondary Containment



SPCC PROGRAM GOALS:
Spill Control

Spill Response Equipment and Supplies



SPCC PROGRAM GOALS:
Spill Control

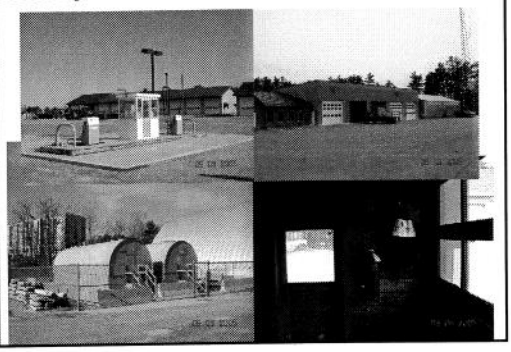
Spill Response Equipment and Supplies

- **Located at or near each tank and container storage location**
- **Spill materials include:**
  - Absorbent pads and Spill Magic
  - Pig Co ® 65 gallon Overpak Spill Kit containing the following equipment/material:
    - 10-48 in. Socks; 6-10 ft. Socks; 6-Pillows; 56-Wipers; 40 PIG® Mat Pads; 6-Disposal bags & ties; 6-Tamper Proof Labels; 1-Emergency Response Guidebook; 1-Instruction Manual
  - Spill mats for covering catch basins/floor drains
  - Protective Gloves/Suits and Safety Glasses/Goggles
  - Caution tape for securing spill area
  - Shovels and bags for collection of clean-up material

At your facility, where are SPILL KITS located?

- (HINT: See Oil Storage Locations)

SPCC PROGRAM GOALS:
Spill Control
Security



SPCC PROGRAM GOALS:
Spill Control
BMPs during oil transfers

What type of oil transfers are performed at your facility?

SPCC PROGRAM GOALS:
Spill Control
BMPs relating to oil handling – CORRECTIVE ACTIONS?

SPCC PROGRAM GOALS

How do we achieve the three (3) SPCC Goals?

1. **SPILL PREVENTION**
   - Installation of required equipment/systems
   - Preventive and routine maintenance
   - Security
   - Best management practices for oil storage/handling
   - Training
   - Inspection and corrective action
2. **SPILL CONTROL**
   - Secondary containment
   - Monitoring of leak detection systems
3. **SPILL COUNTERMEASURES**
   - Quick spill response activities/training
   - Spill control equipment and materials
   - Emergency response assistance

SPCC PROGRAM GOALS: Spill Countermeasures

Steps in an Oil Spill

- Observation and Evaluation / Assess Situation
- Reporting and Seeking Assistance (Contact SPCC Emergency Coordinator)
- Initial Containment / Protect Receptors
- Containment (stop or contain the spill)
- Spill Cleanup
- Follow-Up/Incident Analysis
- Restoration/Compensation

☺ **REMEMBER:** Personal safety is top priority!!! You should attempt to contain the spill only if you and others are not endangered by doing so.

☺ **SEE HANDOUT of Appendix B**

SPCC PROGRAM GOALS: Spill Countermeasures

Spill Types (incidental or non-incidental)

- **Incidental spills:** "Incidental spills" are considered those spills:
  - in which personnel are familiar with the hazards associated with the spilled material; and
  - containment and response do not pose potential safety or health hazards; and
  - can be controlled in the immediate release area; and
  - which do NOT reach the environment; and
  - which are less than 5 gallons.
- **Non-Incidental spills:** Spills, which <u>DO NOT</u> meet ALL of the above criteria, are considered Non-Incidental spills.

SPCC PROGRAM GOALS:
Spill Countermeasures

Effective Spill Response

For Incidental Spills

- Assess the spill situation (source, material, quantity, limits).
- REMEMBER: Personal safety is top priority!!! - attempt to contain spill only if you can do so without risk!
- Extinguish all source of ignition .
- Use personal protective equipment (PPE) as appropriate for hazards of the spilled material and your level of training
- Evacuate unnecessary personnel –secure spill area w/ caution tape
- Protect potential receptors/cut off migration pathways
- STOP THE LEAK and CONTAIN THE SPILL!!!

SPCC PROGRAM GOALS:
Spill Countermeasures

Effective Spill Response

For Incidental Spill (continued):

- **Use appropriate spill response equipment to contain and clean up spill... and once oil is absorbed:**
  - Pack debris/cleanup media in tightly closed double bag along with contaminated PPE.
  - Place double bag in a 55-gallon drum labeled "WASTE OIL DEBRIS" and store drum on a "spill pallet"
- **Follow-up Report**
- **Incident Analysis**

SPCC PROGRAM GOALS:
Spill Countermeasures

Effective Spill Response

For Non-Incidental Spills:

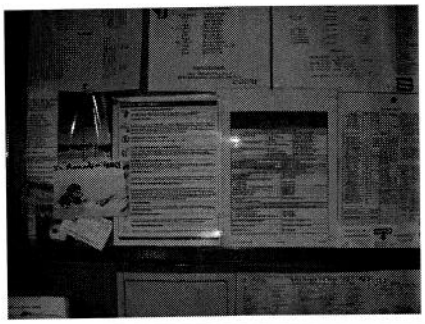
- REMEMBER: Personal safety is top priority!!!
- Cover/protect floor drains & catch basins, if you can do so without risk.
- Evacuate and secure the spill area.
- Immediately report the spill to SPCC Emergency Coordinator (EC)
- EC will notify MTA Communications Center and John Branscom, MTA Environmental Coordinator, and decide whether outside assistance is needed
- If required, MTA Communication Center will contact emergency response agencies and Maine DEP.
- Provide as much information as possible about the spill (e.g., nature of spill, location and quantity of oil released).
- Remain close to the site to direct responders to the spill location (as long as you are in a safe position).

SPCC PLAN:
EMERGENCY CONTACT LIST –INTERNAL NOTIFICATION

- **Emergency Coordinators - Discoverer shall contact one of the following in the order presented**
- **Primary Emergency Response Coordinator**
  - **Facility Foreman**
- **First Alternate Emergency Response Coordinator**
  - **Facility Supervisor**
- **Second Alternate Emergency Response Coordinator**
  - **Department Director or Deputy Director**
- **OTHER MTA CONTACTS - Discoverer or ERC shall contact each of the following as soon as possible**
- **MTA Communications Center**
  - **(207) 871-7771 ext. 4**
- **John Branscom, Environmental Services Coordinator**
  - **(207) 871-7771 ext. 359; cell: 671-3487; pager: 471-0881**

THE CONTACT LIST FOR YOUR FACILITY SHOULD BE POSTED BY THE PHONE

SPCC PROGRAM GOALS:
Spill Countermeasures
Emergency Response and Notification



SPCC PROGRAM GOALS:
Spill Countermeasures
Emergency Response and Notification

- **MTA Communications Center and EC are responsible for spill notification and follow-up**
- **Follow-up notification requirements based on nature of release (e.g., sheen of surface water body, persons injured, amount of oil released).**
- **SPILL REPORT FORM - Appendix D SPCC Plan (attached) - must be completed by EC in its entirety following each spill.**
- **Completed SPILL REPORT FORMS must be inserted into Appendix D - SPCC Plan (and copied to MTA Environmental Services Coordinator).**

SPCC PROGRAM GOALS:
Spill Countermeasures

Closing Out Spills

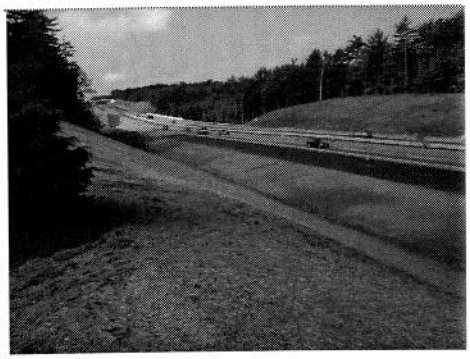
Document ALL spills:

- Ensure that SPILL REPORT FORM has been completed, reviewed with affected parties, signed and filed in SPCC Plan and with MTA Environmental Services Coordinator
- Discuss what must be done to prevent another occurrence
  - Was the response quick and effective?
  - Should anything be done to enhance the prevention, control and/or response system?
- VERY IMPORTANT!
  - Restock Spill Kits with replacement items and additional items, if necessary.

QUESTIONS?

ON SPILL PREVENTION, CONTROL OR RESPONSE

STORM WATER POLLUTION PREVENTION



INTRODUCTION

Storm Water Pollution Prevention Regulatory Background

- EPA's Clean Water Act (40 CFR 122)
- Code of Maine Regulations (CMR)
  - Chapter 529 – *General Permit for the Discharge of Stormwater from MDOT/MTA Municipal Separate Storm Sewer Systems*
- MTA facilities within Urbanized Areas (UAs) subject to storm water regulations
- MTA has developed Storm Water Management Plan (SWMP) for all regulated UAs along Turnpike
  - Permit and Plan expire in June 2008
  - COMING SOON: New 5-year Plan!
- MTA has also developed good housekeeping BMPs for all maintenance facilities
  - Regardless of location (e.g., UA or non-UA)

SO...
where are these UAs subject to storm water regulations?

- "Urbanized Areas" Include:
  - Sabattus - Mile 83.6 to 84.3
  - Lewiston – Mile 78.9 to 79.6 and 80.8, 81.4*
  - Auburn – Mile 75.0 to 75.6 and 78.9 to 79.4
  - Falmouth – Mile 51.8 to 53.4 and Exits 52, 53
  - Portland – Mile 46.7 to 51.8, Exits 46, 47, 48
  - Scarborough – Mile 41.0 to 42.0
  - Saco – Mile 33.0 to 35.7, Exit 36 approach ramp
  - Biddeford – Mile 32.0 to 33.0

*Lewiston is managed as UA between municipal boundaries by MTA

SO...
is your Maintenance Facility located within these UAs?

NO, BUT....MTA has implemented "good housekeeping" BMPs at all Maintenance Facility to minimize the potential for storm water pollution.

Because....

Storm Water Pollution Prevention: BMPs at Maintenance Facilities

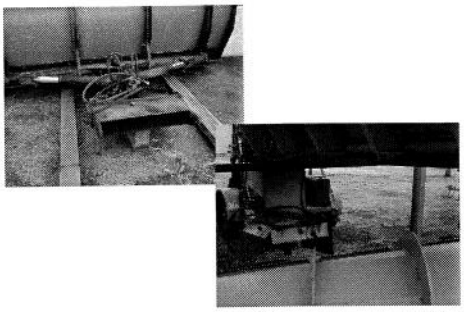
Many MTA Maintenance Facility Activities May Have the Potential To Impact Storm Water

- Equipment Storage
- Vehicle Maintenance and Washing
- Material Handling and Storage
  - Oil and Petroleum Products
  - Sand and Salt
  - Waste and Excess Material Storage
  - Painting

- **What are the BMPs for Storm Water Pollution Prevention at your facility?**

Storm Water Pollution Prevention: BMPs at Maintenance Facilities

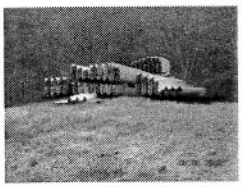
Capping Hydraulic Lines

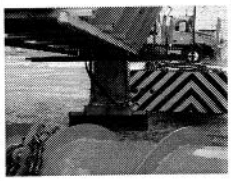


Storm Water Pollution Prevention: BMPs at Maintenance Facilities

Proper vehicle, equipment and materials storage

Use vegetated buffers for storing galvanized materials →

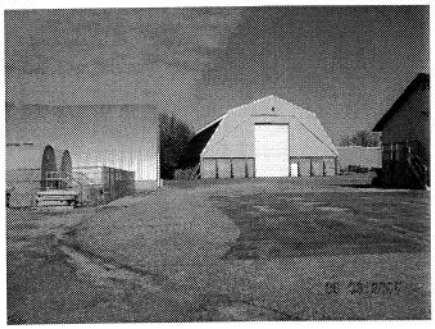




←Be mindful of hydraulic hoses and store equipment inside/under cover whenever possible

Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

Indoor sand and salt storage

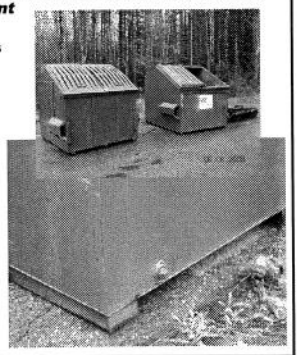


Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

Solid waste management

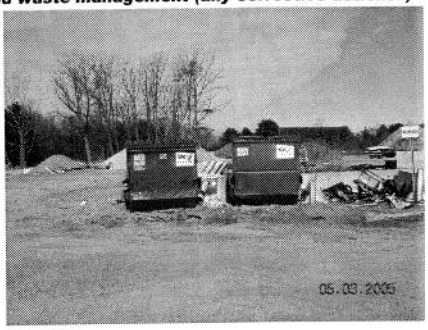
What's wrong with this picture? →

What's right about this picture? →



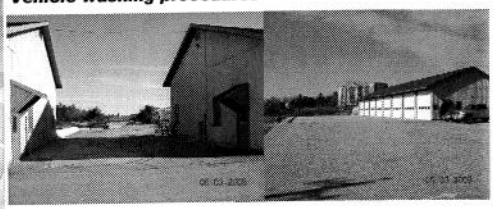
Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

Solid waste management (any corrective actions?)



Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

Vehicle washing procedures

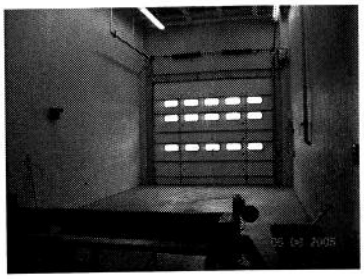


Only RINSE outside at designated rinse point!

Where is your facility's designated rinse point?

Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

Vehicle washing procedures



Only WASH inside!

Storm Water Pollution Prevention:
BMPs at Maintenance Facilities

CAN YOU THINK OF ANY OTHER BMPs AT YOUR FACILITY THAT PREVENT OR MINIMIZE STORMWATER POLLUTION?

NOW...
what are the responsibilities outside the Maintenance Facility?

- Comply with requirements outlined in SWMP and Permit
  - Five-Year Permit Program addressing six Minimum Control Measures (MCMs)
  - Focused on Areas Where Maine Turnpike Passes Through "Urban Areas"
  - Recordkeeping and Annual Reporting required
  - Satisfy Six (6) MCMs...which are...

70

NOW...
what are the responsibilities outside the Maintenance Facility?

- SATISFY SIX MINIMUM CONTROL MEASURES OF MS4 PERMIT
  1. Public Education and Outreach
     - Attend training provided by MTA or DEP's NPS Training Center
  2. Public Involvement and Participation
     - Taken care of by management
  3. Illicit Discharge Detection and Elimination (IDDE)
     - CB cleanout and assessments
     - CB and Outfall inspections
  4. Construction Storm Water Runoff Control
     - Erosion Prevention and Sedimentation Control
  5. Post-Construction Storm Water Management
     - Erosion Prevention and Sedimentation Control
  6. Pollution Prevention/Good Housekeeping
     - Implement BMPs we already talked about

71

We've already talked about most of these MCMs, so let's talk about IDDE now...

- SIX MINIMUM CONTROL MEASURES
  1. Public Education and Outreach
  2. Public Involvement and Participation
  3. Illicit Discharge Detection and Elimination
     - CB cleanout and assessments
     - CB and Outfall inspections
  4. Construction Storm Water Runoff Control
  5. Post-Construction Storm Water Management
  6. Pollution Prevention/Good Housekeeping

We'll talk about MCM #4 & #5 when we talk about Erosion and Sedimentation Control in a few moments

72

SO...
what exactly are we required to do as part of the IDDE requirements?

PERMIT REQUIREMENTS

MEPDES Permit Part IV(D) 3. Illicit Discharge Detection and Elimination (IDDE):

"Each permittee must...develop a storm sewer system map...showing all stormwater discharges..."

SWMP MEASURABLE GOALS

BMP: Develop Storm Sewer System Maps for MTA within UA

Goal: Ensure that maps include required information:

a) *Outfall identifier/designation*
b) *Location*
c) *Type, materials and size of conveyance, outfall or channelized flow*
d) *Name of receiving surface water body*

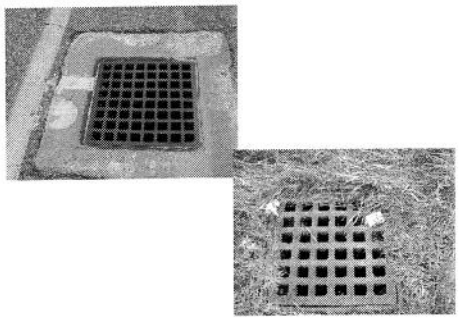
ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

- **IDDE Program has been implemented within all Urbanized Areas (UAs) over five years**
  - **Mapping has been conducted by Scott Lachance and GZA using GPS data points collected for all CB and outfalls within UA**
  - **Maps have been provided to each HM/EM Facility**
- **Dry Weather Inspections of Storm Water Catch Basins and Outfalls within UAs**
  - **Initial inspection performed when mapped**
  - **GZA has performed follow up dry weather inspection throughout summer months**
  - **Not sure who will be doing inspections this year?**
    - **GZA or MTA Highway Maintenance?**
  - **Always be looking for flow in periods where there has been little or no rainfall**

TYPICAL OUTFALL:

What do you call this?

ARE THESE OUTFALLS?



INTERCONNECTION BETWEEN CATCH BASINS AND OUTFALLS

SO... what else are we required to do?

PERMIT REQUIREMENTS

MEPDES Permit Part IV(D) 3. Illicit Discharge Detection and Elimination (IDDE):

"Each permittee must...[conduct] dry weather inspections including training for locating illicit discharges..."

SWMP MEASURABLE GOALS

BMP: Assess content of catch basins during annual cleanout

Goal: Utilize regularly scheduled catch basin cleaning to detect possible illicit discharges by visually assessing the contents for the following:

a) Unusual color or odor

b) Excessive oil

c) Viscosity

d) Other suspicious characteristics

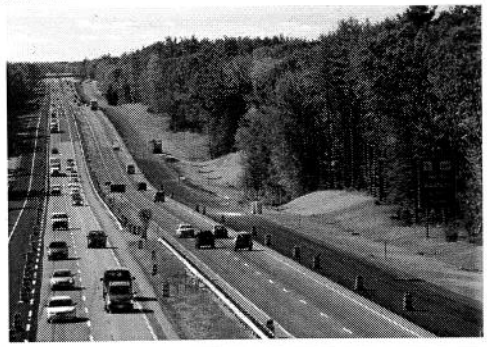
CATCH BASIN CLEANOUT TRACKING FORM

DATE OF CLEANOUT	CB IDENTIFIER	CB LOCATION with nearest Mile Marker	UNUSUAL ODOR/COLOR	EXCESSIVE OIL	FOAM OR SCUM	DISCHARGE	DETAILS OF INSPECTOR AND ANY COMMENTS

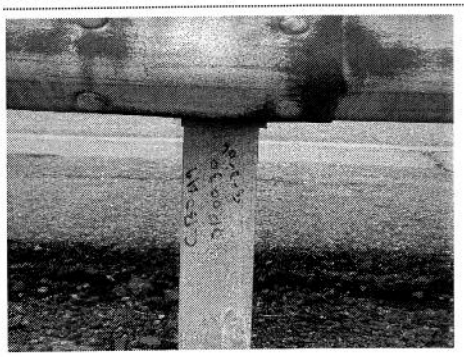
CATCH BASIN CLEANOUT TRACKING FORM

- DATE OF CLEANOUT
- CB INDENTIFIER
- CB LOCATION

CATCH BASIN (CB) LOCATION



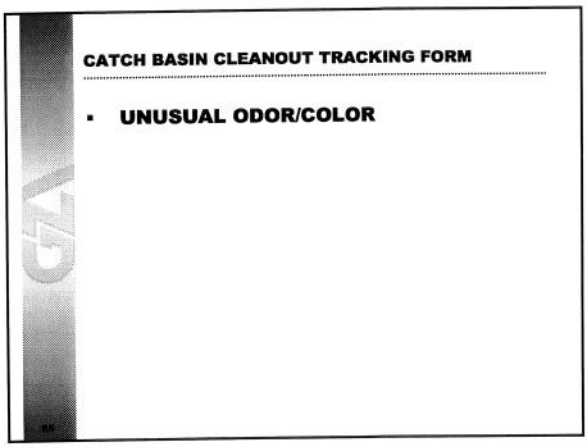
CATCH BASIN (CB) IDENTIFIER

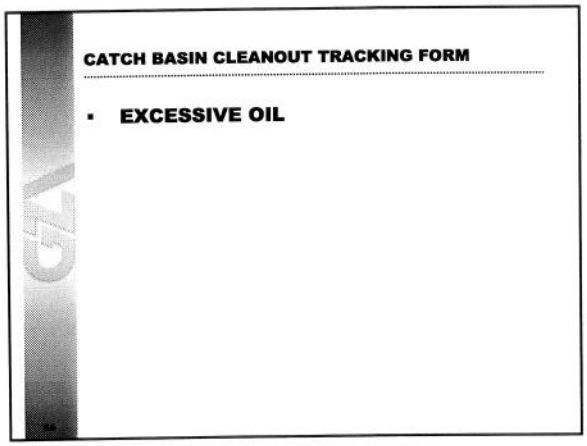


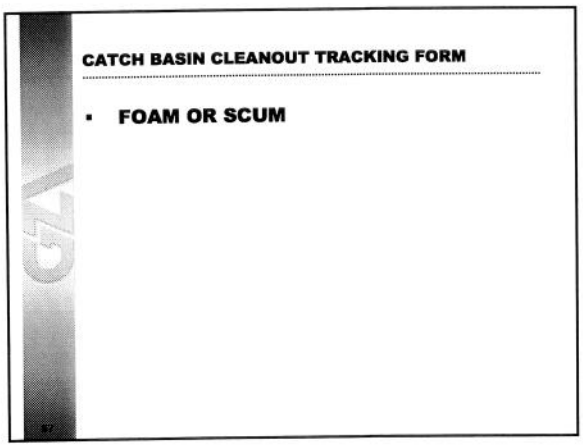
CATCH BASIN (CB) IDENTIFIER

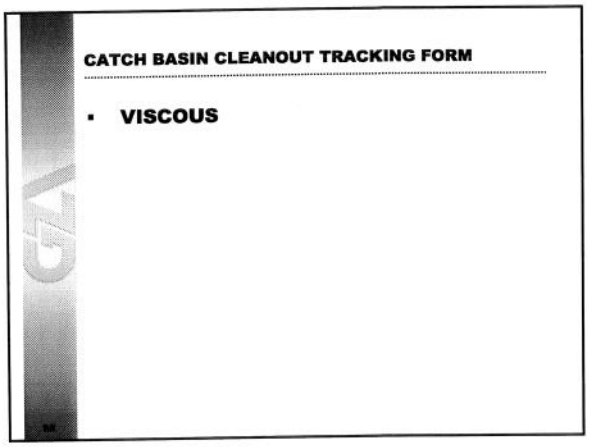
CATCH BASIN (CB) IDENTIFIER: Use Outfall Information

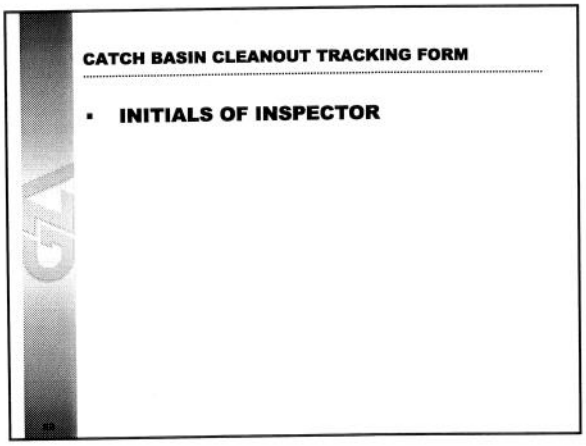
All outfalls are identified on the delineator post located next to the outlet

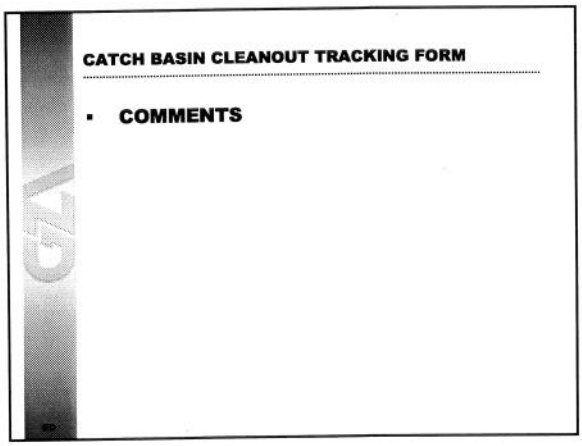

CATCH BASIN CLEANOUT TRACKING FORM
▪ UNUSUAL ODOR/COLOR


CATCH BASIN CLEANOUT TRACKING FORM
▪ EXCESSIVE OIL


CATCH BASIN CLEANOUT TRACKING FORM
▪ FOAM OR SCUM


CATCH BASIN CLEANOUT TRACKING FORM
▪ VISCOUS

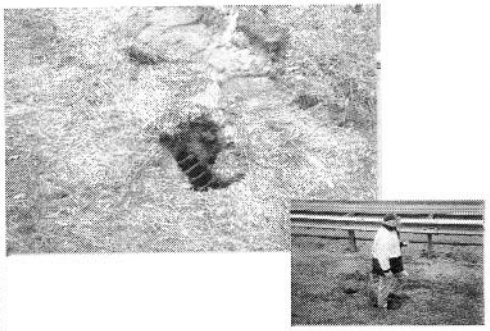

CATCH BASIN CLEANOUT TRACKING FORM
▪ INITIALS OF INSPECTOR


CATCH BASIN CLEANOUT TRACKING FORM
▪ COMMENTS

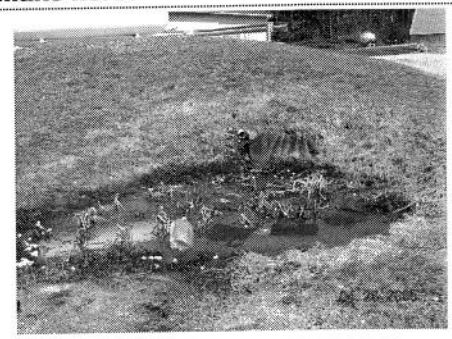
What type of comments would you make here?

What type of comments would you make here?

What type of comments would you make here?



What type of comments would you make here?



Is this an ILLICIT DISCHARGE?

STORM WATER POLLUTION PREVENTION:
Illicit Discharge Detection and Elimination

What does ILLICIT DISCHARGE mean?

"...any non-permitted discharge to...the waters of the State that **does not consist entirely of stormwater** or allowable non-stormwater discharges identified in Part IV(D)(3)(c)."

For example,

1. Illegal tie-in from sewer discharge
2. Chemical discharge from mill
3. Laundry or car wash discharges containing detergent

But, there are also...

- Allowable non-stormwater discharges

Authorized Non-Stormwater Discharges

- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water in filtration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Uncontaminated flows from foundation drains
- Air conditioning and compressor condensate
- Irrigation water
- Flows from uncontaminated springs
- Uncontaminated water from crawl space pumps
- Uncontaminated flows from footing drains
- Lawn water runoff
- Flows from riparian habitats and wetlands
- Residual street wash water (where spills/leaks of toxics or hazardous materials have not occurred, unless all spilled material has been removed and detergents are not used)
- Hydrant flushing and fire fighting activity runoff
- Water line flushing and discharges from potable water sources

STORM WATER POLLUTION PREVENTION: Illicit Discharge Detection and Elimination

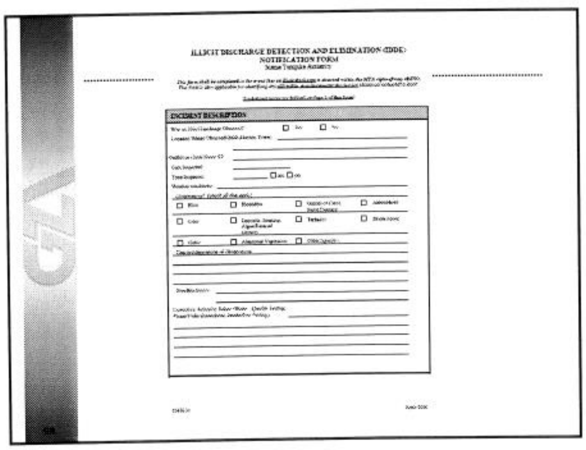
What does ILLICIT DISCHARGE mean?

"...any non-permitted discharge to...the waters of the State that **does not consist entirely of stormwater** or allowable non-stormwater discharges identified in Part IV(D)(3)(c)."

If an ILLICIT DISCHARGE is identified, it must be:

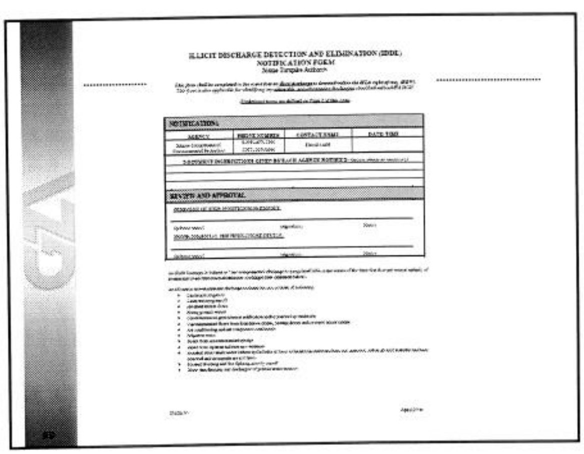
1. **Documented using the IDDE notification form; and**
2. **Reported to the Environmental Services Coordinator right away**

57


ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)
NOTIFICATION FORM
Maine Turnpike Authority

INCIDENT DESCRIPTION

58

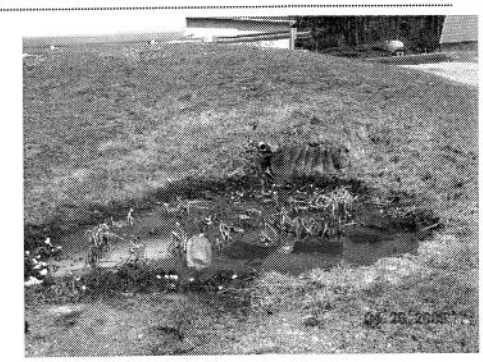

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)
NOTIFICATION FORM
Maine Turnpike Authority

NOTIFICATION

REVIEW AND APPROVAL

59

IDDE NOTIFICATION: Class Exercise



Now...
let's talk about MCMs #4 & #5 by discussing Erosion and Sedimentation Control (ESC) Principles and BMPs

- **SIX MINIMUM CONTROL MEASURES**
  1. **Public Education and Outreach**
  2. **Public Involvement and Participation**
  3. **Illicit Discharge Detection and Elimination**
     - **CB cleanout and assessments**
     - **CB and Outfall inspections**
  4. **Construction Storm Water Runoff Control**
  5. **Post-Construction Storm Water Management**
  6. **Pollution Prevention/Good Housekeeping**

DILEMMA FOR TRANSPORTATION SYSTEMS WITH RESPECT TO STORMWATER AND ESC:
Subject to many duplicative requirements

Solution for Transportation Systems

- **Comply MOA**
  - **Updated in November 2007 to reflect changes to Chapter 500 Stormwater Management Rules**
  - **Includes reference to MaineDOT BMP Manual**
  - **Must document BMPs through inspections and other tracking mechanisms that are summarized in an Annual Report to DEP**
- **Benefits:**
  - **Streamline compliance (overall more efficient)**
  - **Avoid duplication of effort**
  - **Eliminates need for redundant permits**
  - **Allows MTA/MaineDOT to "police" themselves**

EROSION & SEDIMENTATION CONTROL

There have been a number of changes to rules involving earthwork projects:

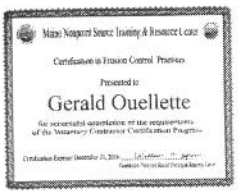
"What are the changes and new requirements that I need to be aware of in Highway Maintenance Operations?"

103

REQUIREMENT:

#1 All projects must have an On-Site Responsible Party (OSRP)

- OSRP has been trained through DEP'S Non-Point Source Training Center


Maine Nonpoint Source Training & Resource Center

Certification in Erosion Control Practices

Presented to

Gerald Ouellette

104

REQUIREMENT:

#1 All projects must have an On-Site Responsible Party (OSRP)

- OSRP is knowledgeable in erosion and sediment control

POP QUIZ: What is the difference between erosion and sedimentation?

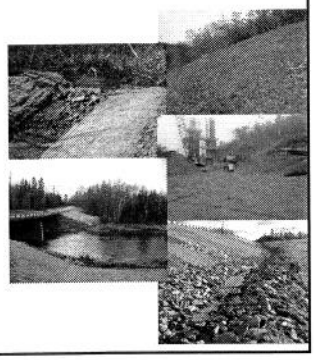
105

Erosion and Sedimentation

- Erosion = Movement of soil by action of water or wind.
  - Erosion is natural; but
    Accelerated erosion is not!
- Sedimentation = "settling out"
  of soil particle from the water.

Erosion Prevention Methods

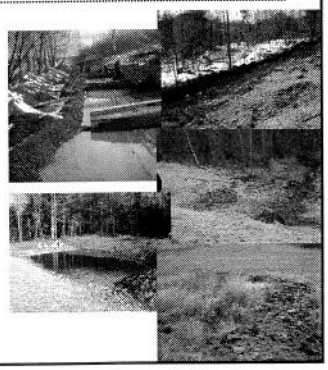
- Hay Mulch
- Erosion Control Mix (wood waste mulch) – slope protection
- Erosion Control Blanket – ditches and slopes
- Seeding – temporary and permanent
- Rip Rap – ditches and slopes



Sediment Control Methods

Sediment Controls

- Silt Fence
- Erosion Control Mix – sediment berms
- Stone Check Dams
- Sediment Basins
- Level Spreaders



REQUIREMENT:

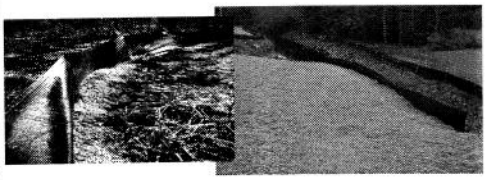
#2 A daily inspection log must kept for the duration of the project.

- The daily log should include the following:
  - On-site precipitation
  - Air temperature
  - Notes on all ESCs in place
    - How they performed?
    - If they failed?
    - Any corrective actions required/taken?
- The log must be updated at least
  - Weekly
  - After all significant storm runoff
  - After flood events
  - Even when work has been suspended temporarily

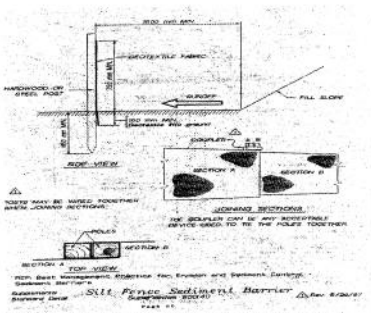
REQUIREMENT:

#3 Silt fence must be installed downhill of all disturbed slopes

- Regardless of size or location
- Until area is **permanently stabilized**



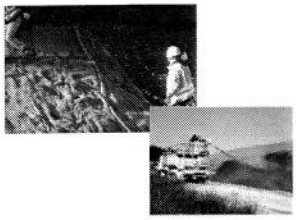
TYPICAL SILT FENCE DETAIL



See BMP Manual for updated specifications (Section III:41)

REQUIREMENT:

#4 All temporary erosion control devices shall be in place prior to any embankment and excavation operations



REQUIREMENT:

#5 Newly disturbed earth shall be mulched or otherwise stabilized by the end of each workday.

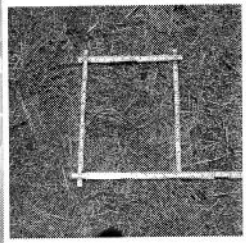
- Mulch shall be maintained on a daily basis

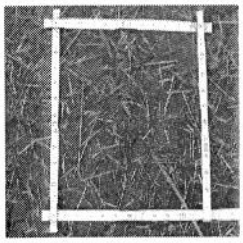
#6 All disturbed ditches shall be stabilized by the end of each workday.

- Stabilization shall be maintained on a daily basis

ADEQUATE MULCHING:

Will both of these mulch applications prevent erosion?





Hay and straw mulch applications are addressed in Section III:9 of the MaineDOT BMP Manual

REQUIREMENT:

#7 Permanent slope stabilization measures shall be applied within one week of the last soil disturbance.

- See Section II:4 for permanent stabilization
- Includes riprap downspouts or stone ditch protection as part of the slope or ditch construction

PERMANENT SLOPE STABILIZATION: STONE DITCH PROTECTION

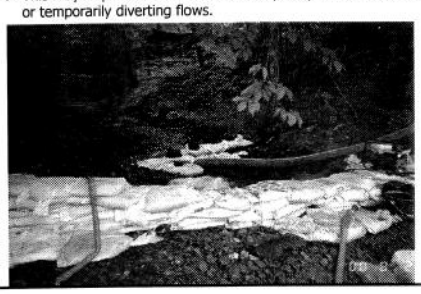
PERMANENT SLOPE STABILIZATION: RIPRAP DOWNSPOUTS

OTHER CONSTUCTION REQUIREMENTS:
BMPs for Protecting Natural Resources

- **Work in wetlands is prohibited**
  - ...except to the minimum extent necessary for completion of detailed work.
  - Excavated and other materials shall not be stockpiled in wetlands.
  - Hay bales, silt fences or other suitable barriers shall be used, where necessary, to prevent sedimentation from eroding materials.
- **Disturbance of natural resources beyond the construction limits shown on work plans is NOT allowed.**

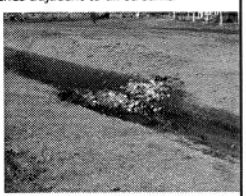
OTHER CONSTUCTION REQUIREMENTS:
General BMPs for Channels, Culverts and Pipes

- **Before allowing permanent channels to carry water, they shall be stabilized.**
  - This may require the installation of temporary erosion control BMPs or temporarily diverting flows.

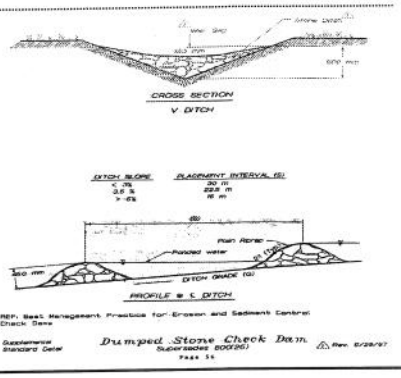


OTHER CONSTUCTION REQUIREMENTS:
General BMPs for Channels, Culverts and Pipes

- **Existing ditches shall be maintained until the new ditches are stabilized.**
  - Stone check dams shall be placed in existing ditches prior to construction to prevent the release of sedimentation
  - Stone check dams shall be installed at the outlets of all existing and proposed ditches adjacent to all streams



TYPICAL CHECK DAM DETAIL



121

OTHER CONSTUCTION REQUIREMENTS: General BMPs for Channels, Culverts and Pipes

- All cross culvert outlets shall be armored before the end of the work day

- Construction operations may require the placement of a temporary pipe with fill over a ditch line to provide access to a work area

124

OTHER CONSTUCTION REQUIREMENTS: General BMPs

- Prior to conducting clearing and grubbing operations, temporary and permanent sedimentation control measures shall be installed.
- Temporary and permanent erosion and sedimentation controls shall be inspected and maintained during periods of approved suspension (e.g., even when earthwork for project is on hold or not being conducted).
- Bare earth slopes shall be roughened to dissipate sheet flow.
  - This should be accomplished by "tracking" the slope perpendicular to the centerline (e.g., "track" the equipment up and down the slope).
  - See Sec-III:27 of DOT BMP Manual

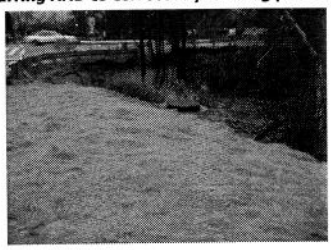
125

OTHER CONSTUCTION REQUIREMENTS:
General BMPs

- Temporary erosion control measures shall be maintained until the site is stabilized with vegetation or other permanent control measures

OTHER CONSTUCTION REQUIREMENTS:
General BMPs

- Regardless of the time of year, take appropriate measures to prevent erosion or sedimentation from occurring AND to correct any existing problems



OTHER CONSTUCTION REQUIREMENTS:
General BMPs

- For proposed ditches, stabilize the outlet first and build from the bottom up. Only excavate what can be stabilized or protected by the end of the work day.

SUMMARY OF EROSION & SEDIMENTATION CONTROL

- **MaineDOT BMP Manual is a good resource for:**
  - Details of structural BMPs
  - Summary of MOA, regulations and other background information
- **BMPs are more plentiful and more frequent**
  - Use a daily log to document earthwork
  - Apply mulch daily
  - Must track all projects regardless of size and location

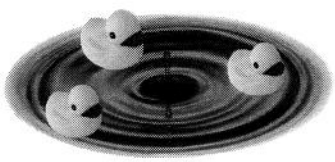
127

IMPORTANT POINTS:
As OSRP you should...

- **Be familiar with required ESCs**
- **Be familiar with new BMPs**
  - Structural (e.g., check dams, silt fence)
  - Non-structural (e.g., inspections)
- **Be prepared to document ESCs and BMPs**
  - Summaries used to complete the Annual Report to DEP
- **More changes are on the way....**

128

Thank You



...and stay tuned for more information

129

Appendix B

Emergency Response Guide/ Contact Information

When a spill strikes.....

1. Contact Site Emergency Coordinator

If not present when the spill is initially observed the Emergency Coordinator or Alternate Coordinator should be immediately contacted. The Coordinator shall then direct actions at the site relative to the spill.

2. Assess the risk:

From the moment a spill occurs and throughout the response, determine the risks that may affect human health, the environment, and property. Always put safety FIRST. If possible, identify the spilled material, its source, and determine how much was spilled. Identify potential receptors (drains, etc). Determine if spill is minor, "Incidental" or "Non-incidental". If "Non-incidental" report immediately to MTA Communication Center. Com Center will contact emergency response agencies. Consider need to evacuate area where spill has occurred.

3. Extinguish all sources of ignition

Assess potential fire hazards. Extinguish or remove sources of flame or spark.

4. Select personal protective equipment (PPE):

If spill is " Incidental" and will be cleaned up by site personnel, choose the appropriate PPE to safely respond to the spill. Consult Material Safety Data Sheets (MSDS) and literature from chemical and PPE manufacturers for the best recommendations. If you are uncertain of the danger and the material is unknown, allow outside response agencies to respond to the incident.

5. Confine the spill / protect receptors:

SPEED COUNTS! Limit the spill area by blocking, diverting, or confining the spill. Use contained absorbents including the Socks, Booms and Mats found in spill kits. Stop the flow of the liquid before it has a chance to contaminate a water source. Spill kits are designed to facilitate a quick, effective response.

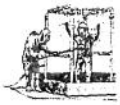
6. Stop the source:

After the spill is confined, stop the source of the spill. This may simply involve turning a container upright, or plugging a leak from a damaged drum or container. Transfer liquids from the damaged container to an appropriate new one.

7. Evaluate the incident and implement cleanup:

Once the spill is confined and the leak has been stopped, it is time to reassess the incident and develop a plan of action for implementing the spill cleanup. Spills are commonly absorbed. Pillows, mat pads, and absorbent can be used to absorb the remainder of the spill. Simply place the pillows and pads throughout the spill area. Once the absorbents are saturated with solvent, etc., they may be considered hazardous waste and should be disposed of as such. Oil soaked absorbents should be double bagged and shipped to an incinerator. Contact ME DEP or ME Dept of Public Safety to report the spill (if hasn't already been reported by the Communication Center).

8. Decontaminate:



Decontaminate the site, personnel, and equipment by removing or neutralizing the hazardous materials that have accumulated during the spill. This may involve removing and disposing of contaminated media, such as soil, that was exposed during spill incident.

9. Complete required reports

Complete all notifications and paperwork required by local, state, and federal guidelines for reporting spill incidents. Failure to do so can result in penalties. Coordinate with the MTA's Environmental Services Coordinator.

10. Conduct incident analysis

The Environmental Services Coordinator will conduct an incident analysis and develop plans to prevent recurrence.

SAFETY FIRST

Appendix C

Internal Emergency Contact Notice

EMERGENCY CONTACT LIST
CROSBY MAINTENANCE FACILITY

EMERGENCY RESPONSE COORDINATORS
Discoverer shall contact one of the following in the order presented

Primary Emergency Response Coordinator	Bill Thompson, Highway Maintenance Supervisor	Office: (207) 871-7728 Cell phone: (207) 838-6825 Pager: (207) 759-8502
First Alternate Emergency Response Coordinator	Roger Mathews, Highway Division Manager	Office: (207) 985-3506 Cell phone: (207) 776-0974 Pager: (207) 471-0077
Second Alternate Emergency Response Coordinator	Wes Jackson, Director of Highway & Equipment Maintenance	Office: (207) 871-7771 ext. 113 Cell phone: (207) 831-5811 Pager: (207) 750-2748

OTHER MTA CONTACTS
Discoverer or ERC shall contact each of the following as soon as possible

MTA Communications Center	(207) 871-7771 ext. 4
John Branscom, Loss Prevention and Safety Specialist	(207) 871-7771 ext. 359; cell: 671-3487; pg: 471-0881
John Branscom, Environmental Services Coordinator	(207) 871-7771 ext. 359; cell: 671-3487; pg: 471-0881

OTHER AGENCIES EMERGENCY CONTACT
(EMERGENCY DIAL 911 – other numbers for reference, if needed)

South Portland Fire Department	**911** or (207) 799-3314
Maine State Police	(800) 482-0730
Maine Department of Environmental Protection **Spill Hotline** Central Office	 **(800) 482-0777** (207) 287-7688
Maine Emergency Management Agency (MEMA)	(207) 287-4080
Maine State Emergency Response Commission	(800) 452-4464
Centers for Disease Control	(800) 311-3435
National Response Center	(800) 424-8802
EPA Region 1	(617) 223-7265 (24 hours)

SPILL RESPONSE CONTRACTORS
ERC will contact if spill recovery and/or cleanup assistance is required

Petroleum/Fuel Suppliers: Diesel & Gasoline Fuel: C.N. Brown & Co. No. 2 Fuel Oil: Union Oil Co. Propane: Downeast Energy Motor & Lubricating Oils: Maine Lubrication Service	 (207) 743-9212 -or- (800) 442-6330 (207) 799-1521 (207) 799-5585 (207) 772-6513
Clean Harbors Environmental Services	(207) 799-8111 -
Environmental Projects, Inc. (EPI)	(207) 786-7390
ENPRO Services, Inc.	(207) 799-0850

Appendix D

Spill Report Form

SPILL REPORT FORM

Maine Turnpike Authority
430 Riverside Street
Portland, Maine 04103

INCIDENT DESCRIPTION

Is The Spill Reportable? ☐ Yes ☐ No

Location Where Occurred: _____

_____

Date Began: _____ Date Ended: _____

Time Began: _____ ☐ am ☐ pm Time Ended: _____ ☐ am ☐ pm

Spill/Release onto or into: (*check all that apply*) ☐ Air ☐ Ground ☐ Water

Material Spilled/Released: _____

_____

Extremely Hazardous Substance (EHS) Involved? ☐ Yes ☐ No

Amounts Spilled/Released: _____

Amounts Recovered: _____

Source and Cause of the Discharge: _____

_____

_____

Is more spillage possible? ☐ Yes ☐ No **If yes**, amount: _____

Description of All Affected Media (*include weather conditions*): _____

_____

_____

What resources are at risk? (*check all that apply*)

☐ Public Safety ☐ Public Water or Well ☐ Private Water or Well ☐ Atmosphere

☐ Land or Ground ☐ Open Water ☐ Surface Drainage ☐ Storm Sewer

☐ Sanitary Sewer ☐ Vapors in Building ☐ Other (*specify*): _____

Damages or Injuries Caused by Discharge: _____

_____

_____

_____

Is an Evacuation necessary? ☐ Yes ☐ No

Corrective Action(s) Taken: _____

_____

_____

_____

_____

SPILL REPORT FORM

Maine Turnpike Authority
430 Riverside Street
Portland, Maine 04103

NOTIFICATIONS (To be made by MTA Communications Center if spill is reportable)

AGENCY	PHONE NUMBER	CONTACT NAME	DATE/ TIME	REPORTING CRITERIA
Local Fire Department	911			If aid is needed to evacuate area
Maine State Police/State Emergency Response Commission (SERC)	1-800-482-0730			If aid is needed to evacuate or respond to spill
Maine Department of Environmental Protection				If spill is >5 gal. **or** visible sheen is present on surface water **or** occurs outside
SPILL HOTLINE	1-800-482-0777			
Central Office	287-7688			
Maine Emergency Management Agency (MEMA)	287-4080			If aid is needed to evacuate or respond to spill
National Response Center (NRC)	1-800-424-8802			If visible sheen is present on surface water

OTHER EMERGENCY TELEPHONE NUMBERS (for reference, if needed):	
Environmental Protection Agency, Region 1	1-617-565-3590
Clean Harbors Environmental Services	1-207-799-8111
Environmental Projects, Inc. (EPI)	1-207-846-0447 or 1-207-657-2400
ENPRO Services, Inc.	1-207-799-8600
AUGUSTA: Maine General Medical Center	1-207-626-1000
BIDDEFORD: Southern Maine Medical Center	1-207-283-7000
LEWISTON: Central Maine Medical Center	1-207-795-0111
PORTLAND: Maine Medical Center	1-207-871-2381
Poison Control Center	1-800-562-8236

DOCUMENT INSTRUCTIONS GIVEN BY EACH AGENCY NOTIFIED: *(attach sheets as necessary)*

_____

_____

REVIEW AND APPROVAL

PREPARER OF SPILL REPORT (MTA Site Supervisor/Foreman):

_____

(printed name) (signature) (date)

CONTRACTOR SITE SUPERVISOR (if Cleanup Contractor involved):

_____

(printed name) (signature) (date)

MTA ENVIRONMENTAL SERVICES COORDINATOR:

_____

(printed name) (signature) (date)

Appendix E

Notice to Oil Delivery Drivers

NOTICE TO OIL/FUEL DELIVERY TRUCK DRIVERS

1. DRIVERS ARE REQUIRED TO REMAIN PRESENT AT ALL TIMES DURING UNLOADING ACTIVITIES.

2. CHECK TO BE SURE ALL VALVES AND VEHICLE OUTLETS ARE CLOSED AND HOSES DISCONNECTED BEFORE MOVING YOUR TRUCK AWAY.

3. SPILL RESPONSE EQUIPMENT IS LOCATED AT THE FUEL PUMP ISLAND.

4. IN THE EVENT OF AN EMERGENCY (I.E., SPILL, LEAK, RELEASE, ETC.), PLEASE CALL THE MTA COMMUNICATIONS CENTER IMMEDIATELY AT (207) 871-7771 X 4.

GARDINER & YORK

Appendix F

Routine Facility Inspection Reports
BMP Incident and Corrective Action Reports

APPENDIX F-2
BMP/PM INCIDENT AND CORRECTIVE ACTION REPORT

Instructions:	This worksheet is to be completed when evidence of pollutants entering the storm water system or ineffective BMPs/PMs are identified. When complete, this report should be attached to the activity record that initiated this corrective action.

Report Initiated by: ☐ Monthly SPCC Inspection ☐ Quarterly Stormwater Inspection ☐ Other_____

Date:	Time:	Potential Pollutant Source Number (if applicable):

Report Completed by:

1. Observations:

2. Are additional BMPs/Pms appropriate? If any changes are necessary including repair or maintenance, describe change needed and date completed below:

Change/Activity	Date Completed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Reviewed By:_____
Authorized Signature

Date:_____

TABLE 1

Summary of MTA Facilities and Other Features within UA
Maine Turnpike Authority

REGULATED SMALL MS4 COMMUNITY	MILE MARKER DELINEATION [1] Northern Boundary	Southern Boundary	LINEAR DISTANCE OF UA SEGMENT (Miles)	MTA FACILITY FEATURES [2] WITHIN UA (Roadway and ROW assumed)	WATER BODIES	STREAMS [3]	Refrence Maps: UA Maps	USGS Maps
SABATTUS	**MM 84.3** Lisbon Road Underpass	**MM 83.6** Sabattus Town Line	**0.7**	*None identified*	*None identified*	*None identified*	Sabattus	1
LEWISTON	**MM 79.6** Goddard Road Overpass	**MM 78.9** Androscoggin River	**0.7**	*None identified*	*None identified*	1 Hart Brook 2 Androscoggin River	Lewiston	2
intermittent contact (<0.1 mile) within Lewiston UA	**MM 81.4** Route 196 & MCRR Overpass		**<0.1**	*None identified*				
	MM 80.8 Ferry & Cottage Road Overpass		**<0.1**	*None identified*				
	MM 78.9 Androscoggin River	**MM 79.4** River Road	**0.5**	*None identified*		2 Androscoggin River		
AUBURN	**MM 75.6** Washington Street Overpass	**MM 75.0** Kitty Hawk Avenue Underpass	**0.6**	Exit 75 Interchange (ramp)	*None identified*	2 Androscoggin River	Auburn	2
	MM 78.9 Androscoggin River	**MM 78.4** South of Riverside Drive	**0.5**					
FALMOUTH	**MM 53.4** Mountain Road Underpass	**MM 51.8** Presumpscot River	**1.6**	Exit 53 Interchange (ramp) Exit 53 Toll Plaza	*None identified*	3 Unnamed tributary of Presumpscot River (crosses Turnpike near Exit 53 NB on-ramp)	Falmouth	3
	Falmouth Spur midpoint between CNRR Overpass and Falmouth/Middle Road Overpass	**Falmouth Spur** Falmouth Road/Middle Road Overpass	**~0.1**	*None identified*				
	Falmouth Spur Presumpscot River	**Falmouth Spur** Portland/Falmouth Town Line	**~0.9**	*None identified*		4 Presumpscot River		
PORTLAND	**Falmouth Spur** Exit 52 Interchange	**Falmouth Spur** Portland/Falmouth Town Line	**~0.1**	Exit 52 Interchange (ramps and spur)	*None identified*	4 Presumpscot River	Portland	3
	MM 51.8 Presumpscot River	**MM 46.7** Stroudwater River	**5.1**	Exit 52 Interchange (ramps and spur) Exit 48 Interchange (ramps) Exit 48 Toll Plaza Exit 47 Interchange (ramps) Exit 47 Toll Plaza		5 Northerly unnamed tributary of Presumpscot River (crosses Turnpike south of Riverside Street overpass) 6 Southerly unnamed tributary of Presumpscot River (crosses Turnpike south of Route 302 overpass) 7 Northerly unnamed tributary of Fore River (within Turnpike ROW south of Warren Ave overpass) 8 Southerly unnamed tributary of Fore River (crosses Turnpike south of Brighton Ave and RR overpass) 9 Stroudwater River		3+4
SCARBOROUGH	**MM 42.0** Two Rod Road Underpass	**MM 41.0** Unnamed tributary of Beaver Brook	**1**	*None identified*	*None identified*	10 Unnamed tributary of Beaver Brook (crosses Turnpike south of Two Rod Road underpass)	Scarborough	5
SACO	**MM 35.7** Goosefare Brook	**MM 33.0** Saco River	**2.7**	Exit 36 Interchange (ramps) Former Exit 36 Interchange (ramps)	*None identified*	11 Goosefare Brook 12 Deep Brook 13 Cole Brook 14 Saco River	Saco	6
BIDDEFORD	**MM 33.0** Saco River	**MM 32.0** Thacher Brook	**1**	*None identified*	*None identified*	14 Saco River (including wetlands on southern bank along SB lanes) 15 Unnamed tributary of Saco River (crosses Turnpike south of South Street and runs parallel) 16 Thacher Brook	Biddeford	6

STANDARD OPERATING PROTOCOL (SOP) AND PROCEDURES FOR IDENTIFYING AND DOCUMENTING SUSPECTED ILLICIT DISCHARGES OR NON-STORM WATER DISCHARGES IN ACCORDANCE WITH THE MAINE TURNPIKE AUTHORITY'S ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) PROGRAM

In accordance with the requirements of the MEPDES General Permit Part IV(D)(3)(a through c), this protocol has been prepared by the Maine Turnpike Authority (MTA) for developing, implementing, and enforcing procedures to detect and eliminate illicit discharges and non-storm water discharges, as defined in 06-096CMR521(9)(b)(2), except as provided in Part IV(D)(3)(c) of the General Permit. A summary of the MTA's standard operating procedures for mapping, field inspections, notification of internal and external agencies, and follow-up response actions relative to the identification and tracing of suspected illicit discharges are listed below:

1. Using GPS equipment and software, the MTA shall inventory and map storm water outfalls and storm sewer systems (catchbasins, manholes, and other drainage systems) within the MTA's Right-of-Way (ROW) that intersect or pass through the urbanized areas (UAs) located within the regulated MS4 municipalities along the Maine Turnpike (I-95) corridor. The UAs shall be mapped in a phased schedule based on selected prioritization criteria as shown on the attached UA Prioritization Table.

2. MTA highway maintenance or environmental management personnel that have received training in accordance with the SWPP Plan requirements shall conduct dry weather IDDE field inspections using the attached IDDE Log-1 (Primary) for each storm water outfall previously identified and mapped under item 1 above. The dry weather IDDE inspections shall be conducted in conjunction with routine highway maintenance activities including routine cleaning of catchbasins and other routine construction-related projects and/or in conjunction with the outfall inventory and mapping field surveys.

3. In the event that a potential illicit discharge or non-storm water discharge is identified during the dry weather IDDE inspection program, immediately contact and submit a copy of IDDE Log-1 (Primary) identifying the illicit discharge to the MTA's Environmental Services Coordinator listed below:

   John Branscom
   MTA Environmental Services Coordinator
   Office: (207) 871-7771 Ext. 359
   Cell: (207) 671-3487
   Pager: (207) 471-0881
   Fax: (207) 878-9702

4. The MTA's Environmental Services Coordinator or designee shall conduct a follow-up IDDE field inspection using the attached IDDE Log-2 (Comprehensive) and, if necessary, shall conduct additional water quality testing to aid in the identification and assessment of the suspected illicit discharge or non-storm water discharge.

5. If necessary, the MTA's Environmental Services Coordinator shall notify the appropriate state (Maine DEP) and/or local enforcement agency (local MS4 municipality) to further assess and locate the source of the suspected illicit connection/discharge or non-storm water discharge (Note: the local municipality will be dependent upon actual location of identified suspected illicit discharge or non-storm water discharge):

   David Ladd
   Maine DEP, Bureau of Land & Water Quality (BLWQ)
   Office: (207) 287-5404
   Toll Free (800) 452-1942

6. In conjunction with the local and/or state enforcement agency, the MTA's Environmental Services Coordinator shall coordinate additional response actions to trace the source of the suspected illicit discharge or non-storm water discharge, if necessary. Additional response actions may include additional visual or video inspections of the storm sewer systems and/or dye/smoke testing of the storm sewer systems by qualified MTA maintenance personnel or MTA subcontractors.

7. The MTA's Environmental Services Coordinator shall ensure the proper documentation of IDDE field inspection logs and shall maintain copies of field inspection logs and follow-up response actions relative to suspected or identified illicit discharges or non-storm water discharges identified during the implementation of this IDDE program and protocols established herein.

IDDE Log - 1
Preliminary Outfall / IDDE Dry Weather Reconnaissance & Inspection Log
Maine Turnpike Authority

Outfall or Catchbasin I.D.: (OF-000X or CB-000X)	Date (mm/dd/yy)	Physical Description				Physical Indicators for Flowing Outfalls or Catchbasins Only									
		Location		Type of Flow (✓)		Odor (✓)			Color (Describe):	Floatables (✓)					
		UA Town I.D.	Nearest Mile Marker (within 0.1 Mi.)	Flowing Water / Stream	Stagnant Pool	Sewage	Petroleum (Oil) or Gas	Other (Describe):		Sewage	Petroleum (Oil) or Gas (Product or Sheen)	Suds	Excessive Algae Bloom	Other (Describe):
				☐	☐	☐	☐			☐	☐	☐	☐	
				☐	☐	☐	☐			☐	☐	☐	☐	
				☐	☐	☐	☐			☐	☐	☐	☐	
				☐	☐	☐	☐			☐	☐	☐	☐	
				☐	☐	☐	☐			☐	☐	☐	☐	

Outfall or Catchbasin I.D.: (OF-000X or CB-000X)	Date (mm/dd/yy)	Physical Indicators for Both Flowing & Non-Flowing Outfalls or Catchbasins						
		Deposits, Staining, or Algae Growth	Abnormal Vegetation (✓)		Outfall or CB Damage	Suspected Illicit Disharge	Authorized Non-Stormwater Discharges (See List Below*)	Comments or Other Observations (Use Back of Form, If Necessary)
		Yes or No (If Yes, Describe)	Excessive or Plush Growth	Stressed or Dead	Yes or No (If Yes, Describe)	Yes or No (If Yes, Notify Env. Coord.)	Yes or No (If Yes, Note Type or Number From List Below*)	
			☐	☐				
			☐	☐				
			☐	☐				
			☐	☐				
			☐	☐				

Note: *An Illicit Discharge includes any discharge that is not entirely composed of stormwater, except for the Authorized Non-Stormwater Discharges listed below. Examples include sanitary sewer discharges (illegal tie-ins), chemical discharges from mills, and laundry or car wash discharges containing detergents, ect.*

* List of Authorized Non-Stormwater Discharges:

1. Landscape or Lawn Irrigation
2. Diverted Stream Flow
3. Rising Groundwaters
4. Spring Flow
5. Groundwater Infiltration
6. Pumped Groundwater
7. Founddation Drain, Footing Drain, or Sump Pump Flow
8. Air Conditioning/Compressor Condensate
9. Wetland or Habitat Flow
10. Residual Street Wash Water
11. Fire Hydrant Flushing or Fire-Fighting Activity Runoff
12. Water Line Flushing or Potable Waster Source Discharge

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) NOTIFICATION FORM

Maine Turnpike Authority

This form shall be completed in the event that an illicit discharge is detected within the MTA right-of-way (ROW).
This form is also applicable for identifying any allowable non-stormwater discharges identified within MTA ROW.

(Underlined terms are defined on Page 2 of this form)

INCIDENT DESCRIPTION

Was an Illicit Discharge Observed? ☐ Yes ☐ No

Location Where Observed (*Mile Marker, Town*): _____

_____

Outfall or Catch Basin ID: _____

Date Inspected: _____

Time Inspected: _____ ☐ am ☐ pm

Weather conditions: _____

Observations? (*check all that apply*)

☐ Flow	☐ Floatables	☐ Outfall or Catch Basin Damage	☐ Atmosphere
☐ Odor	☐ Deposits, Staining, Algae/Baterial Growth	☐ Turbidity	☐ Storm Sewer
☐ Color	☐ Abnormal Vegetation	☐ Other (*specify*):	

Detailed description of Observations:

_____

_____

_____

Possible Source: _____

_____

Corrective Action(s) Taken (*Water Quality Testing, Visual/Video Inspections, Smoke/Dye Testing*): _____

_____

_____

_____

_____

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) NOTIFICATION FORM

Maine Turnpike Authority

This form shall be completed in the event that an illicit discharge is detected within the MTA right-of-way (ROW).
This form is also applicable for identifying any allowable non-stormwater discharges identified within MTA ROW.

(Underlined terms are defined on Page 2 of this form)

NOTIFICATIONS

AGENCY	PHONE NUMBER	CONTACT NAME	DATE/ TIME
Maine Department of Environmental Protection	1-800-452-1942 (207) 287-5404	David Ladd	

DOCUMENT INSTRUCTIONS GIVEN BY EACH AGENCY NOTIFIED: *(attach sheets as necessary)*

REVIEW AND APPROVAL

PREPARER OF IDDE NOTIFICATION REPORT:

(printed name) (signature) (date)

ENVIRONMENTAL SERVICES COORDINATOR:

(printed name) (signature) (date)

An illicit discharge is defined as "any non-permitted discharge to a regulated MS4 or the waters of the State that does not consist entirely of stormwater or allowable non-stormwater discharges (see definition below).

An allowable non-stormwater discharge includes the one or more of following:

- Landscape irrigation
- Lawn watering runoff
- Diverted stream flows
- Rising ground waters
- Uncontaminated groundwater infiltration and/or pumped groundwater
- Uncontaminated flows from foundation drains, footing drains and/or crawl space pumps
- Air conditioning and air compressor condensate
- Irrigation water
- Flows from uncontaminated springs
- Flows from riparian habitats and wetlands
- Residual street wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spill material has been removed and detergents are not used)
- Hydrant flushing and fire fighting activity runoff
- Water line flushing and discharges of potable water sources

MAINE TURNPIKE AUTHORITY
Catch Basin Cleanout Tracking Form

MPDES Permit Part IV(D) 3. Illicit Discharge and Elimination (IDDE).
Each permittee must develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges, as definied in 06-096CMR521(9)(b)(2), except as provided in Part IV(D)3(c) of this permit into any small MS4.

MTA's SWMP states that MTA shall…
"Utilize regularly scheduled catch basin cleaning to detect possible illicit discharges by visually assessing the contents for the following: unusual color or odor, excessive oil, foam or scum, viscosity, or other suspicious characteristics."

DATE OF CLEANOUT	CB IDENTIFIER (Example: CB0136)	CB LOCATION with nearest Mile Marker (Example: 41.77 NB/Med. Shoulder)	UNUSUAL ODOR/COLOR (Yes or No) if yes, describe	EXCESSIVE OIL (Yes or No) if yes, describe	FOAM OR SCUM? (Yes or No) if yes, describe	VISCOUS? (Yes or No) if yes, describe	INITIALS OF INSPECTOR AND ANY COMMENTS include other suspicious characteristics and/or any damage observed

MAINE TURNPIKE AUTHORITY
SPILL PREVENTION, CONTROL AND COUNTERMEASURES TRAINING
STORM WATER POLLUTION PREVENTION TRAINING
AND
EROSION & SEDIMENTATION CONTROL PRACTICES
MAY 2008

COMPLIANCE EXAM

Name: _____ Score: _____

Signature: _____

Date: _____

1. MTA policy requires monthly inspections of all equipment, tanks, and oil storage areas at its facilities that store oil and petroleum products.

    a. True
    b. False

2. MTA policy requires quarterly inspections of all stormwater potential pollutants and best management practices.

    a. True
    b. False

3. MTA policy requires that daily inspections be documented for all earthwork projects to ensure that erosion prevention and sedimentation control (ESC) BMPs are present and effective.

    a. True
    b. False

4. The ESC BMP inspection log must:

    a. be updated weekly
    b. document daily precipitation and temperature
    c. identify any failures and corrective actions for all erosion and sedimentation controls
    d. include all of the above

5. How often will mulch be applied to any disturbed earth, including ditches?

    a. Hourly
    b. Before it rains
    c. By the end of each workday
    d. Once in a blue moon

6. Silt fence is considered an erosion prevention measure, not sedimentation control barrier.

    a. True
    b. False

7. Every earthwork job must have the following, regardless of size or location:

    a. A stormwater permit signed by the local municipal officials, as well as state and federal regulators.
    b. An on-site responsible party (OSRP) that is knowledgeable in ESC BMPs and is responsible for maintaining the inspection log, as well as any ESC practices at the site.
    c. A cribbage tournament to decide who the OSRP will be for the next project.

8. Please provide an example for each of the following:

    a. Erosion Prevention Device_____

    b. Sedimentation Control Device_____

    c. Spill Response Equipment_____

    d. Stormwater BMP_____

9. Employees discovering an oil spill must take immediate steps to:

    a. Make a determination whether it is "incidental" or "non-incidental"
    b. Stop the release if you can do so without risk to your personal safety
    c. Take immediate steps to ensure their own and surrounding workers' safety
    d. Notify the SPCC Coordinator, and (when in doubt) contact the MTA Communications Center
    e. All of the above

10. When removing snow removal equipment (such as plow blades and sand/salt hoppers) from trucks for seasonal storage, the first thing that you should do is:

    a. Start the countdown for an untimely blizzard;
    b. Notify the SPCC Coordinator, Environmental Services Director, MTA Communications Center, and DEP that you declare today the first day of mud season;
    c. Cap each hose line with the fitted plug to minimize leakage;
    d. All of the above

11. MTA policy requires monthly inspections of all equipment, tanks, and oil storage areas at its facilities that store oil and petroleum products.

    a. TRUE
    b. FALSE

12. An important initial step that may need to be taken in the event of a spill is to:

    a. Make sure you look around to see who is nearby so you can blame it on them
    b. Post your resume on monster.com
    c. Pretend that it never happened
    d. Cover/protect floor drains, catch basins, and drainageways to prevent the migration of oil toward or into navigable water

13. In addition to spill kits available at each site, MTA also provides absorbent pads for spill response at each facility. After absorbent pads are used, they should be deposited:

    a. In the nearest trash can
    b. In the nearest dumpster
    c. In a drum marked "used absorbent materials"
    d. In a drum marked "used oil"
    e. Any of the above

14. Sump socks and absorbent pads in floor drains should be inspected monthly and replaced if saturated

    a. TRUE
    b. FALSE

15. No spills less than 5 gallons need to be documented and reported to MTA's Environmental Services Coordinator.

    a. True
    b. False

16. As part of MTA's 5-year Storm Water Management Plan (SWMP), the following practices must be followed:

    a. Storm water features must be mapped within all urbanized areas;
    b. Dry weather inspections must be performed for all mapped storm water features;
    c. All authorized non-stormwater discharges must be identified;
    d. Appropriate procedures must be followed when an illicit discharge is detected; or
    e. All of the above

17. MTA's MS4 permit requires regularly scheduled catch basin cleanouts to detect possible illicit discharges by visually assessing the sediments removed for any:

    a. cut, color and clarity
    b. unusual color or odor, as well as the presence of oil, foam, scum or viscous material
    c. snap, crackle and pop
    d. precious metals

18. Which of the following is an example of an illicit discharge?

    a. Antifreeze spills from an automobile accident into a nearby catch basin
    b. An outlet pipe discharging green glowing goo to the ditch along the Turnpike
    c. Runoff from lawn watering
    d. Both a. and b.

19. Which of the following is an example of an authorized non-stormwater discharge?

    a. Antifreeze spills from an automobile accident into a nearby catch basin
    b. An outlet pipe discharging green glowing goo to the ditch along the Turnpike
    c. Runoff from lawn watering
    d. Both a. and b.

20. If you discover an illicit discharge, you should immediately

    a. Call the local news stations;
    b. Notify the Environmental Services Coordinator and help fill out the IDDE log and spill report form;
    c. Call the State Police;
    d. Contact your supervisor and schedule your vacation right away; or
    e. Both a. and d.