

**STORM WATER PROGRAM
MANAGEMENT PLAN (SPMP)
ANNUAL SUMMARY REPORT
PERMIT YEAR 2
(JUNE 2009 – JUNE 2010)**

prepared for

Maine Turnpike Authority

**2360 Congress Street
Portland, Maine**



prepared by

**GZA GeoEnvironmental, Inc.
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**File No. 09.0025500.22 Task 1
September 2010**

Maine Turnpike Authority

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VIA EMAIL

September 15, 2010

Mr. David Ladd
Stormwater Phase II Coordinator
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

SUBJECT: Maine Turnpike Authority (MTA)
Stormwater Program Management Plan (SPMP)
Maine DEP Permit # MER043001
Annual Report for Permit Year 2 (June 2009 through June 2010)

Dear David:

On behalf of MTA, I am pleased to submit this Annual Summary Report for Permit Year 2, which satisfies the requirements in Part IV(J) of the MPDES General Permit for Stormwater Discharges from Maine Department of Transportation (MaineDOT) and MTA Municipal Separate Storm Sewer Systems (MS4s).

This Annual Summary Report describes MTA's program of Best Management Practices (BMPs) accomplished and status of Measurable Goals (MGs) for each of the six Minimum Control Measures (MCMs) for Permit Year 2, which were originally presented in MTA's SPMP (dated December 2008). In short, MTA has successfully met the Permit Year 2 requirements as outlined in the SPMP.

A current copy of the SPMP is not included in this report, as it was submitted to the DEP in December 2008. The Plan remains unchanged and is still current and applicable with the exception that a small stretch of Urbanized Area (UA) was identified in the Town of Kittery. This minor update is addressed in **Table 1 – Summary of MTA Facilities and Other Features within UA**, as well as discussions relative to MCM 1 and 3 in this letter report.

BACKGROUND

In accordance with Part IV(A) of the MPDES MS4 General Permit, MTA's SPMP was developed for the purpose of establishing, implementing and enforcing a stormwater management program to reduce the discharge of pollutants from MTA's roadways, drainage areas and facilities within UAs to the maximum extent practicable to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA). MTA's SPMP and accompanying Notice of Intent (NOI), which were submitted to the



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Maine DEP in December 2008, outline the program of BMPs and MGs that MTA has incorporated to meet the requirements of the following six MCMs:

1. Public education and outreach on stormwater impacts;
2. Public Involvement and Participation;
3. Illicit Discharge Detection and Elimination (IDDE);
4. Construction site stormwater runoff control;
5. Post-construction stormwater management in new development and redevelopment; and
6. Pollution prevention/good housekeeping for community/facility operations.

For each of the MCMs, MGs have been established to evaluate the designated BMPs. These MGs have been assigned an implementation schedule and/or milestones for implementation of applicable BMPs. Additionally, specific MTA personnel are delegated the responsibility for implementing each BMP. The work plan/implementation schedule, which summarizes the MCMs, MGs, applicable BMPs and the designated responsible party's name and job title as found in the SPMP, has been updated to include a summary of achievements and completed goals for Permit Year 2. This summary is included in this report as **Table 2 – SPMP Implementation Schedule**.

The following sections present a summary of achievements and completed goals for the second year of implementation (Permit Year 2) and evaluation of the SPMP requirements.

SUMMARY OF SPMP PERMIT YEAR 2 ACHIEVEMENTS & COMPLETED GOALS

In accordance with the MPDES General Permit Part IV(J), this Annual Summary Report presents a summary of significant goals achieved during the second year (July 2009 through June 2010) of implementation of the MTA's SPMP including an evaluation of BMPs and MGs established for the 6 MCMs discussed above. Specifically, Part IV(J) of the permit requires the following annual documentation relative to the SPMP:

MPDES Part IV(J)(1) -- By September 15, 2009, and annually thereafter by September 15, the permittee shall submit a report for the Department's review and approval...The report must include the following:

- a. The current copy of the Plan (including a detailed implementation schedule), status of compliance with permit conditions, an assessment of the appropriateness of identified BMPs and progress towards achieving identified measurable goals for each of the MCMs.*

The SPMP has not been modified or updated since its submittal to the Maine DEP on December 19, 2008. Therefore, a current copy of the SPMP is not included with this Annual Summary Report. However, a revised copy of **Table 1** has been included, which presents the new UA identified in the Kittery area. Furthermore, all of the MCMs, MGs, and BMPs are summarized in the work plan/implementation schedule presented in **Table 2** of this report.

- b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.*

No water quality monitoring data, including field screening or laboratory analysis, was conducted during this reporting period (Permit Year 2). However, data relative to each BMP and MG are

summarized in the section for each specific MCM. For example, some of the process and impact indicators evaluated for MCM 1 are included on the next page; the number and type of inspections conducted as part of the Illicit Discharge Detection and Evaluation (IDDE) program are included with the summary for MCM 3.

- c. *A summary of the stormwater activities the permittee intends to undertake pursuant to its Plan during the next reporting cycle.*
- d. *A change in identified measurable goals that apply to the program elements.*

No significant changes to the SPMP implementation schedule or MGs have been proposed for Permit Year 2 or are anticipated for Permit Year 3. Although no MOA was developed in coordination with DEP and MaineDOT (as originally indicated in the SPMP under MCM 4 and 5), MTA continues to enforce these MCMs through contract documents and has recently developed a Construction Project Environmental Compliance (CPEC) Program to ensure compliance with MS4 MGs and other stormwater requirements. The CPEC Program is summarized MCMs 4, 5 and 6. Please refer to **Table 2** copied directly from the SPMP for a listing of achieved MGs in Permit Years 1 and 2 (in blue font) and proposed MGs for Permit Year 3 through 5 (in black font).

- e. *A summary describing the activities, progress, and accomplishments for each of the MCM #1 through #6 (including such items as status of education and outreach efforts, public involvement activities, stormwater mapping efforts, dry weather inspections, detected illicit discharges, detected illicit connections, illicit discharges that were illuminated, construction site inspections, number and nature of enforcement actions, post construction BMP status and inspections, and the status of the permittee's good housekeeping/pollution prevention program).*

A summary of achievements and completed goals for Permit Year 2 is shown on attached **Table 2** (Summary of SPMP Implementation Schedule & Completed Goals for Permit Year 2) and the primary or key results are also summarized for each MCM in the subsections below. Additional supporting documentation is also provided in **Attachments A through E**.

MCM 1 – Public Education & Outreach on Stormwater Impacts: As shown on **Table 2** and **Attachment A**, a revised SPMP training program was performed for MTA Maintenance personnel and Engineering inspectors. The stormwater training program, which is combined with Spill Prevention, Control and Countermeasures (SPCC) topics, was performed in May and June 2010 by regulatory specialists from GZA GeoEnvironmental, Inc. (GZA) and MTA alike. The training was attended by approximately 95 MTA employees¹. Prior to conducting training, the combined SPCC/Stormwater training curriculum was updated circa April 2010 to reflect the following information, as seen in **Attachment A**:

- MTA's Mobile SPCC Plan, which includes procedures regarding refueling of mobile equipment, such as mowers, loaders and other heavy equipment (i.e., avoid and minimize refueling within UA and Urban Impaired Streams (UIS) watersheds);

¹ Please note that in years past MTA has generally provided training for approximately 111 to 130 employees; the reason for the decrease in attendants is twofold. First, these training sessions are generally conducted throughout the month of May and in the past included the seasonal employees, who assist with winter plowing through April; however, seasonal employees were not working during training and therefore did not attend. Second, the training sessions for building maintenance staff were limited to spill prevention topics and did not address the full spectrum of stormwater management topics in Permit Year 2; therefore, MTA training efforts focused primarily on comprehensive training for personnel routinely disturbing earth, inspecting stormwater infrastructure and performing stormwater maintenance activities.

- Additional UA identified in York and Kittery (i.e., a summary of UA reviewed that is similar to **Table 1** of this report);
- Interactive question and answer session in the format of a series of Jeopardy™ games on SPCC/Stormwater related topics;
- Development and implementation of new MTA CPEC program; and
- Requirements associated with erosion prevention and sedimentation control, including construction and post-construction BMPs, operation and maintenance (O&M), and inspections, including a review of the following topics that are applicable within and outside UA:
 - Quarterly forms to capture installation and maintenance of structural BMPs that are used to document data that is reported to DEP in MTA's Annual MOA Report;
 - Maintenance required to ensure compliance with special permit conditions for site with Site Law/Chapter 500 permit requirements;
 - Additional maintenance requirements to facilitate sheet flow from MTA's impervious areas (and avoid channelized flow) within the Long Creek watershed and other areas; and
 - Prioritization of maintenance (e.g., sweeping, catch basin cleanouts, outfall inspections, etc.) within UIS watersheds as per MTA's MS4 UIS Strategy.

In addition to these updates, MTA SPCC/Stormwater training sessions in 2010 also re-emphasized the training updates from Permit Year 1, which included (but were not limited to) the following:

- Revisions to the MPDES MS4 Permit requirements;
- Introduction of MTA's MS4 UIS strategy, which identified Goosefare Brook and Hart Brook as MTA's two designated highest priority watersheds;
- Considerations within other UIS watersheds (e.g., Long Creek, Capisic Brook, Red Brook, etc.); and
- Review of stormwater management, erosion prevention and sedimentation control practices, including construction and post-construction BMPs and O&M.

In Permit Year 3, MTA anticipates providing additional information during training in 2011 with respect to compliance with upcoming Multi-Sector General Permit (MSGP) requirements, such as quarterly visual monitoring procedures.

Also as part of MCM 1, MTA has adopted an Awareness Plan and BMP Adoption Plan. Both of these Plans were provided as handouts during training and discussed to ensure that all MTA employees are aware of the three goals of this MCM in Permit Years 1 and 2:

1. To raise awareness that polluted stormwater runoff is the most significant source of water quality problems in Maine's waters;
2. To motivate people to use the BMPs which reduce polluted stormwater runoff; and
3. To reduce polluted stormwater runoff as a result of increase awareness and utilization of BMPs.

Although an assessment of process and impact indicators is not required in Permit Year 2, the training sessions described above, which included in-class test/examination and workshop session, continue to provide an opportunity to assess these indicators associated with the Stormwater Awareness and BMP Adoption Plans adopted by MTA. For example, the 3-hour training sessions conducted at each MTA maintenance facility this permit cycle included a total of 95 MTA employees in attendance and the average test score for these employees was 95%. Furthermore, the development of a new interactive question and answer sessions (i.e., Jeopardy™ game) focused on the stormwater issues, including the impact indicators evaluated in the Permit Year 1 annual report (e.g., types of structural and non-structural BMPs, sources of stormwater pollution, etc.). As required in the MS4 permit, the evaluation of the process and impact indicators associated with MCM 1 will be further assessed in Permit Year 3.

With respect to the Stormwater Awareness and BMP Adoption Plans, it is also important to note in Permit Year 2 that MTA's new CPEC Program was developed, which required that contractors conducting work on projects located within UA receive and review a copy of both Plans. More information on MTA's CPEC Program is included in summaries for MCMs 4 through 6.

With respect to MTA's continuation of education and outreach efforts from the previous 5-year permit cycle, MTA offers the following accomplished MGs:

- MTA, its counsel or its consultant(s), have attended and participated in multiple public meetings, seminars, and conferences as shown in **Attachment B**, including at least eight (8) Interlocal Stormwater Working Group (ISWG) meetings.
- MTA also participated in several additional stormwater-related efforts including: (1) attending Watershed Management Plan Meetings for UIS watersheds within and outside of UA (i.e., Long Creek, Capisic Brook, Red Brook, etc.)²; (2) contributing to DEP's "Think Blue Maine" campaign; and (3) continuing a link from MTA's environmental website to the Cumberland County Soil and Water Conservation District's (CCSWCD) yardscape program.
- MTA also requires, in contract documents and as part of the CPEC Program, all contractors to submit training certificates for the delegated on-site responsible party (OSRP) on MTA contracted projects to ensure they are adequately trained and knowledgeable in ESC from DEP's NPS Training Program or an equivalent program.

MCM 2 – Public Involvement & Participation: The MTA's public notice policy and scheduled public meetings during Permit Year 2 complied with the Maine Freedom of Access Act (FOAA), including a public MTA Board Meeting on December 17, 2009 where time was allotted for environmental topics and stormwater management was highlighted. MTA continues to maintain close communication with MS4 communities and their respective Stormwater Coordinators, primarily through participation in the Greater Portland Interlocal Stormwater Working Group (ISWG). Additionally, MTA has continued to be closely involved with the evolving management requirements of UIS watersheds both within and outside of UA:

- Long Creek (outside UA in South Portland);
- Capisic Brook (within UA in Portland); and
- Red Brook (outside UA in Scarborough).

² MTA is not aware of any watershed management planning efforts for Goosefare Brook within this permit year, but maintains periodic communication with stormwater coordinators for the City of Saco. Furthermore, MTA continues to communicate periodically with the City of Lewiston's point of contact for the Hart Brook WMP (Jan Patterson) to remain abreast of developments within this priority UIS watershed.

As mentioned previously, MTA also continues to communicate periodically with host municipalities regarding watershed management planning efforts within Hart Brook (within UA in Lewiston) and Goosefare Brook (within UA in Saco), as well as other stormwater efforts. A list of Stormwater Coordinators for host MS4 municipalities is included in **Attachment C**.

Similar to efforts in Permit Year 1, MTA also continues to contribute to DEP's "Think Blue Maine" campaign and provide a link from MTA's website to CCSWCD's yardscape program, to fulfill MGs for both MCM 1 and 2 in Permit Year 2.

MCM 3 – Illicit Discharge Detection & Elimination (IDDE): The UA within MTA's right-of-way (ROW) was mapped during the previous MPDES Permit cycle using 2000 Census Bureau data. Furthermore, MTA's existing MS4 maps, which include unique identifiers and flow arrows for conveyances, is supplemented by an Access™ database (also developed in the previous 5-year MS4 permit cycle) that contains the construction information for each outfall and catch basin, as well as the proximate receiving surface waterbody. In Permit Year 2, an additional short stretch of UA along MTA's ROW near the Kittery/York Town Line was identified, mapped and inventoried consistent with MS4 requirements described above.

MTA continues to manage the data collected from outfall inspections and catch basin cleanouts using an Access™ database. However, the field data for cleanouts and inspection is captured using tracking forms that contain catch basin and outfall information for each of the MTA territories maintained by Highway Maintenance facilities. Although MTA operates seven Highway Maintenance facilities from Kittery to Augusta, only four of the MTA territories intersect with UA; these include Highway Maintenance facilities located in the following areas (see **Table 1** for more information on UA and MTA territories):

- York (Kittery/York UA);
- Kennebunk (Saco/Biddeford UA);
- South Portland at Crosby Farm (Scarborough/Portland/Falmouth UA); and
- Auburn (Auburn/Lewiston/Sabattus UA).

A copy of the tracking forms for the new Kittery/York UA, as well as the pre-existing Biddeford/Saco UA, is provided in **Attachment D**. Similar tracking forms (for the other two MTA territories traversing UA) are used along with the MS4 maps to identify all of the catch basins and outfalls within their respective territory to be inspected and cleaned out (as needed) by Highway Maintenance personnel.

Consistent with MTA's MS4 UIS strategy, priority was given to conducting dry weather inspections of outfalls that discharge to the two highest priority watersheds (Hart Brook and Goosefare Brook). MTA conducted dry weather of inspection within these priority UIS watersheds, as well as throughout the remaining UA and within the Long Creek watershed (outside UA), as described below:

- As part of MTA's IDDE effort, MTA inspected approximately 321 catch basins and 221 outfalls within UA;
- MTA continued to expand IDDE efforts and documented inspections of catch basins and outfalls outside of UA, specifically within the Long Creek watershed in South Portland. This non-UA effort in South Portland adds another 50 catch basins and 30 outfalls to the conveyances inspected by MTA; thus totaling approximately 371 catch basins and 251 outfalls documented as part of MTA's IDDE effort in Permit Year 2; and
- Sediments were removed from catch basins with priority given to (1) those located within UIS watersheds, specifically Hart Brook and Goosefare Brook; and (2) those located within the median of MTA's ROW, as sediments tend to accumulate more rapidly in these median conveyances.

Sediments were disposed of in accordance with an existing Memorandum of Understanding with DEP.

MTA also continues to maintain an effective standard operating procedure (SOP) to ensure that illicit discharges are detected and properly eliminated during dry weather inspections, as well as during daily routine operations. MTA employees have been trained annually (for several years) to identify, document and report all “*discharges that do not consist entirely of stormwater*” to MTA’s Environmental Services Coordinator, who assists in documenting and notifying applicable regulators/agencies as needed. Although no illicit or non-stormwater discharges were detected in Permit Year 2, MTA documented four patron vehicle accidents within UA that resulted in vehicle fluids being released to the ground and/or stormwater conveyance. Each of these four spills was cleaned up immediately either using MTA resources (i.e., MTA crew and materials) or DEP coordination (i.e., DEP on-call responder worked independently or with a contractor to remediate appropriately); furthermore, none of these potential illicit discharges were permitted to reach any stormwater infrastructure (i.e. catch basins, outfalls) or any waters of the state (i.e., wetlands, rivers or streams). All of these detections were recorded in MTA’s Log of Spills and Spill Report forms were completed to document physical damages and corrective actions (i.e., cleanup activities and control measures taken).

MCM 4 Construction Site Stormwater Runoff Controls: For many years, MTA has implemented many MS4 elements to control stormwater runoff from construction sites (e.g., require contractors’ OSRP to be trained by DEP’s Non-Point Source (NPS) program and provide appropriate certification; inspect and document BMPs for construction performed by MTA employees; etc.). In Permit Year 2, MTA continues to maintain these requirements, as well as those construction-related requirements associated with Chapter 500 and the MOA, including the application of MaineDOT’s BMP Manual to all projects regardless of the one acre threshold thus often exceeding the requirements of this MS4 permit. For example, most of the construction BMPs (structural and non-structural), which are reported to the DEP in the annual MOA report³, are implemented throughout MTA’s ROW (including but not limited to UA) and apply to all linear projects undertaken by MTA (including those less than one acre in disturbed area).

MTA continues to rely on binding contract language to ensure that contractors comply with the construction-related BMPs/requirements of (1) Chapter 500; (2) applicable portions of the MOA; and (3) the MS4 permit. MTA employees and contractors are trained extensively on construction site stormwater runoff controls and are required to maintain inspections for review when performing construction that disturbs land (even less than one acre).

Furthermore, in Permit Year 2, MTA began the development of a new environmental compliance program to ensure all stormwater-related activities and other environmental regulatory obligations/considerations are documented in a singular binder for each construction project completed by contractors for MTA. The compliance program, known as the CPEC Program, separates all construction projects into three phases (i.e., Project Development, Construction, and Post-Construction) and identifies applicable requirements and activities for each project undertaken by MTA. This Program provides a mechanism to ensure that stormwater requirements and other environmental regulatory obligations, including the MPDES Construction General Permit (CGP) and Chapter 500 Stormwater Management Rules, are considered during construction and appropriate actions are taken for reducing pollutants in stormwater from construction activities.

The CPEC documents, including stormwater-related inspections and corrective actions, are kept in a single binder for each of the construction projects undertaken by MTA. During each of the three phases of the project (i.e., project development, construction and post-construction), a corresponding checklist is completed

³ MTA’s Annual MOA Report was submitted to DEP in July 2010.

for each project to ensure compliance is maintained throughout the project by appropriate MTA and/or contractor personnel.

MCM 5 Post-construction Stormwater Management in New Development and Redevelopment: Similar to MCM 4, MTA has implemented many MS4 elements related to post-construction stormwater management for new development and redevelopment to minimize water quality impacts for many years (i.e., training employees on long term O&M practices, etc.). In Permit Year 2, MTA continues to maintain these requirements, as well as post-construction standards associated with Chapter 500 and the MOA throughout MTA ROW regardless of whether or not there is a direct discharge to the waters of the State. MTA provides a summary of these annual O&M practices to DEP in the Annual MOA Report, which was most recently submitted to DEP in July 2010.

To ensure that adequate long-term operations and maintenance (O&M) is continued for newly constructed BMPs, MTA developed and implemented an O&M schedule in Permit Year 1 that is included in **Attachment E**. In addition to this schedule, MTA also developed the CPEC program (described above) to incorporate post-construction BMPs and their respective inspections and O&M for each project constructed by contractors for MTA. MTA anticipates implementing the CPEC program for projects completed internally by Highway Maintenance personnel in Permit Year 3.

MCM 6 – Pollution Prevention (P2) & Good Housekeeping for Community/Facility Operations: As discussed under MCM 1, MTA employees continued to be trained in stormwater P2 and ESC practices, as well as good housekeeping practices. MTA's training program also incorporates construction and post-construction inspection and O&M requirements, including the newly developed BMP O&M schedule included as **Attachment E**.

Consistent with previous years, street sweeping was conducted within all UA. However, in Permit Year 2, priority was given to sweeping as soon as possible after snow melt within the following UIS watersheds:

- Within UA: Hart Brook in Lewiston and Goosefare Brook in Saco; and
- Outside UA: Long Creek in South Portland and Red Brook in Scarborough.

Sweeping is conducted at least once each year on linear areas and multiple times each year in peripheral areas, such as interchanges, toll plazas, park-and-ride lots and other facilities. Sweeping and other P2/good housekeeping measures are also reported to DEP each year in the Annual MOA Report. In Permit Year 2, MTA also purchased an additional vacuum sweeper to ensure sweeping is conducted timely and appropriately within UA and throughout MTA ROW.

As mentioned in MCM 3, MTA continues to operate its annual catch basin cleanout and outfall inspection program consistent with previous years:

- In conjunction with the dry weather inspections conducted by MTA highway maintenance and engineering personnel, HNTB continues to perform annual inspections of MTA's infrastructure, including large stormwater conveyances. Both of these inspection programs identify potential repairs and/or upgrades to be made to conveyances within UA, as well as throughout the remainder of MTA's ROW.
- Collected sediments are removed and disposed of in accordance with an existing Memorandum of Understanding (MOU) with DEP.

Although MTA does not operate any vehicle maintenance facilities within UA, MTA continues to implement the following measures relative to the objectives of MCM 6:

1. Spill Prevention, Control and Countermeasures (SPCC) Plans with integrated Stormwater Pollution Prevention Measures for all MTA Highway/Equipment Maintenance Garages that address the proper use, storage and disposal of petroleum products, as well as non-petroleum products and other hazardous materials;
2. To supplement spill response and prevention measures in the facility-specific SPCC Plans, MTA has developed and implemented a Mobile SPCC Plan for all MTA ROW, and specifically addresses more stringent practices within UA;
3. The integrated stormwater pollution prevention measures incorporated in these SPCC and Pollution Prevention Plans address vehicle and equipment storage practices, maintenance and refueling;
4. Post-construction requirements have been developed and implemented for newly installed structural BMPs include an O&M schedule to ensure long-term maintenance;
5. Construction and post-construction inspection requirements have been implemented for all projects (even those less than 1 acre of disturbed area) in accordance with the Chapter 500 MOA; and
6. MTA maintains an existing road-killed wildlife policy.

SUMMARY OF CORRESPONDENCE WITH DEP

Submittal of Annual Fee: MTA received an invoice from DEP in June 2010 requesting submittal of the MS4 annual fees (as seen in **Attachment F**). MTA subsequently submitted Check #145772 in the amount of \$132.00 to DEP circa July 7, 2010.

Review of Annual Report: MTA received a letter from DEP dated August 4, 2010 (as seen in **Attachment F**). This letter summarized DEP's review of MTA's Permit Year 1 MS4 Annual Report to which there were no questions or comments that required responses from MTA.

If you have any questions concerning this Annual Summary Report of MTA's MS4 SPMP, please do not hesitate to call me at (207) 871-7771, ext. 359.

Respectfully,



John M. Branscom
Environmental Services Coordinator for
Maine Turnpike Authority

cc: Robyn Saunders, GZA GeoEnvironmental, Inc.

ATTACHMENTS:

Table 1	Summary of MTA Facilities within UA
Table 2	SPMP Implementation Schedule for Permit Year 2
Attachment A	Training Documents
Attachment B	Logs of Public Meetings and other Events
Attachment C	Stormwater Coordinators in Host MS4 Communities
Attachment D	Updated Field Sheets
Attachment E	O&M Schedule for MTA Administration Building
Attachment F	DEP Correspondence



TABLES

TABLE 1

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

REGULATED SMALL MS4 COMMUNITY	MILE MARKER DELINEATION ¹		LINEAR DISTANCE OF UA SEGMENT (Miles)	RESPONSIBLE MAINTENANCE FACILITY	MTA FACILITY FEATURES ² WITHIN UA (Roadway and ROW assumed)	STREAMS ³
	Northern Boundary	Southern Boundary				
SABATTUS	MM 84.3 Lisbon Road Underpass	MM 83.6 Sabattus Town Line	0.7	Auburn	None identified	None identified
LEWISTON intermittent contact (<0.1 mile) within Lewiston UA	MM 79.6 Goddard Road Overpass	MM 78.9 Androscoggin River	0.7	Auburn	None identified	1 Hart Brook (also known as Dill Brook) ⁴ 2 Androscoggin River
	MM 81.4 Route 196 & MCRR Overpass		<0.1		None identified	
	MM 80.8 Ferry & Cottage Road Overpass		<0.1		Exit 80 Park and Ride (parking lot)	
AUBURN	MM 78.9 Androscoggin River	MM 78.4 Riverside Road	0.5	Auburn	None identified	2 Androscoggin River
	MM 75.6 Washington Street Overpass	MM 75.0 Kitty Hawk Avenue Underpass	0.6		Exit 75 Interchange (ramp) Exit 75 Park and Ride (parking lot)	
FALMOUTH	MM 53.4 Mountain Road Underpass	MM 51.8 Presumpscot River	1.6	Crosby	Exit 53 Interchange (ramp) Exit 53 Toll Plaza Exit 53 West Falmouth Park and Ride (parking lot)	3 Unnamed tributary of Presumpscot River (crosses Turnpike near Exit 53 NB on-ramp) 4 Presumpscot River
	Falmouth Spur midpoint between CNRR Overpass and Falmouth/Middle Road Overpass	Falmouth Spur Road/Middle Road Overpass	~0.1		None identified	
	Falmouth Spur Presumpscot River	Falmouth Spur Portland/Falmouth Town Line	~0.9		None identified	
PORTLAND	Falmouth Spur Exit 52 Interchange	Falmouth Spur Portland/Falmouth Town Line	~0.1	Crosby	Exit 52 Interchange (ramps and spur)	4 Presumpscot River 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 Capisc Brook ⁴ (within Turnpike ROW south of Warren Ave overpass) 8 Nasons Brook ⁴ (crosses Turnpike south of Brighton Ave and RR) 9 Stroudwater River
	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 Exit 47 Westbrook Park and Ride (parking lot)	
SCARBOROUGH	MM 42.0 Two Rod Road Underpass	MM 41.6 Unnamed tributary of Beaver Brook	0.4	Crosby	Exit 42 Scarborough Park and Ride (parking lot)	10 Unnamed tributary of Beaver Brook (crosses Turnpike south of Two Rod Road underpass)
SACO	MM 35.7 Goosefare Brook	MM 33.0 Saco River	2.7	Kennebunk	Exit 36 Interchange (ramps) Former Exit 36 Interchange (ramps) Saco Hotel and Conference Center Exit	11 Goosefare Brook ⁴ 12 Deep Brook 13 Cole Brook 14 Saco River
BIDDEFORD	MM 33.0 Saco River	MM 32.0 Thacher Brook	1	Kennebunk	Exit 32 Biddeford Park and Ride (parking lot)	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
KITTERY ⁵ York (non-UA)	MM 4.2 Kittery town line	MM 3.1 Cutts Road	1.1	York		17 Unnamed tributary of York River (crosses Turnpike in two places near Welcome Plaza)
	MM 5.2 York River	MM 4.2 Kittery town line	1			

NOTES:

1.) Mile Marker (MM) designations for UA delineations should be considered approximate and will be confirmed and updated, as necessary and as more detailed mapping information is made available.

2.) MTA facility features identified within each host MS4 communities include the roadway (i.e., paved roads, bridges, etc.) and ROW (e.g., approximate 300-foot wide corridor along MTA roadway), as well as interchanges (i.e., approach ramps), spurs and toll plazas as indicated. "None identified" indicates that only MTA roadway and ROW are present within the UA delineation. This table will be updated as more detailed mapping information is made available and/or in the event that MTA facility features are constructed within UA delineations. Please note that none of the MTA maintenance facilities are located within UA.

3.) Streams were identified by using the corresponding 7.5-minute series topographic United States Geological Survey (USGS) quadrangle. Stream locations, as well as water body information, in this table will be updated as more detailed mapping is performed and made available.

4.) Maine DEP classifies several specific waterways within the state designed as Urban Impaired Streams (UIS). A number of these streams cross MTA's ROW in US as listed. These include: Dill Brook, Capisc Brook, Nasons Brook, and Goosefare Brook. The SPMP identifies Goosefare Brook and Dill Brook (i.e. Hart Brook) as the two priority watersheds within MTA's territory.

5.) The southern boundary of MTA territory begins at the Spruce Creek crossing in Kittery. Please note that I-95 territory south of Spruce Creek in Kittery is considered Maine Department of Transportation (MaineDOT) territory. Therefore, UA intersecting with MTA ROW is limited to portions of the roadway north of the Cutts Road overpass in the proximity of the Welcome Center in Kittery. Based on conversations with DEP, it is our understanding that the Town of York is not considered a MS4 host community; however, MTA is implementing the same MS4 measures (e.g., tracking catch basin cleanouts, conducting inspections, etc.) within UA that intersect with MTA ROW (i.e., from Kittery/York Town Line to the York River).

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #1 (MCM 1)

MPDES Permit Part IV(H) 1. Public education and outreach. The three goals of this minimum control measure are: 1. to raise awareness that polluted stormwater runoff is the most significant source of water quality problems in Maine's waters; 2. to motivate people to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and 3. to reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs. The permittee shall document changes in awareness and BMP adoption (behavior change) in target audiences.

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
<p><i>a (i) Raise Awareness (Goal 1); Beginning July 1, 2008, each permittee shall continue raising awareness of stormwater issues amongst employees and contractors.</i></p> <p><i>(1) Each permittee shall establish measurable goals. Progress on these goals must be reported annually for process indicators and in years 1 (background), 3 & 5 for impact indicators.</i></p> <p><i>(2) Each permittee shall include a review in its fifth year Annual Report. The review must include an analysis of the process indicators and impact indicators.</i></p>	<p>Develop an Awareness Plan to raise awareness of stormwater issues amongst employees and contractors</p> <p>Urban Impaired Stream (UIS) Strategy: The Awareness Plan will place emphasis on raising awareness within MTA's two designated highest priority UIS watersheds (e.g., Hart Brook and Goosefare Brook).</p>	<p><i>The Awareness Plan's will raise awareness of polluted stormwater runoff issues and will provide for assessment of process and impact indicators.</i></p>	Year 1: Develop an Awareness Plan for employees and contractors	Drafted an Awareness Plan for MTA employees and contractors	Maintain a copy of the Plan and associated documents (i.e., updated training, etc.)	Environmental Services Coord'r and/or Designated Consultant
			Year 2: Implement BMPs associated with Awareness Plan for employees and contractors	Increased awareness of polluted stormwater runoff issues by providing employees and contractors with MTA's Awareness Plan through employee training and/or the Construction Project Environmental Compliance (CPEC) program implemented for contracted projects in Permit Year (PY) 2	Maintain a copy of the Plan and associated documents in the updated training curriculum and also in CPEC binder documents	
			Years 3-5: Continue following the time line and implementation schedule in Awareness Plan			
			Year 1-2: Assess process indicators as part of the Annual Report	Year 1: A total of 111 MTA employees attended one of eight stormwater training sessions (each 3-hour sessions) conducted at each of the MTA highway maintenance facilities. Year 2: A total of 95 MTA employees attended a 3-hour stormwater training session conducted at each of the MTA highway maintenance facilities. The Awareness Plan was provided to MTA employees and reviewed during each training session. Each employee was tested on stormwater awareness topics (i.e., PY1: in-class exam; PY2: in-class "jeopardy" participation).	Maintain training documentation to assess process indicators, which include (but are not limited to) the following: * training schedules, * sign-in/attendance rosters, * test/evaluations, and * other materials (e.g., database)	
			Year 3-5: Assess process indicators as part of the Annual Report			
			Year 1: Assess impact indicators as part of the Annual Report	The average test score for each of the 8 stormwater training sessions was 90% or higher (overall average: 92%). Please refer to the text of the annual progress report for an assessment of additional impact indicators	Conduct an evaluation (i.e., exam, pop-quiz, etc.) following training to measure awareness of stormwater pollution, BMPs and/or runoff issues	
			Year 3 & 5: Assess impact indicators as part of the Annual Report			
			Year 1: Assess impact indicators as part of the Annual Report			
			Year 3 & 5: Assess impact indicators as part of the Annual Report			
			<p><i>a (ii) Target BMP Adoption (Goal 2); Beginning July 1, 2008, each permittee shall continue outreach efforts from the previous permit cycle while encouraging employees and contractors to utilize BMPs that minimize stormwater pollution.</i></p> <p><i>(1) Each permittee shall establish measurable goals. Progress on these goals must be reported annually for process indicators and in years 1 (background), 3 & 5 for impact indicators.</i></p> <p><i>(2) Each permittee shall include a review in its fifth year Annual Report. The review must include an analysis of the process indicators and impact indicators.</i></p>	<p>Develop a BMP Adoption Plan for employees and contractors to minimize stormwater pollution</p> <p>Urban Impaired Stream (UIS) Strategy: The BMP Adoption Plan will place emphasis on utilizing target BMPs within MTA's two designated highest priority UIS watersheds (e.g., Hart Brook and Goosefare Brook).</p>	<p>Identify target BMPs to be utilized by employees and contractors that minimize stormwater pollution</p>	
Year 2: Implement BMPs and continue to identify additional BMPs that minimize stormwater pollution	Implemented BMPs and continue to identify additional BMPs that minimize stormwater pollution as part of MTA operations: - BMPs are emphasized in CPEC program; and - Target BMPs are listed in MaineDOT's BMP Manual which is referenced in contract language for MTA projects.					
Year 3-5: Implement BMPs and continue to identify additional BMPs that minimize stormwater pollution						
Year 1-2: Assess process indicators as part of the Annual Report	Year 1: A total of 111 MTA employees attended one of eight stormwater training sessions (each 3-hour sessions) conducted at each of the MTA highway maintenance facilities. Year 2: A total of 95 MTA employees attended a 3-hour stormwater training session conducted at each of the MTA highway maintenance facilities. The BMP Adoption Plan was provided to MTA employees and reviewed during each training session. Each employee was tested on BMP-specific topics (i.e., PY1: in-class exam; PY2: in-class "jeopardy" participation).	Conduct inspections of work sites to provide a baseline for future assessment of process indicators (i.e., as part of CPEC program implementation in Permit Year 2)				
Year 3-5: Assess process indicators as part of the Annual Report						
Year 1: Assess impact indicators as part of the Annual Report	Please refer to the text of the annual progress report for an assessment of impact indicators	Maintain copies of training records, inspection logs for construction, maintenance activity records and/or other documents referenced in BMP Adoption Plan to demonstrate achievement of goals and program objectives.				
Year 3 & 5: Assess impact indicators as part of the Annual Report						
Year 1: Assess impact indicators as part of the Annual Report						
Year 3 & 5: Assess impact indicators as part of the Annual Report						

Italic font = MS4 permit language
 Blue font = MGs accomplished to date
 Red font = UIS Strategy
 Bold font = Goals achieved during current permit year

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #1 (MCM 1) - continued

MPDES Permit Part IV(H) 1. Public education and outreach. The three goals of this minimum control measure are: 1. to raise awareness that polluted stormwater runoff is the most significant source of water quality problems in Maine's waters; 2. to motivate people to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and 3. to reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs. The permittee shall document changes in awareness and BMP adoption (behavior change) in target audiences.

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
<p><i>a(iii) Compliance with this MCM will be based upon:</i> (1) Continued existing education and outreach efforts (existing efforts from previous 5-year Plan are indicated in blue text); (2) Reported process and impact indicators; and (3) Completed annual reports and a 5-year analysis of the plans.</p> <p>Urban Impaired Stream (UIS) Strategy: Information regarding MTA's two designated highest priority UIS watersheds will be incorporated into the existing education and outreach efforts continued from previous MS4 permit cycle..</p>	a. Conduct training to address pollution reduction in stormwater runoff for MTA employees	Ensure MTA employees are educated and appropriately trained	Year 1: Continue Stormwater Training Program for MTA staff	A total of 111 MTA employees were trained as part of MTA's stormwater training program, which was continued and revised to include (but not limited to): * Erosion prevention and sedimentation control, including construction and post-construction BMPs, O&M and inspection requirements; and * Information on priority UIS watersheds (e.g., Hart Brook, Goosefare Brook), as well as Long Creek (a non-UA watershed)	Maintain stormwater training schedule, rosters, quizzes, etc.	Environmental Services Coord'r and/or Public (Government and Community) Relations Office
			Year 2:	A total of 95 MTA employees were trained as part of MTA's stormwater training program, which was continued and revised to include (but not limited to): * Mobile refueling procedures in UA and UIS watersheds; * Additional UA identified in York and Kittery; * Development of Construction Project Environmental Compliance (CPEC) Program; * Erosion prevention and sedimentation control, including construction and post-construction BMPs, O&M and inspection requirements; and * A review of PY1 information, including MS4 permit revisions, priority UIS strategy and other UIS watershed considerations.		
			Year 3-5: Continue Stormwater Training Program for MTA staff			
	b. Require contractors to maintain an on-site responsible party (OSRP) who is training in erosion and sediment control	Ensure that OSRP has the authority to promptly remedy any deficient controls	Year 1-2: Continue to obtain Erosion and Sedimentation Control (ESC) certification from contractors' OSRP	MTA continues to require Contractors to submit training documentation for ESC certification (e.g., as part of CPEC program, during pre-construction meetings, etc.). Standard contract documents remain in place stipulating that a qualified OSRP is on-site and authorized to remedy ESCs appropriately.	Maintain ESC certification documents from contractors	
			Year 3-5: Continue to obtain ESC certification from contractors' OSRP			
			Year 1-2: Address stormwater topics at meetings and on MTA website	MTA continues to coordinate with others on important stormwater issues (including MTA's two priority UIS watersheds) by: (1) participating in the Greater Portland ISWG; (2) attending Watershed Management Planning meetings for UIS watersheds; (3) contributing to the DEP's "Think Blue" campaign; (4) including information on stormwater in newsletters, internal and public meetings, etc.; and (5) maintaining an environmental link on the MTA website, including a link to the CCSWCD yardscape program.		
Year 3-5: Address stormwater topics at meetings and on MTA website						

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #2 (MCM 2)

MPDES Permit Part IV(H) 2. Public involvement and participation. *The goal of this minimum control measure is to involve the permittee's community including various departments, bureaus or facilities, and when applicable involve regulated small MS4 communities in both the planning and implementation process of improving water quality and reducing quantity via the stormwater program. An active and involved participation process is crucial to the success of a stormwater management program because it allows for broader support, addition expertise and a conduit to other programs.*

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY	
<i>a(i) Public notice requirements. The permittee shall comply with applicable state and local Public Notice requirements using effective mechanisms for reaching the public, and comply with the public notice requirements of the Maine Freedom of Access Act, 1 M.R.S.A. 4401 et seq. ("FOAA") when the permittee involves stakeholders in the implementation of this general permit. The permittee shall document the meetings and attendance through the annual report as a way of measuring this goal.</i>	Ensure that appropriate public notice requirements are met when public meetings are held that address stormwater topics	Comply with applicable state and local Public Notice requirements using effective mechanisms for reaching the public, and comply with the public notice requirements of the Maine Freedom of Access Act, 1 M.R.S.A. 401 et seq. ("FOAA") when the permittee involves stakeholders in the implementation of this general permit. The permittee shall document the meetings and attendance through the annual report as a way of measuring this goal.	Year 1: Continue to ensure all public meetings that address stormwater meet FOAA requirements	Public notices continue to be executed in accordance with FOAA requirements. <i>A list of meetings, including a MTA Board Meeting on December 16, 2008 that was open to the public and included many stormwater topics, is presented as Attachment B to PY1 annual report.</i>	Maintain written public notice policy that complies with FOAA requirements, public notice announcements and a log of applicable meetings	Environmental Services Coord'r and/or Public (Government and Community) Relations Office	
			Year 2: Public notices continue to be executed in accordance with FOAA requirements.	<i>A list of meetings, including a MTA Board Meeting on December 17, 2009 that was open to the public and included stormwater topics, is presented as Attachment B to this annual report.</i>			
			Year 3-5: Continue to ensure all public meetings that address stormwater meet FOAA requirements				
<i>a(ii) Coordinate with regulated communities. The permittee shall coordinate efforts by providing information on planned activities to Regulated Small MS4 municipal stormwater coordinators. The permittee shall develop a strategy to ensure involvement, mutual cooperation and coordination with the Regulated Small MS4 municipalities, and report on such efforts annually pursuant to Part IV(J) on joint efforts, meetings attended, projects and coordination.</i>	Coordinate with host MS4 communities, as well as MaineDOT, by sharing information on planned activities	Contact each host MS4 community to identify the respective stormwater coordinator	Year 1: Compile list of Stormwater Coordinators for host MS4 communities	<i>A list of Stormwater Coordinators for host MS4 communities was developed based on participation in ISWG meetings and watershed management planning efforts attended by MTA.</i>	Maintain list of Stormwater Coordinators for each host MS4 community		
			Year 2: Communicate with host MS4 communities via the designated Stormwater Coordinator	<i>MTA has maintained communications with host MS4 communities and their respective Stormwater Coordinators (i.e., Point of Contact) through numerous meetings, including those listed in Attachment B of this Annual Report.</i>			Maintain documentation regarding communication and/or coordination with host MS4 communities
			Year 3-5: Communicate with host MS4 communities via the designated Stormwater Coordinator				
		Report annually on involvement, mutual cooperation and coordination with host MS4s	Year 1: Develop strategy for coordinating with host MS4s and document subsequent coordination	<i>MTA continues to be closely involved with respect to evolving stormwater management requirements of UIS, in particular Hart Brook within UA (but also Long Creek, outside UA). Additionally, MTA participated in the DEP's "Think Blue" media campaign.</i>	Summarize coordination in each annual report		
			Year 2: Develop strategy for coordinating with host MS4s and document subsequent coordination	<i>MTA continues to be closely involved with respect to evolving stormwater management requirements in UIS watersheds both within and outside of UA, in particular Long Creek, Capisic Brook and Red Brook in PY2. MTA also communicates with host municipalities to stay abreast of WMP efforts in Hart Brook and Goosefare Book. MTA also continues to participate in DEP's "Think Blue" media campaign and provide a link from MTA's website to CCSWCD's yardscape program</i>			
			Years 3-5: Develop strategy for coordinating with host MS4s and document subsequent coordination				

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TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #3 (MCM 3)

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

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY					
<p>a. (i) By June 30, 2013, each permittee shall develop a watershed-based storm sewer system infrastructure map of its respective MS4 within the UA showing all stormwater catch basins, connecting surface and subsurface infrastructure depicting the direction of in-flow and out-flow pipes, and the locations of all discharges from all outfalls operated by the permittee.</p>	<p>Develop watershed-based Storm Sewer System Infrastructure Maps for MTA Facility within UA</p> <p>Urban Impaired Stream (UIS) STRATEGY: Priority will be given to mapping of UIS watersheds within UA. For example, the MGs listed for PY1 through PY5 will be conducted in PY1 for CBs and OFs within UA.</p>	<p>Each catch basin must be uniquely identified: -to facilitate control of potential illicit discharges, and -to ensure proper operation and maintenance of the structures.</p> <p>For each outfall, the following information must be included: -type, material, and size of conveyance; -outfall or channelized flow; -the name and location of the immediate surface waterbody or wetland to which the stormwater runoff discharges.</p> <p>If an outfall does not discharge directly to a named waterbody, identify the name and location of the nearest named waterbody to which the outfall eventually discharges.</p>	<p>Year 1: Review existing MS4 maps that were compiled as part of the previous MS4 permit</p>	<p>MTA maintains existing MS4 maps which were completed as part of previous MS4 permit. These maps were developed using 2000 Census data which is a requirement of the current MS4 permit.</p>	<p>Maintain inventory of maps for portions of MTA facility within UA</p>	<p>Environmental Services Coordinator and/or Designated Consultant</p>					
			<p>Identify potential updates to UA maps that must be made to meet these new IDDE requirements before June 2013</p>	<p>No potential updates to UA maps were identified during PY1. When MTA's MS4 maps and associated database were created, the specific information required (i.e., unique identifier, type/size of conveyance, immediate surface waterbody, etc.) was collected and is maintained in the database.</p>	<p>Maintain punchlist of potential upgrades to maps</p>						
			<p>Year 2: Ensure that maps include all CBs and subsurface infrastructure depicting flow directions</p>	<p>MTA already maintains MS4 mapping to include flow arrows depicting the flow directions between all MTA stormwater infrastructure.</p>	<p>Maintain updated maps that include: - uniquely identified CBs and associated surfaces - flow directions - outfall description (e.g., type, material, size)</p>		<p>Environmental Services Coordinator and/or Designated Consultant</p>				
			<p>Ensure that maps include details pertaining to construction of each outfall</p>	<p>MTA also continues to maintain a comprehensive stormwater database that stores construction information for MTA outfalls located within UA.</p> <p>In PY 2, additional UA was identified in York and Kittery. The stormwater infrastructure (i.e. CBs and OFs) were identified, mapped and added to the existing database.</p>							
			<p>Year 3: Revise maps to include connecting surface associated with CBs</p>								
			<p>Revise maps to include the name and location of immediate surface waterbody or wetland to which each outfall discharges</p>								
			<p>Year 4-5: Revise maps to identify receiving waters for outfalls that do not directly discharge to a named waterbody</p>								
			<p>a. (ii) Each permittee shall develop and implement a prioritized dry weather outfall inspection plan based on drainage areas such as an urban impaired stream watershed, or based on a watershed or sub-watershed that the permittee has identified as having the greatest potential threat to the receiving water.</p>	<p>Develop prioritized dry weather inspection program</p> <p>Urban Impaired Stream (UIS) STRATEGY: Priority will be given in Year 1 to conducting dry weather inspections of outfalls that discharge to MTA's two highest priority watersheds. Although not located within UA, MTA will expand dry weather inspection of outfalls to include MTA right-of-way (ROW) that intersects with the Long Creek watershed.</p>	<p>Develop a defined standard operating procedure (SOP), procedure and policy for identifying illicit discharges during dry weather inspections and the detailed steps to locate and eliminate the source</p>			<p>Year 1: Review, develop and/or update the SOP, policy and protocol for identifying illicit discharges during dry weather inspections</p>	<p>MTA's IDDE SOP was reviewed and is being updated to ensure that the SOP is compliant with new MS4 permit requirements.</p>	<p>Retain written notification policy for consistently reporting suspected illicit discharges internally and externally</p>	<p>Environmental Services Coordinator and/or Designee</p>
								<p>Year 2: Implement a defined SOP with detailed steps that must be taken to locate and eliminate the source of an illicit discharge when it is identified during these inspections</p>	<p>MTA continues to maintain an effective SOP for identifying illicit discharges during dry weather inspections.</p>	<p>Maintain source location determinations, as well as corrective actions taken to eliminate the illicit connection/discharge</p>	
								<p>Year 3-5: Implement a defined SOP with detailed steps that must be taken to locate and eliminate the source of an illicit discharge when it is identified during these inspections</p>			
<p>Conduct dry weather inspection of outfalls within UIS watersheds in UA</p>	<p>Year 1: Conduct a dry weather inspection of outfalls that discharge to the two highest priority watersheds (e.g., Hart Brook and Goosefare Brook)</p>	<p>Dry weather inspections of outfalls that discharge to the two highest priority watersheds (Hart Brook and Goosefare Brook) were conducted by highway maintenance personnel during PY1.</p>				<p>Document dry weather inspections within UIS watersheds</p>		<p>Environmental Services Coordinator and/or Highway Maintenance Supervisor</p>			
<p>Year 2: Expand the dry weather inspection of outfalls to include any remaining UIS within UA</p>	<p>Dry weather inspections of outfalls that discharge to the two highest priority watersheds (Hart Brook and Goosefare Brook) and other UIS within UA were conducted by MTA during PY2.</p> <p>In PY2, MTA was able to conduct dry weather inspections of all outfalls within UA, plus those within the Long Creek watershed outside of UA.</p>										
<p>Year 3-5: Expand the dry weather inspection of outfalls to include any remaining UIS within UA</p>											

Italic font = MS4 permit language
 Blue font = MGs accomplished to date
 Red font = UIS Strategy
 Bold font = Goals achieved during current permit year

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #3 (MCM 3) - continued

MPDES Permit Part IV(H) 3. Illicit Discharge Detection and Elimination (IDDE). *Each permittee must develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges, as defined in 06-096CMR521(9)(b)(2), except as provided in Part IV(H)3(b) of this permit.*

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
<i>a. (iii) By the end of permit year five, to the extent allowable under State or local law, MaineDOT/MTA shall develop and implement a strategy to detect any illicit discharges to their open ditch system within their two highest priority watersheds.</i>	Establish a strategy for addressing illicit discharges to open ditch systems within two highest priority watersheds (e.g., Hart Brook and Goosefare Brook)	Utilize existing mechanisms (e.g., IDDE Notification Form, Mobile SPCC Plan Spill Reporting, Highway Safety Incident Response, Annual Comprehensive Inspection conducted by HNTB) to provide consistent protocol for internal reporting through an established chain-of-command, which establishes a central point of contact for MTA to notify state and municipal enforcement authorities	Year 1: Review for potential revisions to existing mechanisms to document any detected illicit discharges in open ditch system	MTA's Spill Report Form was updated to include illicit discharge detection information. Other existing mechanisms were evaluated during Permit Year 1 and will continue to be considered to ensure illicit discharges are eliminated from open ditch systems within UA.	Maintain source location determinations, as well as corrective actions taken to eliminate the illicit connection/discharge	Environmental Services Coordinator and/or Designated Consultant
			Year 2: Implement revisions to document illicit discharges detected in open ditch system within MTA's two highest priority watersheds, as necessary	MTA's IDDE SOP was reviewed in PY2 to ensure that illicit discharge detection in open ditch systems will be implemented appropriately, not only in MTA's two highest priority UIS watersheds, but within MTA's UA. Since MTA's highway maintenance personnel routinely inspect open ditch systems during mowing, brush clearing and other routine operations, they have been trained (annually since 2004) to report discharges "that do not consist entirely of stormwater" to MTA's Environmental Services Coordinator.		
			Year 3-5: Continue to document illicit discharges detected in open ditch system within MTA's two highest priority watersheds, as necessary			
<i>b. This permit authorizes non-stormwater discharges provided they do not contribute to a violation of water quality standards, as determined by the Department; these discharges must be addressed in the Plan if they are identified by the permittee as significant contributors of pollutants to the regulated small MS4.</i>	Modify this Plan, as necessary, to address non-stormwater discharges that are identified as significant contributors of pollutants to the MS4	Ensure that this SPMP addresses identified non-stormwater discharges that are considered significant contributors of pollutants to the regulated MS4	Year 1-2: Identify and document non-stormwater discharges as they are discovered during dry weather inspections, mapping, etc.	No non-stormwater discharges have been discovered during PY1 or PY2. MTA maintains a log of spills along MTA's right-of-way, including spills within UA. All spills are properly documented and remediated to avoid impacts to stormwater discharges and to eliminate the potential for contributing to an illicit discharge.	Maintain log of identified non-stormwater discharges that potentially contribute to a violation of water quality standards	Environmental Services Coordinator and/or Designated Consultant
			Revise the SPMP and this implementation schedule as necessary	No non-stormwater discharges have been discovered during PY1 or PY2; therefore, no revisions to the SPMP are necessary at this time		
			Year 3-5: Identify and document non-stormwater discharges as they are discovered during dry weather inspections, mapping, etc.			
			Revise the SPMP and this implementation schedule as necessary			

MINIMUM CONTROL MEASURE #4 (MCM 4)

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MPDES Permit Part IV(H) 4. Construction site runoff control. *Develop, implement and enforce a program or modify an existing program, to reduce pollutants in any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Each permittee must include standard operating procedures for addressing and implementing compliance and enforcement actions.*

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS		ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
The program will include, but not be limited to, the development and implementation of the Memorandum of Agreement (MOA) between MDEP, MTA and MDOT.	Develop and implement MEPDES MOA that establishes a program to reduce pollutants in stormwater runoff from construction activities at regulated projects. UIS Strategy: Additional BMPs in the two highest priority UIS watersheds will be addressed in the proposed MOA.	Development of a MEPDES MOA will provide permit coverage to MTA and MaineDOT associated with the duplicative requirements of the three MEPDES programs: MS4 GP, MCGP and MSGP. The proposed MOA will be reasonably consistent with the standards established by the DEP in MCMs #4 through #6 of this MS4 General Permit (GP), as well as the Maine Construction General Permit (MCGP) and DEP's Multi-Sector General Permit (MSGP).	Year 1:	Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	MTA implemented Erosion and Sedimentation Control (ESC) practices, including daily construction inspection requirements and BMPs at all MTA sites (even those less than one acre - in accordance with Chapter 500 MOA). Through binding contract language, MTA continues to require contractors (1) to comply with Chapter 500 standards for all projects; and (2) to provide NPS training certification for each OSRP.	Maintain documentation associated with MOA development process with DEP	Environmental Services Coordinator and/or Designee
			Year 2:	Finalize MEPDES MOA and identify specific requirements	Although no MEPDES MOA was developed or adopted in PY2, MTA continues to implement the measures described above in PY1. MTA also implemented a new environmental compliance program to ensure all stormwater related activities and other environmental regulatory considerations are documented in a singular binder for all construction projects completed by Contractors for MTA. The compliance program, known as the Construction Project Environmental Compliance (CPEC) program, separates all construction projects into three phases (i.e., Project Development, Construction, and Post-Construction) and identifies applicable requirements and activities for each project undertaken by MTA. The program provides a mechanism for ensuring that stormwater requirements and other environmental regulatory obligations are considered and appropriate actions are taken for reducing pollutants in stormwater runoff from construction activities at regulated projects.		
			Year 3-5:	Implement MEPDES MOA and prepare annual MOA report	Maintain records for projects to be included in annual MOA report and associated records		

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #5 (MCM 5)

MPDES Permit Part IV(H) 5. Post-construction stormwater management in new development and redevelopment.

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
<i>a. Required</i>						
<i>(i) Each permittee shall develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge directly to waters of the State other than groundwater.</i>	Develop and implement MEPDES MOA that establishes a program for new development and redevelopment that addresses stormwater runoff from projects that disturb one acre or more discharging directly to waters of the State. <i>This program must ensure that controls are in place that are designed to prevent or minimize water quality impacts.</i>	Development of a MEPDES MOA will provide permit coverage to MTA and MaineDOT associated with the duplicative requirements of the three MEPDES programs: MS4 GP, MCGP and MSGP. The proposed MOA will be reasonably consistent with the standards established by the DEP in MCMs #4 through #6 of this MS4 General Permit (GP), as well as the Maine Construction General Permit (MCGP) and DEP's Multi-Sector General Permit (MSGP).	Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	Although a MEPDES MOA was not developed with DEP, MTA continues to address stormwater runoff from new development and redevelopment projects of all sizes, within UA and throughout MTA's ROW. However, there were no projects identified in Permit Year 1 that "discharge directly to waters of the State."	Maintain documentation associated with MOA development process with DEP	Environmental Services Coordinator and/or Designee
			Year 2: Finalize MEPDES MOA and identify specific requirements	Although a MEPDES MOA was not developed with DEP, MTA implemented a new environmental compliance program for new development and redevelopment that addresses stormwater runoff from all MTA projects, both during construction and post-construction. This program, known as the CPEC Program, was designed to ensure that appropriate controls are in place during all phases of construction to prevent or minimize water quality impacts from stormwater runoff.	Maintain a CPEC Program binder for each project to demonstrate compliance and to document MTA's efforts to minimize water quality impacts	
			Year 3-5: Implement MEPDES MOA and prepare annual MOA report		Maintain records for projects to be included in annual MOA report and associated records	
<i>(ii) Each permittee shall develop and implement strategies that include a combination of structural and/or non-structural best management practices (BMPs) appropriate for its regulated small MS4.</i>	Develop and implement MEPDES MOA that addresses strategies that include appropriate structural and non-structural BMPs.		Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	MTA continues to train employees internally to identify appropriate strategies that include both structural and non-structural BMPs, as well as rely on design engineers to meet Chapter 500 standards	Maintain documentation associated with MOA development process with DEP	Environmental Services Coordinator and/or Designee
			Year 2: Finalize MEPDES MOA and identify specific requirements	In addition to continuing the efforts described above in PY1, the CPEC program was developed in PY2 to address strategies that incorporate appropriate structural and non-structural BMPs into MTA projects.	Maintain a CPEC Program binder for each project to identify structural and non-structural BMPs to be maintained	
			Year 3-5: Implement MEPDES MOA and prepare annual MOA report		Maintain records for projects to be included in annual MOA report and associated records	
<i>(iii) To ensure adequate long-term operation and maintenance of post construction BMPs, each permittee shall develop, as part of its Stormwater Program Management Plan, an approved BMP inspection schedule that at a minimum stipulates that new BMPs are inspected at least once during the first year of installation.</i>	Develop and implement MEPDES MOA that includes guidelines for post construction BMP inspections. Post construction BMP inspections must determine if the BMP is adequately maintained and is functioning as intended or requires maintenance. If the post construction BMP requires maintenance, provide a record of the deficiency and corrective action(s) taken.	<i>Each permittee shall include the following in their annual report:</i> -the cumulative number of post construction BMPs discharging directly into waters of the State other than groundwater or into their separate storm sewer system; -the number of sites with documented functioning post construction BMPs; and -the number of sites requiring routine maintenance or remedial action to ensure that the post construction BMP is functioning as intended.	Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	MTA has developed an O&M schedule that incorporates annual inspection requirements for all newly installed structural BMPs. - No significant projects with BMPs were identified within UA in PY1 (even newly constructed MTA Headquarters is located outside UA). - Therefore, no development/redevelopment sites within UA were identified as discharging directly into waters of the State in PY1. - Although no sites were located within UA and/or identified during PY1, MTA continues to monitor ROW for existing BMPs that require maintenance to ensure that they function as intended.	Maintain documentation associated with MOA development process with DEP	Environmental Services Coordinator and/or Designee
			Year 2: Finalize MEPDES MOA and identify specific requirements	MTA continues to implement the O&M schedule described above in PY1 for newly installed BMPs. The CPEC program incorporates post-construction BMPs, as well as inspections and other O&M considerations, for all projects undertaken by MTA. The CPEC program provides a mechanism for ensuring that records are maintained on all inspections, maintenance activities, and corrective action(s) for new projects starting in PY3.	Maintain a copy of the established MEPDES MOA	
			Year 3-5: Implement MEPDES MOA and prepare annual MOA report		Maintain records for projects to be included in annual MOA report and associated records	

Italic font = MS4 permit language
 Blue font = MGs accomplished to date
 Red font = UIS Strategy
 Bold font = Goals achieved during current permit year

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #6 (MCM 6)

MPDES Permit Part IV(H) 6. Pollution prevention (P2)/good housekeeping in community/facility operations. *This MCM has the ultimate goal of preventing or reducing reducing pollutant runoff from MaineDOT's/MTA's roads, other paved surfaces, infrastructure, and facilities through the development and implementation of an operation and maintenance (O&M) program. The O&M program must include the following:*

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY	
<i>a. Required</i>							
<i>i. By the end of permit year one, each permittee shall develop an inventory of potential pollutant sources and associated operations conducted in, on or associated with facilities, buildings, roads, travel ways including right-of-way owned or operated by the permittee that have the potential to cause or contribute to stormwater or surface water pollution. By the end of permit year two, the permittee shall develop written operation and maintenance procedures that include maintenance schedules and inspection procedures to ensure long term operation of structural and non-structural controls and reduce stormwater pollution to the maximum extent possible.</i>	Develop and implement MEPDES MOA that includes an O&M Plan that addresses potential pollutant sources and O&M procedures, such as: <i>(1) proper use, storage and disposal of petroleum and non petroleum products, hazardous materials, waste materials, pesticides and fertilizers including minimizing the use of these products, and an alternative product analysis;</i> <i>(2) spill response and prevention;</i> <i>(3) vehicle and equipment storage, maintenance and fueling;</i> <i>(4) landscaping and lawn care including, where applicable and not subject to other federal regulations, an evaluation of reduced mowing frequencies, establishing and maintaining buffers, cutting vegetation within 100 feet of a stormwater conveyance or surface water;</i> <i>(5) erosion and sedimentation control; and</i> <i>(6) disposal of road-killed wildlife.</i>	Development of a MEPDES MOA will provide permit coverage to MTA and MaineDOT associated with the duplicative requirements of the three MEPDES programs: MS4 GP, MCGP and MSGP. The proposed MOA will be reasonably consistent with the standards established by the DEP in MCMs #4 through #6 of this MS4 General Permit (GP), as well as the Maine Construction General Permit (MCGP) and DEP's Multi-Sector General Permit (MSGP).	Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	MTA developed and implemented an O&M schedule for newly installed BMPs located throughout MTA's ROW, not just within UA, during Permit Year 1. MTA does not operate any of these newly installed BMPs and/or Maintenance Garages within UA. Furthermore, MTA does not anticipate that petroleum and/or non-petroleum products (e.g., potential pollutant sources) to be stored, used or disposed of within UA areas. However, MTA already maintains the following policies, procedures and plans: (1) Spill Prevention, Control and Countermeasures (SPCC) Plans with integrated Stormwater Pollution Prevention Measures for all MTA Highway/Equipment Maintenance Garages that address the proper use, storage and disposal of petroleum products, as well as non-petroleum products and other hazardous materials; (2) Spill response and prevention measures have been established at these facilities in the SPCC Plans, as well as in MTA's Mobile SPCC Plan that is implemented throughout all MTA ROW; (3) The integrated stormwater pollution prevention measures incorporated in these Plans address vehicle and equipment storage practices, maintenance and refueling; (4) Post-construction requirements for newly installed structural BMPs, including an O&M schedule for mowing and inspections in accordance with applicable Chapter 500 requirements, were developed during Permit Year 1; (5) Construction and post-construction inspection requirements have been implemented for all projects (even those less than 1 acre) have been implemented in accordance with the Chapter 500 MOA; and (6) Road-killed wildlife policy.	Maintain documentation associated with the O&M schedule and other existing documents relevant to implementing MCM 6	Environmental Services Coordinator and/or Designee	
			Year 2: Finalize MEPDES MOA and identify specific requirements	In addition to continuing the practices described above in PY1, MTA also implemented the new CPEC program to ensure appropriate documentation of these MTA policies, procedures, and plans are maintained in a centralized location for new projects.			Maintain a copy of the established MEPDES MOA
			Year 3-5: Implement MEPDES MOA and prepare annual MOA report				Maintain records for projects to be included in annual MOA report and associated records
<i>ii. Using training materials that are available from the EPA, the State, regional stormwater groups or other organizations, Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine volumes 1 and 2, and the ThinkBlueMaine website, this program must include employee training to prevent and reduce stormwater pollution from permittee operations and facilities. The permittee shall report annually on the types of training presented, the number of employees and contractors that received training, the length of the training and training effectiveness.</i>	Develop Stormwater Pollution Reduction Training Program for contractors and MTA employees <div style="border: 1px solid red; padding: 2px; color: red; font-size: small;"> UIS Strategy: Revise Stormwater Training Program to include additional information pertaining to UIS watersheds and additional BMPs </div>	The existing training programs conducted for MTA employees will be reviewed and updated, as necessary, to include additional information pertaining to stormwater pollution prevention and ESC BMPs from the resources detailed in the GP. Because MTA does not conduct training for contractors, MTA will rely on contractors to become certified through the DEPs Non-Point Source Training Center or an equivalent program. Contractors will provide proof of certification to MTA as part of the Training Program	Year 1: Conduct existing training program that addresses stormwater pollution prevention, as well as erosion and sediment control	As previously detailed in MCM 1, MTA's SPCC training program was conducted in May and June 2009 and included stormwater pollution prevention, as well as erosion and sediment controls, construction and post-construction inspections and BMP requirements.	See MCM #1 ↓ ↓ ↓	See MCM #1 ↓ ↓ ↓	
			Year 1: Revise existing training program to incorporate additional information from resources identified in GP	Training program was revised to include information and resources identified in the GP.			
			Year 1: Review current files to ensure that contractors are certified by DEP in stormwater pollution prevention, as well as erosion and sediment control	MTA continues to rely on the DEP's NPS Training Program to certify contractors; but MTA obtains ESC certification from all contractor's OSRPs.			
			Year 1: Include the required training information in the annual report	Completed training documentation is included as part of the PY1 Annual Report.			
			Year 2: Continue training program and annual reporting	As previously detailed in MCM 1, MTA's SPCC/Stormwater training program was conducted in May and June 2010 and included stormwater pollution prevention, as well as erosion and sediment control practices, construction and post-construction inspections and BMP requirements. Revisions to the SPCC/Stormwater training program are summarized in MCM 1 and copies included in Attachment A of this PY2 Annual Report.			
Year 3-5: Continue training program and annual reporting							

Italic font = MS4 permit language
 Blue font = MGs accomplished to date
 Red font = UIS Strategy
 Bold font = Goals achieved during current permit year

TABLE 2
STORMWATER PROGRAM MANAGEMENT PLAN (SPMP) IMPLEMENTATION SCHEDULE
 Maine Turnpike Authority

MINIMUM CONTROL MEASURE #6 (MCM 6) - continued

MPDES Permit Part IV(H) 6. Pollution prevention (P2)/good housekeeping in community/facility operations. *This MCM has the ultimate goal of preventing or reducing reducing pollutant runoff from MaineDOT's/MTA's roads, other paved surfaces, infrastructure, and facilities through the development and implementation of an operation and maintenance (O&M) program. The O&M program must include the following:*

MCM REQUIREMENT	BEST MANAGEMENT PRACTICES (BMPs)	METHODOLOGY/PURPOSE	MEASURABLE GOALS	ACHIEVEMENTS AND COMPLETED GOALS	DOCUMENTATION	RESPONSIBLE PARTY
<i>a. Required</i>						
<i>iii. Each permittee shall develop and implement a program to sweep all paved streets and parking lots maintained by the permittee at least once a year as soon as possible after snowmelt.</i>	Develop and implement MEPDES MOA that includes an O&M Plan that addresses sweeping of paved surfaces	Development of a MEPDES MOA will provide permit coverage to MTA and MaineDOT associated with the duplicative requirements of the three MEPDES programs: MS4 GP, MCGP and MSGP. The proposed MOA will be reasonably consistent with the standards established by the DEP in MCMs #4 through #6 of this MS4 General Permit (GP), as well as the Maine Construction General Permit (MCGP) and DEP's Multi-Sector General Permit (MSGP).	Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	Although a MEPDES MOA was not developed, MTA continued to implement the existing annual sweeping program for the mainline and associated areas.	Maintain documentation associated with MOA development process with DEP	Environmental Services Coordinator and/or Designated Consultant
			Year 2: Finalize MEPDES MOA and identify specific requirements		Maintain a log of sweeping activities (provided to DEP in Annual MOA Report)	
	Continue existing annual sweeping program established under previous MS4 permit cycle		Year 3-5: Implement MEPDES MOA and prepare annual MOA report		Maintain records for projects to be included in annual MOA report and associated records	
	UIS Strategy: Priority will be given to sweeping within two highest priority UIS watersheds as soon as possible after snowmelt.		Year 1-2: Continue to implement MTA's existing annual sweeping program	Sweeping was conducted within all UA with priority given to sweeping within UIS watersheds (Hart Book and Goosefare Brook) as soon as possible after snow melt.	Maintain a copy of a memo regarding prioritized sweeping efforts from Director of Highway Maintenance	Highway Maintenance staff
			Year 3-5: Continue to implement MTA's existing annual sweeping program		Maintain O&M documents for sweeping program	Highway Maintenance staff
	<i>iv. The permittee shall develop and implement a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once every other year and dispose of the removed sediments in accordance with current state law.</i>		Develop and implement MEPDES MOA that includes an O&M Plan that addresses CB inspections and cleanouts		Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	MTA continues to clean out catch basins of accumulated sediments and debris on an annual basis. Removed sediments are disposed of in accordance with an existing Memorandum of Understanding (MOU) with DEP.
Year 2: Finalize MEPDES MOA and identify specific requirements		Maintain documentation relative to sediment removal and disposal				
Continue existing annual catch basin cleanout program established under previous MS4 cycle		Year 3-5: Implement MEPDES MOA and prepare annual MOA report			Maintain records for projects to be included in annual MOA report and associated records	
UIS Strategy: Priority will be given to cleaning out catch basins within two highest priority UIS watersheds before others within UA.		Year 1-2: Continue to implement MTA's existing annual catch basin cleanout program	Catch basins were cleaned out and IDDE inspection and cleanout logs are maintained at each MTA highway maintenance facility.		Maintain O&M documents for catch basin cleanout program	Highway Maintenance staff
		Year 3-5: Continue to implement MTA's existing annual catch basin cleanout program			Maintain O&M documents for catch basin cleanout program	Highway Maintenance staff
<i>v. The permittee shall evaluate and implement a prioritized schedule, as necessary, for repairing or upgrading conveyances, structures and outfalls of the regulated small MS4.</i>		Develop and implement MEPDES MOA that includes an O&M Plan that includes a prioritized schedule for repairing and upgrading MS4 associated infrastructure.			Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	As part of the annual MS4 inspection and cleanout program already developed by MTA, any potential repairs are identified thus triggering the required repair, as needed. Furthermore, MTA's primary construction contractor (HNTB) conducts an annual inspection of MTA ROW and identifies necessary upgrades to conveyances not only in UA, but throughout all of MTA's ROW.
	Year 2: Finalize MEPDES MOA and identify specific requirements			Maintain annual inspection report(s) with recommendations for upgrades and repairs		
	Continue existing annual comprehensive inspection of MTA infrastructure and operations conducted by HNTB	Year 3-5: Implement MEPDES MOA and prepare annual MOA report			Maintain annual inspection report with recommendations for upgrades and repairs	HNTB's MTA contract services staff
	UIS Strategy: Additional information will be provided in the inspection report regarding conveyances, outfalls, etc. in the two highest priority watersheds	Year 1-2: Continue to implement MTA's existing annual comprehensive inspection program of all infrastructure/operations		HNTB continues to conduct an annual inspection of the MTA ROW, which is supplemented by dry weather inspections conducted by MTA's Highway Maintenance and/or Engineering departments.	Maintain annual inspection report with recommendations for upgrades and repairs	HNTB's MTA contract services staff
		Year 3-5: Continue to implement MTA's existing annual comprehensive inspection program of all infrastructure/operations			Maintain annual inspection report with recommendations for upgrades and repairs	HNTB's MTA contract services staff
	<i>vi. By the end of permit year two, the permittee shall develop and implement a stormwater pollution prevention plan ("SWPPP") for vehicle maintenance facilities operated by the permittee within the UA unless the facility is currently regulated under Maine's Industrial Stormwater Program.</i>	Develop and implement MEPDES MOA that includes an O&M Plan that addresses SWPPP requirements for vehicle maintenance facilities within UA			Year 1: Develop MEPDES MOA with DEP in a coordinated effort with MaineDOT	Other than the proposed development of a MEPDES MOA with DEP, no action is required until Permit Year 2.
Year 2: Finalize MEPDES MOA and identify specific requirements			MTA does not operate any vehicle maintenance facilities within UA		No documentation needed	
Year 3-5: Implement MEPDES MOA and prepare annual MOA report					Maintain records for projects to be included in annual MOA report and associated records	

Italic font = MS4 permit language
 Blue font = MGs accomplished to date
 Red font = UIS Strategy
 Bold font = Goals achieved during current permit year



ATTACHMENT A
TRAINING DOCUMENTS

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

May 2010

AGENDA

7:30 AM CONVENE

7:30-9:00 SPCC TRAINING

Changes to facility SPCC Plans

Three Goals of SPCC Program

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

NEW SPCC TRIVIA GAME!

15 MINUTE BREAK

9:15-9:30 MOBILE SPCC TRAINING

Review Mobile SPCC Plan

9:30-11:15 STORMWATER AND ESC TRAINING

MS4 Best Management Practices at Maintenance Facilities

Requirements of MTA Stormwater Management Permit and Program

ESC Practices for Earthwork Projects

NEW STORMWATER AND ESC TRIVIA GAME!

11:15-11:30 TEST AND EVALUATION

11:30 ADJOURN

Maine Turnpike Authority
Stormwater/ESC Training
May 2010

MAINE TURNPIKE AUTHORITY
ANNUAL ENVIRONMENTAL TRAINING

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

Prepared and conducted by
GZA GeoEnvironmental, Inc.



MAY 2010

REGULATORY BACKGROUND

EPA's Clean Water Act (40 CFR 122)
"...no one has the right to pollute the waters of the United States..."

- Authority under the National Pollutant Discharge and Elimination System (NPDES)
- Authority delegated to Maine DEP
 - Maine Pollutant Discharge and Elimination System (MPDES) permits and programs



REGULATORY BACKGROUND AND ATMOSPHERE



Maine DEP MPDES Programs
"...regulate construction, industrial activities and municipal storm sewers..."

- Requirements under Maine DEP are changing...
 - Chapter 500 Stormwater Management for New Development and Redevelopment
 - Chapter 529 General Permit for the Discharge of Stormwater from MDOT/MTA Municipal Separate Storm Sewer Systems
 - Multi-Sector General Permit (MSGP) for Stormwater Discharges
 - Maine Construction General Permit (MCGP)
- Urban Impaired Streams (UIS) are developing Watershed Management Plans and Permitting requirements.



**Maine Turnpike Authority
Stormwater/ESC Training
May 2010**

REGULATORY BACKGROUND

TO SATISFY THE REGULATORY REQUIREMENTS, MTA HAS DEVELOPED....

- Storm Water Program Management Plan (SPMP) for all regulated UAs along Turnpike
 - 2008 New 5-year Plan!
 - Catch basin cleanout program
 - Outfall inspection program
 - Stormwater Awareness Plan
 - BMP Adoption Plan
- Storm Water Pollution Prevention Plan (SWPPP) elements are incorporated into facility SPCC Plans.
- Good housekeeping BMPs for all maintenance facilities
 - Regardless of location (e.g., UA or non-UA)
- Construction inspection checklist for ALL projects
 - Regardless of location and size

SO...we know where these UAs subject to storm water regulations are along the mainline:

- "Urbanized Areas" Include:
 - Sabattus - Mile 83.6 to 84.3
 - Lewiston - all of Lewiston
 - 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
 - Kittery - Mile 3.1 to 4.2 and 0 to 2.2, Exits 1, 2, 3



1

*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....



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Stormwater/ESC Training
May 2010**

 *DEP states:* 

"...the effect stormwater runoff has on the water quality of Maine waters is impacted by the level of effort put into the construction, operation, and maintenance of MTA's stormwater infrastructure. Polluted water entering the storm drain system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine."

1

Permit Requirements

DILEMMA FOR TRANSPORTATION SYSTEMS :

*Subject to many duplicative requirements
For example, Separate MS4 Requirements*

- Implement Awareness Plan
 - GOAL: raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters
- Implement BMP Adoption Plan
 - GOAL: identify BMPs that reduce polluted stormwater runoff

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

1

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BMPs at Maintenance Facilities

To satisfy these permit requirements
MTA needs YOUR HELP in:



- Implementing the required BMPs
- Tracking BMPs using the appropriate documentation

1

Review of Stormwater BMPs

Two types of BMPs:

- Non-structural



- Operational and pollution-prevention type practices to prevent pollutants from entering stormwater runoff
 - Ex: Good housekeeping practices

- Structural



- Engineered and constructed systems designed to provide water quantity or quality control
 - Ex: Sedimentation trap

Sedimentation trap = Catch basin

1

*Review of Stormwater BMPs:
other sedimentation traps*



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Review of Stormwater BMPs

Let's focus on Maintenance
Facilities first....

...Before we move on to
construction

1

Review of Stormwater BMPs
Indoor sand and salt storage



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Review of Stormwater BMPs
Indoor sand and salt storage



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Stormwater/ESC Training
May 2010

Review of Stormwater BMPs
Vehicle washing procedures



Only RINSE outside
at designated rinse point!

Only WASH inside
in
designated
wash bay!

1

Review of Stormwater BMPs
Pavement Sweeping

Is sweeping a BMP?



1

Review of Stormwater BMPs
Pavement Sweeping

How often?

**Don't forget to track your
sweeping activities in the
quarterly report!**



Priority in Spring time
Priority near Urban Impaired Streams
Hart Brook (Dill Brook) and Goosefare Brook
More on sweeping on mainline...

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May 2010**

**Storm Water Pollution Prevention:
BMPs at Maintenance Facilities**
Solid waste management

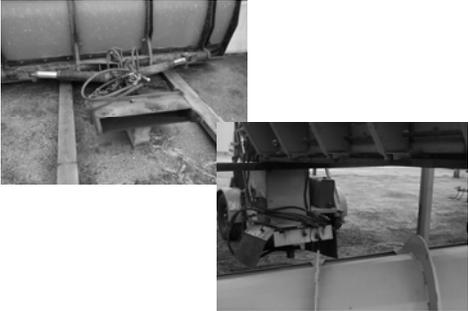
What's wrong with this picture? →



What's right about this picture? →



**Storm Water Pollution Prevention:
BMPs at Maintenance Facilities**
Capping Hydraulic Lines



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**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



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Stormwater/ESC Training
May 2010

Review of Stormwater BMPs

Why is it important to maintain Stormwater BMPs at your Maintenance Facility?

- a.) Many materials can become pollutants in stormwater runoff
- b.) Many activities have the potential to impact stormwater runoff
- c.) Both a.) and b.)

Review of Stormwater BMPs

What are some of the activities that have the potential to impact stormwater if BMPs are not in place?

- Equipment Storage?
- Refueling?
- Vehicle Maintenance and Washing?
- Painting Operations?
- Others?

1

Review of Stormwater BMPs

What are some of the materials that have the potential to impact stormwater if BMPs are not in place?

- Sand and Salt
- Petroleum products
- Magnesium chloride and Salt Brine
- Paint overspray
- Others?

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Review of Stormwater BMPs

Now, let's move on...



...to the mainline and other areas

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

- Comply with requirements outlined in SPMP 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...

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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



Maine Turnpike Authority Stormwater/ESC Training May 2010

MTA IDDE PROGRAM

- IDDE Program has been implemented within all Urbanized Areas (UAs) over five years
 - Maps have been provided to each HM/EM Facility
- Dry Weather Inspections of Storm Water Catch Basins and Outfalls within UAs
 - MTA Highway Maintenance will be doing dry weather inspections during the summer months
 - Always be looking for flow in periods where there has been little or no rainfall




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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 authorized non-stormwater discharges identified in Part IV(H)(3)(b)."

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...

- Authorized non-stormwater discharges



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AUTHORIZED NON-STORMWATER DISCHARGES

<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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May 2010**

IDDE DETECTION

Stormwater permit requires that a strategy for the detection of illicit discharges in MTA's open ditch system is given priority to areas within the Hart Brook and Goosefare Brook watersheds.

What illicit discharge has the highest potential to contaminate the turnpike's open ditch system?

A spill from a wreck.

In response, MTA has developed the following programs:

- IDDE Notification Form
- Mobile SPCC
- Highway Safety Incident response
- Annual Comprehensive Inspection



Don't forget to log your ditch repairs in the Quarterly MOA Report form!

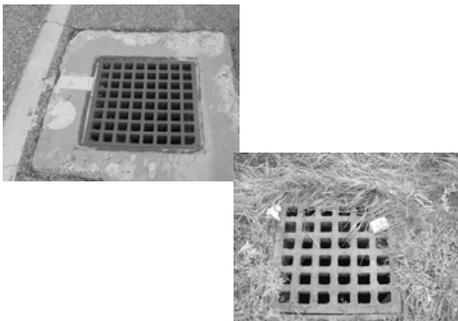
1

***TYPICAL OUTFALL:
What do you call this?***



1

ARE THESE OUTFALLS?

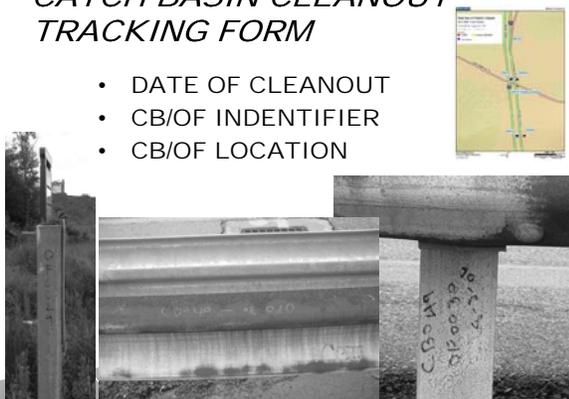


1

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**CATCH BASIN CLEANOUT
TRACKING FORM**

- DATE OF CLEANOUT
- CB/OF IDENTIFIER
- CB/OF LOCATION



**CATCH BASIN CLEANOUT
TRACKING FORM**

- UNUSUAL ODOR/COLOR
- EXCESSIVE OIL
- FOAM OR SCUM
- VISCOUS
- INITIALS OF INSPECTOR



**CATCH BASIN CLEANOUT
TRACKING FORM**

- COMMENTS



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What type of comments would you make here?



What type of comments would you make here?





But wait what if you are in the Long Creek Watershed?

- Additional mainline maintenance requirements
 1. Maintain sheet flow!
 - Regular sweeping of edge of pavement to remove deposits
 - Removal of mounded sediments deposited along the edge of pavement (and reseeded if necessary)
 2. Limited mowing of ROW
 3. No application of pesticides or fertilizers



UIS Watersheds are highly visible areas to public scrutiny...be more vigilant.

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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



EROSION & SEDIMENTATION CONTROL



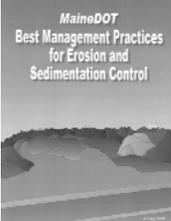
**There have been a number of
changes to rules involving
earthwork projects:**

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



Review of Permit Requirements

MTA and MaineDOT are required to report annually to DEP regarding:



- All projects undertaken
- All BMPs
 - Structural - installed
 - Non-structural - completed O&M
- Inspections



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NEW MTA PROGRAM

MTA is developing a construction recording keeping program...

- Construction Project Environmental Compliance (CPEC) Binder
 - Contains all relevant materials for Stormwater and Erosion/Sedimentation Control permitting requirements
 - Control documentation for construction project compliance

Coming soon... 

more training!!

Review of Permit Requirements

In the meantime how can all of this data be tracked?

- Complete quarterly MOA Report for MTA Maintenance Facilities



QUARTERLY MOA REPORTING FORM

QUARTERLY MOA REPORT FOR MTA MAINTENANCE FACILITIES

PREPARED BY: [] REVIEWED BY: [] DATE: []

PROJECT DESCRIPTION	DATE	LOCATION	PERMIT NUMBER	PERMIT EXPIRES	STATUS	COMPLETION DATE	COMPLETION STATUS	COMPLETION COST	COMPLETION TYPE	COMPLETION METHOD	COMPLETION MATERIALS	COMPLETION EQUIPMENT	COMPLETION PERSONNEL	COMPLETION NOTES

Great Reporting!

Exactly what we want to see!

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CULVERT REPAIR & MAINTENANCE

Fish passage concerns, new regulations are forming statewide and in certain Municipalities.



Don't forget to log your culvert repairs and maintenance in the Quarterly MOA Report form!

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**PERMANENT SLOPE STABILIZATION:
RIPRAP DOWNSPOUTS**



Don't forget to log your downspout work in the Quarterly MOA Report form!

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CATCH BASIN REPAIR & MAINTENANCE



Don't forget to log your catch basins repairs and maintenance in the Quarterly MOA Report form!

57

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SLOPE AND RIGHT OF WAY REPAIRS



Don't forget to log your slope and ROW repairs and maintenance in the Quarterly MOA Report form!

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Review of Permit Requirements

In the meantime how can all of this data be tracked?

- Complete quarterly MOA Report for MTA Maintenance Facilities
- Prepare project-specific Erosion and Sedimentation Control (ESC) Plans



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EROSION & SEDIMENTATION CONTROL PLANS

What is an Erosion and Sedimentation Control (ESC) Plan?

Dig Safe System, Inc.
It's Smart. It's Easy. It's the Law.



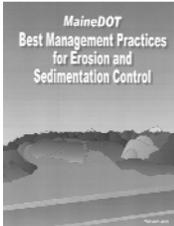
= Erosion and Sedimentation Control (ESC) Plan

... a tool and resource for correct implementation and use of BMPs

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EROSION & SEDIMENTATION CONTROL PLANS
Resource for temporary ESC BMPs



...to install new structural BMPs

BMP Manual can be found in your Foreman's office or online
<http://www.state.me.us/mdot/environmental-office-homepage/2008bmpmanual.php>

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Review of Permit Requirements

In the meantime how can all of this data be tracked?

- Complete quarterly MOA Report for MTA Maintenance Facilities
- Prepare project-specific Erosion and Sedimentation Control (ESC) Plans
- Complete Inspection Checklist for Construction Sites



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INSPECTION CHECKLIST FOR CONSTRUCTION

Inspections and Reporting

A daily inspection log must be kept for the duration of all construction projects.

- ❖ The inspections should include:
 - ❖ Disturbed and impervious areas
 - ❖ Erosion control measures
 - ❖ Materials storage areas exposed to precipitation
 - ❖ Vehicle entrances and exits



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INSPECTION CHECKLIST FOR CONSTRUCTION

Inspection Checklist for Construction Sites to verify implementation of Chapter 604 Stormwater Management Rules, Water Construction General Permit (CGP) and Municipal Separate Storm Sewer System (MS4) Permit as they apply to Maine Turnpike Authority

Project Name: _____

Site Location: _____

Inspection Date: _____

Inspector Name: _____

Inspection Results:

Item	Compliance	Notes
1. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
2. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
3. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
4. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
5. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
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8. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
9. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		
10. All construction sites must have a Stormwater Management Plan (SWMP) approved by the DEP.		

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CONSTRUCTION REQUIREMENT

Winter Stabilization
Temporary winter stabilization must be used between November 1st and April 1st or outside of said time period if the ground is frozen or snow covered.

- ❖ Cover all disturbed soils and seeded ground



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OTHER REQUIREMENTS

Pollution Prevention
Pollution prevention measures must be in place prior to construction activities

- ❖ Protect natural buffers
- ❖ Control activities within construction boundaries
- ❖ Protect groundwater supplies by preventing infiltration contamination
- ❖ Prevent debris and hazardous materials from entering waterbodies
- ❖ SPCC Plan

Fun Fact: Did you know that "any potatoes or any part or parts of potatoes" are not permitted to be discharged into any water body within the state of Maine.

Maine DEP Water Statutes Title 38 §417 Certain deposits and discharges prohibited

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BRIEF REVIEW OF COMMON BMPs

Implementing appropriate BMPs, as described in Maine DOT's Stormwater BMPs Manual, to all MTA related activities will help to minimize stormwater pollutants introduced to Maine's waterbodies.

Newly installed BMPs must be tracked and inspected in first year



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BRIEF REVIEW OF COMMON BMPs

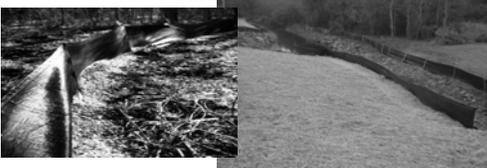
- **MaineDOT BMP Manual is a good resource for:**
 - Details of structural BMPs
 - Summary of MOA, regulations and other background information
- **BMPs are more plentiful and more frequent**
 - Use a daily log to document earthwork
 - Must track all projects regardless of size and location
 - Implement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

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BRIEF REVIEW OF BMPs
VERY IMPORTANT!!

Silt fence must be installed prior to any land disturbance
Silt fence must be installed downhill of all disturbed slopes

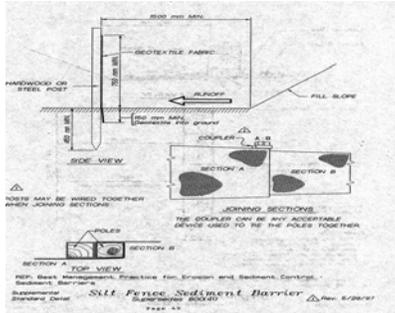
- ❖ Regardless of size or location
- ❖ Until area is **permanently stabilized**



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TYPICAL SILT FENCE DETAIL



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

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**BRIEF REVIEW OF BMPs
VERY IMPORTANT!!**

What's wrong with this picture?



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**BRIEF REVIEW OF BMPs
VERY IMPORTANT!!**

Mulch!

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

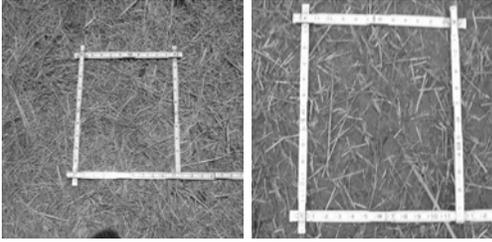
- ❖ Mulch shall be maintained on a daily basis



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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

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VERY IMPORTANT!!

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



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OTHER REQUIREMENTS:
VERY IMPORTANT!!

Trained Personnel
All projects must have an On-Site Responsible Party (OSRP)

- ❖ OSRP has been trained through DEP'S Non-Point Source Training Center
- ❖ OSRP is knowledgeable in erosion and sediment control



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**Maine Turnpike Authority
Stormwater/ESC Training
May 2010**

Review of Permit Requirements

In the meantime how can all of this data be tracked?

- Complete quarterly MOA Report for MTA Maintenance Facilities
- Prepare project-specific Erosion and Sedimentation Control (ESC) Plans
- Complete Inspection Checklist for Construction Sites
- Perform monthly inspections of BMPs post-construction



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Post-Construction BMP Inspections

What about after construction? Do inspections stop and everything functions on it's own.....?

- BMP inspection and maintenance requirement of Chapter 500 permitting, currently at the following facilities:
 - Gardiner Service Plaza
 - MTA Headquarters building
 - Kennebunk SB and NB Service Plazas
- Performed and recorded monthly



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Post-Construction BMP Inspections



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**Maine Turnpike Authority
Stormwater/ESC Training
May 2010**

IMPORTANT POINTS:
As OSRP you should...

- **Be familiar with required ESCs**
- **Be familiar with MaineDOT BMPs**
- **Be prepared to document ESCs and BMPs**
 - Summaries used to complete the Annual Reports to DEP
- **Be conscious and vigilant if you are in a UIS Watershed**
- **More changes are on the way....**
 - UIS watershed management plans...
 - Construction Project Environmental Compliance (CPEC) binders...

REMEMBER:

"...the effect stormwater runoff has on the water quality of Maine waters is impacted by the level of effort put into the construction, operation, and maintenance of MTA's stormwater infrastructure. Polluted water entering the storm drain system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine."

Thank You



...and keep up the GREAT WORK!!

**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

SW TRIVIA GAME	WHO SAID PERMIT	ARE YOU SURE THAT'S THE BEST	WHO SAID ILLICIT	IS IT STABLE	PAPER, PAPER, & MORE PAPER
	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>
	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>
	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>

[SAYS WHO?]

What is the definition of MS4?



ANSWER: Municipal Separate Storm Sewer Systems (MS4s)

[SAYS WHO?]

What does UA stand for and who defines it?

ANSWER: Urbanized Areas (UA) and DEP defines it based on the US Census definition of urbanized areas.



**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

[SAYS WHO?]

Why are stormwater permits required?



ANSWER: Polluted water entering the storm drainage system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine.

[SAYS WHO?]

What are the new requirements proposed under the Multi-Sector General Permit (MSGP) for Stormwater Discharges?



ANSWER: Quarterly visual monitoring following a qualified rain event (10th of inch)

[SAYS WHO?]

What brand new permit was accepted this year that will affect MTA in a specific Watershed and has potential to in other areas?



ANSWER: Long Creek Watershed Management Plan and General Permit for Post Construction in Long Creek

**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

[ARE YOU SURE THAT'S THE BEST?]

What are the two categories of BMPs?



- ANSWER:
1. **Structural** - engineered and constructed systems for water quantity and/or quality control
 2. **Non-structural** - operational and pollution prevention type practices to prevent pollutants from entering stormwater runoff

[ARE YOU SURE THAT'S THE BEST?]



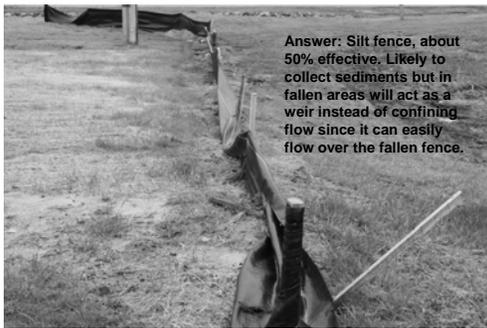
Can you name three MTA maintenance facility activities that have the highest potential for impacting stormwater.

- ANSWER:
- Equipment Storage
 - Vehicle Maintenance and/or washing
 - Material handling and storage



[ARE YOU SURE THAT'S THE BEST?]

What BMP is this and how effective is this one?



Answer: Silt fence, about 50% effective. Likely to collect sediments but in fallen areas will act as a weir instead of confining flow since it can easily flow over the fallen fence.



**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

[ARE YOU SURE THAT'S THE BEST?]

How effective is this catch basin in collecting flow? What concerns should we have about this area?



ANSWER: Likely captures 10% of flows. The lack of vegetation will generate erosion and sedimentation as seen with the channelized flow. No vegetation to dissipate flows and buffer pollutant loads. Covered CB is likely clogged internally also.



[ARE YOU SURE THAT'S THE BEST?]

Name the three non-structural BMPs shown here that are commonly used at every maintenance facility?



ANSWER: Capping Hydraulic Lines
BONUS: Where is the best place to store equipment?



ANSWER: Solid waste management
BONUS: What's wrong here?



ANSWER: Vehicle washing procedures
BONUS: Where is vehicle washing permitted?

[WHO SAID ILLICIT?]

What is the MS4 acronym IDDE stand for?



ANSWER: Illicit Discharge Detection and Elimination (IDDE)

Maine Turnpike Authority Stormwater/ESC Trivia Game May 2010

[WHO SAID ILLICIT?]

What do you do if you observe an illicit discharge? Who should you notify?



ANSWER: Document using the IDDE notification form; and Report to the Environmental Services Coordinator right away.

[WHO SAID ILLICIT?]

Which of the following are not “authorized non-stormwater discharges” listed in the MS4 permit?




- (A) Landscape irrigation
- (B) Diverted stream flows
- (C) Vehicle wash water
- (D) Air conditioning and compressor condensate
- (E) Uncontaminated flows from footing drains




[WHO SAID ILLICIT?]

What type of inspections are required as part of the IDDE program?

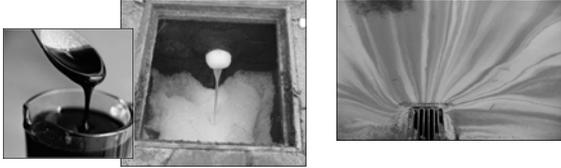



ANSWER: Dry weather inspections of outfalls and catch basin cleanout

Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010

[WHO SAID ILLICIT?]

What are the suspicious characteristics of sediments that must be documented during the annual catch basins clean-out?



ANSWER:

1. Unusual color or odor
2. Excessive oil
3. Viscosity
4. Other suspicious characteristics



[IS IT STABLE?]

What is the difference between erosion and sedimentation?

ANSWER:

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.



[IS IT STABLE?]

What type of comments would you make on the CB clean-out form at this location?



**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

[IS IT STABLE?]

What is wrong with this picture?



[IS IT STABLE?]

What type of comments would you make on the CB clean-out form at this location?



[IS IT STABLE?]

When should permanent slope stabilization measures be applied? Name three of the approved methods for permanent stabilization.

ANSWER: IMMEDIATELY and at least within one week of the last soil disturbance.

Approved Methods

- ❖ **Seeded areas:** 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.
- ❖ **Sodded areas:** Complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
- ❖ **Permanent Mulch:** Total coverage of the exposed area.
- ❖ **Riprap:** Stabilized slopes with appropriate backing of a well-graded gravel or approved geotextile.
- ❖ **Paved areas:** Placement of the compacted gravel subbase is completed.
- ❖ **Ditches, channels, and swales:** Channel is stabilized with a 90% cover of healthy vegetation, well-graded riprap lining, or with another non-erosive lining. No evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.



**Maine Turnpike Authority
Stormwater/ESC Trivia Game
May 2010**

[PAPER, PAPER, AND MORE PAPER]

Who do you send all your stormwater related paperwork to?



ANSWER: John Branscom, Environmental Services Coordinator

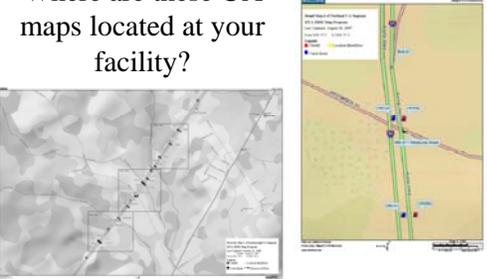
BONUS: Where do you keep the originals?

ANSWER: In your on-site files



[PAPER, PAPER, AND MORE PAPER]

Where are these UA maps located at your facility?

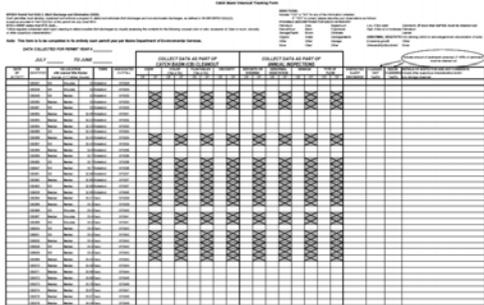


ANSWER: in your on-site environmental files



[PAPER, PAPER, AND MORE PAPER]

What is this form used for?



ANSWER: Catch basins cleanout and dry weather outfall inspections tracking



Maine Turnpike Authority Stormwater/ESC Trivia Game May 2010

[PAPER, PAPER, AND MORE PAPER]

What do you report on this form?

ANSWER: MOA Reporting

- Repairs/redo of ditching (miles)
- Repair/ maintenance of Culvert/Downspout (#)
- Repair/ maintenance of CBs (#)
- Removal of sand from guard rails (miles)
- Repaired/mulched of slope and/or ROW (length x width)
- Inspected catchments (#)
- Cleanout of catchments (#)
- Swept streets (miles)
- Swept ancillary facilities (#)
- Picking of Litter (miles)



[PAPER, PAPER, AND MORE PAPER]

What do you use this form for?

ANSWER:
Daily construction log form – to be used during earthwork construction projects. During post construction – inspect the construction project site and document your inspection using the construction log form at least once per week until the site is permanently vegetated and stabilized.



Maine Turnpike Authority

MS4 Stormwater Awareness Plan

Developing and implementing a Stormwater Awareness Plan is a requirement of the Maine Department of Environmental Protection's (DEP's) *General Permit for the Discharge of Stormwater from Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4s)*. Since MTA is subject to this MS4 permit and its six *Minimum Control Measures (MCMs)*, *Part IV(H)(1)(a)(i)* requires MTA to conduct Public Education and Outreach (MCM #1) efforts that *"continue raising awareness of stormwater issues amongst employees and contractors."*

1.0 PERMIT LANGUAGE

Part IV(H)(1) of the MS4 Permit establishes three goals for *MCM #1 - Public Education and Outreach on Stormwater Impacts*. These include the following:

- 1. To raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters;*
- 2. To motivate staff and contractors to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and*
- 3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.*

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by also continuing to raise awareness of stormwater among MTA employees and contractors. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with *Part IV(J)* of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

Impact indicators are related to the achievement of the goals and objectives of the program, such as (1) observable/measurable effects on behavior; or (2) percent or number of employees to describe sources of storm water pollution, proper spill response, or maintenance of a BMP.

¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2008.

3.0 OBJECTIVE

The objective of this Stormwater Awareness Plan is to raise awareness among MTA employees and contractors regarding stormwater issues. For example, stormwater runoff is one of the most significant sources of water quality problems for Maine's waters.

The goal of the Stormwater Awareness Plan is to provide information relative to stormwater impacts in an effort to raise awareness of MTA employees. For example, 100% of Highway Maintenance employees and Engineering Inspectors will attend training sessions at which stormwater issues and impacts will be addressed. Additionally, MTA will also work to raise awareness among MTA employees in other departments, such as Fare Collections by providing abbreviated Stormwater/Spill Prevention and Response training to supervisors and managers who will in turn inform additional employees regarding stormwater issues relative to MTA operations.

The goal of this Plan is to also raise awareness of contractors by providing this Plan, as well as the Targeted BMP Adoption Plan (which is designed to motivate employees and contractors to use BMPs to reduce polluted stormwater runoff), prior to starting work on MTA projects.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the potential impacts their activities may have on stormwater runoff and water quality in Maine. The message statement is:

“The effect stormwater runoff has on the water quality of Maine waters is impacted by the level of effort put into the construction, operation, and maintenance of MTA’s stormwater infrastructure. Polluted water entering the storm drain system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine.”

In addition to the Stormwater Awareness Plan message, the target audience will be informed of authorized non-stormwater discharges allowed by the permit provided they do not contribute to a violation of water quality standards, as determined by the DEP. These include the following:

- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration (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 watering runoff
- Flows from riparian habitats and wetlands
- Residual street wash water (where spills/leaks of toxic 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

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

This Stormwater Awareness Plan and message will be provided to each MTA employee at annual training sessions and also to each contractor before commencement of work, in addition to the Targeted BMP Adoption Plan.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP’s NPS Training Program to be knowledgeable of stormwater, specifically erosion prevention, sedimentation control and other potential impacts to water quality in Maine.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA’s newsletters and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.
 - For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. Stormwater information will be discussed or provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below:

Date	Training Type
April	Erosion and Sediment Control (ESC) and Stormwater Pollution Prevention for highway maintenance Supervisors and Foremen
May - June	Spill Prevention Control and Countermeasures Plan (SPCC), Stormwater and Erosion and Sediment Control (ESC) for MTA maintenance and engineering employees.
October	Spill Prevention Control and Countermeasures Plan (SPCC) and Stormwater for Fare Collections

The training sessions are designed to meet the goal of increasing awareness, as well as encouraging utilization of targeted BMPs to reduce stormwater runoff and potential impacts. In addition to these training sessions, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, MTA’s requirement to have an OSRP certified by DEP’s NPS Program ensures that the contractor is aware of stormwater related issues. However, in Permit Year 2, MTA will begin distributing this Stormwater Awareness Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA's employees are trained as defined by the Plan; and
- A design engineering firm, such as HNTB, who administer construction contracts, to ensure the Plan is properly implemented by the contractors.

4.4 EVALUATION PROTOCOL

MTA training is documented with attendance sign-in sheets, exam scores, in-class workshops and evaluation forms. A training database is maintained with information gathered from employees during each training session.

Process Indicators: Assessment of the program execution will be included in the annual report. The following topics will be reported for MTA employees:

1. Number of employees that attended training; and
2. Average exam scores for attendees.

Impact Indicators: Gauging the achievement of goals and objectives of the program will be included in the annual report. These will be addressed by the following behavioral change questions:

1. Number or percentage of employees to identify the goals of MCM #1 correctly;
2. Number or percentage of employees to identify source(s) of storm water pollution;
3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked by documenting the pre-construction meetings when this Plan and the Targeted BMP Adoption Plan are provided to each contractor and the contractor, in turn, provides MTA with the certification for their OSRP for the project.

4.5 PLAN MODIFICATION

This Stormwater Awareness Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

Maine Turnpike Authority

MS4 Targeted BMP Adoption Plan

Developing and implementing a Best Management Plan (BMP) Adoption Plan is a requirement of the Maine Department of Environmental Protection's (DEP's) *General Permit for the Discharge of Stormwater from Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4s)*. Since MTA is subject to this MS4 permit and its six *Minimum Control Measures (MCMs)*, *Part IV(H)(1)(a)(ii)* requires MTA to conduct Public Education and Outreach (MCM #1) efforts that **encourage** "*employees and contractors to utilize BMPs that minimize stormwater pollution.*"

1.0 PERMIT LANGUAGE

Part IV(H)(1) of the MS4 Permit establishes three goals for *MCM #1 - Public Education and Outreach on Stormwater Impacts*. These include the following:

1. *To raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters;*
2. *To motivate staff and contractors to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and*
3. *To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.*

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by encouraging employees and contractors to use BMPs that minimize stormwater pollution as part of this Targeted BMP Adoption Plan. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with *Part IV(J)* of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

Impact indicators are related to the achievement of the goals and objectives of the program, such as (1) observable/measurable effects on behavior; or (2) percent or number of employees to describe sources of storm water pollution, proper spill response, or maintenance of a BMP.

¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2008.

3.0 OBJECTIVE

The objective of this Targeted BMP Adoption Plan is to educate MTA's employees and contractors to use BMPs which reduce polluted stormwater runoff within UA.

The goal of the BMP Adoption Plan is to target BMPs in the MaineDOT BMP Manual to be utilized by employees and contractors that minimize stormwater pollution during construction activities, such as:

- (1) Installing silt fence prior to land disturbance; and
- (2) Ensuring that hay mulch is applied to soil at the end of each work day.

For MTA employees, focus will also be given to targeting BMPs relevant to transportation-related maintenance and good housekeeping activities, such as:

- (1) Regular sweeping of the mainline and peripheral facilities;
- (2) Annual catch basin clean-outs and sediment removal;
- (3) As needed ditch cleaning and repair;
- (4) On-going culvert maintenance and litter removal.

Contractors are also encouraged to utilize BMPs in accordance with standard construction contract language (e.g., Special Provision 656), as well as the MaineDOT BMP Manual.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the impacts their activities have on stormwater runoff and the importance of BMPs. The message statement is:

"Implementing appropriate BMPs, as described in MaineDOT's Stormwater BMPs Manual, to all MTA related activities will help to minimize stormwater pollutants introduced to Maine's waterbodies."

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

Targeted BMPs are included in the MaineDOT BMP Manual that is available at each MTA maintenance facility and referenced in standard contract language for contractors.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP's NPS Training Program to be knowledgeable in erosion prevention and sedimentation control.
- Existing standard contract language
 - Requires contractors to maintain a certified OSRP on-site who has authority to implement BMPs appropriately; and
 - Specifies that contractors must utilize MaineDOT's BMP Manual, as well as other BMPs, to ensure construction site runoff is minimized.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA's newsletters

and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.

- For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. This Target BMP Adoption Plan will also be provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below.

Date	Training Type
April	Erosion and Sediment Control (ESC) and Stormwater Pollution Prevention for Highway Maintenance Supervisors and Foremen
May - June	Spill Prevention Control and Countermeasures Plan (SPCC), Stormwater and Erosion and Sediment Control (ESC) for MTA maintenance and engineering employees.

In addition to the training sessions above, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, targeted BMPs are already being implemented in accordance with contract language and the MaineDOT BMP Manual. However, in Permit Year 2, MTA will begin distributing this Targeted BMP Adoption Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA’s employees are trained as defined by the Plan; and
- A design engineering firm, such as HNTB, who administer construction contracts, to ensure the Plan is properly implemented by the contractors.

5.0 EVALUATION PROTOCOL

MTA training is documented with attendance sign-in sheets, exam scores, in-class workshops and evaluation forms. A training database is maintained with information gathered from employees during each training session.

Process Indicators: Assessment of the program execution will be included in the annual report. The following topics will be reported for MTA employees:

1. Number of employees that attended training; and
2. Average exam scores for attendees.

Impact Indicators: Gauging the achievement of goals and objectives of the program will be included in the annual report. These will be addressed by the following behavioral change questions:

1. Number or percentage of employees to identify the goals of MCM #1 correctly;

2. Number or percentage of employees to identify source(s) of storm water pollution;
3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked and evaluated based on daily and/or weekly inspections conducted on-site.

6.0 PLAN MODIFICATION

This Targeted BMP Adoption Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

Memorandum

Date: April 7, 2010

To: Highway Maintenance Foremen and Supervisors/ Sweeper Operators

From: Wesley L. Jackson

RE: Sweeping

As you know, it is time to begin the sweeping operations for 2010. The preparation of the machines for a season of sweeping should begin (March) or well in advance so when the weather conditions have improved allowing the sweeping operations to begin it will be without unnecessary delays due to needed maintenance or repairs. All repairs shall be under the direct supervision of the Equipment Maintenance Supervisor or his designee. The goal of this memo is to provide guidance in identifying location priorities for environmental and operational concerns. Let's keep in mind that the goal is to stay ahead of the line striping operations. The order in which your scheduling is outlined below should be followed closely. To be efficient at what we do it is the expectation of the Director of Highway Maintenance that all of the coordination for the sweeping operation shall be under the direct supervision of the Highway Supervisor or their Designee.

I. Impaired Stream Crossings/Service Areas

- A. The designated highway (Schwarze) sweeper will be evaluated for its readiness by sweeping the Kennebunk NB & SB Service Areas including Exit 25. Next to the watershed areas at **Goosefare Brook** (MM 35.0 to MM36.6) and then up to **Long Creek/Red Brook** (MM44 to MM 46.4) area. The scope is to sweep all paved areas and left shoulders along the median then the outside shoulders within the outlined areas.
- B. The designated vacuum/sweeper is not typically assigned to sweep the mainline but the focus should be on evaluating its performance first sweeping a Service Plaza near the home base of the equipment then extend out to the **Hart Brook** watershed area (MM 78.9 to MM 83.6) all paved areas and left shoulders along the median and the outside shoulders once this is completed the sweeper should be directed to move to the remaining plaza locations from Mile 58.6 working to the north.

II. Mainline and Interchanges

- A. Upon the completion of the stream locations and the Kennebunk Service Plaza areas, the focus of the mechanical sweeper should be directed to the Spruce Creek in Kittery working north on the mainline of our highway working north section by section under the direction of the Highway Maintenance Supervisor or his designee until the sweeping is completed to MM 109 in Augusta.

Memorandum: Sweeping

- B. Upon completion of the Hart Brook Water shed area and the Northerly Service Plaza Locations the sweeper/vac machine should focus on all interchange ramps beginning at Exit 7 York working north until all locations are completed.

III. Overhead Bridges

- A. When the mainline and interchanges are done, the sweeping of all MTA owned overhead bridges should be started. Any bridges with a large amount of pedestrian traffic, especially schoolchildren, can be worked in as time allows while doing the mainline and interchanges.

IV. Parking Lots

- A. Parking lots are to be done next or when circumstances may prevent sweeping in other areas. It may be necessary to do some of the busier commuter lots on the weekend, such assignments need to be coordinated and discussed with the Director of Highway Maintenance in advance of setting such schedule.

Other Notes:

- I. Water Trucks should be set up as soon as possible using spare vehicles.
- II. Tractors with broom attachments should be hooked up and begin working as soon as possible.
- III. Any areas that require hand work should either be done prior to the arrival of the sweeper or at a later date. The sweepers should never be held up waiting for hand work to be done.
- IV. Again to be efficient in our operations it is of utmost importance that the supervisors and foremen work together coordinating the sweeping efforts between sections.

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 authorized 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

Was an Authorized Non-Stormwater Discharge Observed? (See list of authorized discharges on Page 2) Yes No

If Yes, What Type of Authorized Non-Stormwater Discharge Was Observed? _____

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/Bacterial 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 authorized 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	
REVIEW AND APPROVAL			
DOCUMENT INSTRUCTIONS GIVEN BY EACH AGENCY NOTIFIED: <i>(attach sheets as necessary)</i>			
<u>PREPARER OF IDDE NOTIFICATION REPORT:</u> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="display: flex; justify-content: space-between; width: 80%; margin: 0 auto;"> (printed name) (signature) (date) </div>			
<u>ENVIRONMENTAL SERVICES COORDINATOR:</u> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="display: flex; justify-content: space-between; width: 80%; margin: 0 auto;"> (printed name) (signature) (date) </div>			

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 authorized non-stormwater discharges (see definition below).

An authorized 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

Inspection Checklist for Construction Sites to satisfy requirements of Chapter 500 Stormwater Management Rules, Maine Construction General Permit (CGP) and Municipal Separate Storm Sewer System (MS4) Permit as they apply to Maine Turnpike Authority

Project Name: _____

Project Location: _____

Name of OSRP*: _____

OSRP means on-site responsible party that is knowledgeable of erosion prevention and sedimentation control practices and has been certified by the DEP's NonPoint Source (NPS) Training Center or a similar training program.

Complete this column only if weekend work is conducted

**DAILY INSPECTION LOG
FOR THE WEEK OF:** _____

DAY	Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
DATE						
INITIALS						

A. GENERAL SECTION

(1) Amount of On-site Precipitation

SOURCE OF INFORMATION (circle one)

- on-site weather station*
- website: _____*
- rain gauge*

IMPORTANT: If there was rain, were the following areas inspected before and after the storm event...

...disturbed and impervious areas?	Y or N					
...erosion control measures?	Y or N					
...material storage areas exposed to precipitation?	Y or N					
...locations where vehicles enter and exit the site?	Y or N					
...all deficiencies and corrective actions are noted below?	Y or N					

(2) Air Temperature

SOURCE OF INFORMATION (circle one)

- on-site weather station*
- website: _____*
- thermometer*

B. EROSION CONTROL MEASURES

(1) Are erosion prevention and sedimentation controls...

- in place prior to land disturbance?*
- in place prior to embankment/excavation operations?*
- working effectively?*

If no, please describe failure and corrective actions in comments section below

Y or N					
Y or N					
Y or N					
Note #__					

(2) Is silt fence properly installed downhill of disturbed slopes?

If no, please describe failure and corrective actions in comments section below

Y or N					
Note #__					

(3) All newly disturbed earth is stabilized by applying mulch daily?

- If yes, is mulch maintained on-site on a daily basis?*
- If no, what other daily method of stabilization is being used?*

Y or N					
Y or N					

(4) All disturbed ditches are stabilized by the end of the workday?

If yes, what type of stabilization is being used and maintained on-site daily?

Y or N or NA					
--------------	--------------	--------------	--------------	--------------	--------------

(5) Permanent slope stabilization measures are applied...

- within one week of last soil disturbance?*
- If yes, identify area and date of last disturbance?*

Y or N or NA					
Note #__					

(6) Is the project site currently under an approved period of suspended work?

If yes, then has the daily inspection log been maintained current and up-to-date?

Y or N					
Y or N					

C. HOUSEKEEPING

(1) Are inspections conducted on a weekly basis to ensure that sedimentation and potential pollutants are minimized from...

- materials storage areas exposed to precipitation?*
- locations where vehicle enter and exit the site?*

If no, explain reason in comments section below

Y or N					
Y or N					
Note #__					

(2) Are inspections conducted daily to ensure that discharges do not impact receiving waters?

Y or N					
--------	--------	--------	--------	--------	--------

COMMENTS:

NOTE #1.... _____

NOTE #2.... _____

NOTE #3.... _____

NOTE #4.... _____

APPENDICES -- BASIC PERFORMANCE STANDARDS

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APPENDIX A. Erosion and sedimentation control

This appendix applies to all projects.

A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. § 480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken.

NOTE: The site must be maintained to prevent unreasonable erosion and sedimentation. See 38 M.R.S.A. § 420-C (in part). Other or additional standards than those provided in Appendix A may apply, under the Natural Resources Protection Act, to a project located in or adjacent to a protected natural resource.

NOTE: For guidance on erosion and sedimentation controls, consult "Maine Erosion and Sediment Control BMPs", Maine Department of Environmental Protection.

- 1. Pollution prevention.** Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable.

The discharge may not result in erosion of any open drainage channels, swales, upland, or coastal or freshwater wetlands.

NOTE: Buffers improve water quality by helping to filter pollutants in run-off both during and after construction. Minimizing disturbed areas through phasing limits the amount of exposed soil on the site through retention of natural cover and by retiring areas as permanently stabilized. Less exposed soil results in fewer erosion controls to install and maintain. If work within an area is not anticipated to begin within two weeks time, consider leaving the area in its naturally existing cover.

- 2. Sediment barriers.** Prior to construction, properly install sediment barriers at the edge of any downgradient disturbed area and adjacent to any drainage channels within the disturbed area. Maintain the sediment barriers until the disturbed area is permanently stabilized.
- 3. Temporary stabilization.** Stabilize with mulch or other non-erodable cover any exposed soils that will not be worked for more than 7 days. Stabilize areas within 75 feet of a wetland or waterbody within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.
- 4. Removal of temporary sediment control measures.** Remove any temporary sediment control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

NOTE: It is recommended that silt fence be removed by cutting the fence materials at ground level to avoid additional soil disturbance.

- 5. Permanent stabilization.** If the area will not be worked for more than one year or has been brought to final grade, then permanently stabilize the area within 7 days by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, soil and moisture conditions; amend areas of disturbed subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be seeded and mulched again if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. One or more of the following may apply to a particular site.
- (a) Seeded areas. For seeded areas, permanent stabilization means a 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.
 - (b) Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
 - (c) Permanent Mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
 - (d) Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.
 - (e) Agricultural use. For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.
 - (f) Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.
 - (g) Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with a 90% cover of healthy vegetation, with a well-graded riprap lining, or with another non-erosive lining such as concrete or asphalt pavement. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.
- 6. Winter construction.** "Winter construction" is construction activity performed during the period from November 1 through April 15. If disturbed areas are not stabilized with permanent measures by November 1 or new soil disturbance occurs after November 1, but before April 15, then these areas must be protected and runoff from them must be controlled by additional measures and restrictions.

NOTE: For guidance on winter construction standards, see the "Maine Erosion and Sediment Control BMPs", Maine Department of Environmental Protection.

- 7. Stormwater channels.** Ditches, swales, and other open stormwater channels must be designed, constructed, and stabilized using measures that achieve long-term erosion control. Ditches, swales, and other open stormwater channels must be designed to handle, at a minimum, the expected volume

of run-off. Each channel should be constructed in sections so that the section's grading, shaping, and installation of the permanent lining can be completed the same day. If a channel's final grading or lining installation must be delayed, then diversion berms must be used to divert stormwater away from the channel, properly-spaced check dams must be installed in the channel to slow the water velocity, and a temporary lining installed along the channel to prevent scouring. Permanent stabilization of channels is addressed under Appendix A(5)(g) above.

- 8. Roads.** Gravel and paved roads must be designed and constructed with crowns or other measures, such as water bars, to ensure that stormwater is delivered immediately to adjacent stable ditches, vegetated buffer areas, catch basin inlets, or street gutters.
- 9. Culverts.** Culverts must be sized to avoid unintended flooding of upstream areas or frequent overtopping of roadways. Culvert inlets must be protected with appropriate materials for the expected entrance velocity, and protection must extend at least as high as the expected maximum elevation of storage behind the culvert. Culvert outlet design must incorporate measures, such as aprons or plunge pools, to prevent scour of the stream channel. The design must take account of tailwater depth.
- 10. Parking areas.** Parking areas must be constructed to ensure runoff is delivered to adjacent swales, catch basins, curb gutters, or buffer areas without eroding areas downslope. The parking area's subbase compaction and grading must be done to ensure runoff is evenly distributed to adjacent buffers or side slopes. Catch basins must be located and set to provide enough storage depth at the inlet to allow inflow of peak runoff rates without by-pass of runoff to other areas.
- 11. Additional requirements.** Additional requirements may be applied on a site-specific basis.

APPENDIX B. Inspection and maintenance

This appendix applies to all projects. A project that is only required to meet basic standards (stormwater PBR) must meet the standards in Section 1. All other projects must meet standards in Sections 1 through 5.

See Appendix D(5) for additional maintenance requirements related to infiltration of stormwater.

1. During construction. The following standards must be met during construction.

- (a) Inspection and corrective action. Inspect disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspect these areas at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.
- (b) Maintenance. Maintain all measures in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (rainfall).
- (c) Documentation. Keep a log (report) summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

2. Post-construction. The following standards must be met after construction.

- (a) Plan. Carry out an approved inspection and maintenance plan that is consistent with the minimum requirements of this section. The plan must address inspection and maintenance of the project's permanent erosion control measures and stormwater management system. This plan may be combined with the plan listed in Section 2(a) of this appendix. See Section 8(C)(2) for submission requirements.
- (b) Inspection and corrective action. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections. The following areas, facilities, and measures must be inspected and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site. Inspection

or maintenance tasks other than those discussed below must be included in the maintenance plan developed for a specific site.

NOTE: Expanded and more-detailed descriptions for specific maintenance tasks may be found in the Maine DEP's "Stormwater Management for Maine: Best Management Practices."

- (i) Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows. See permanent stabilization standards in Appendix A(5).
 - (ii) Inspect ditches, swales and other open stormwater channels in the spring, in late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, to control vegetated growth that could obstruct flow, and to repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or sideslopes.
 - (iii) Inspect culverts in the spring, in late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.
 - (iv) Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring. Clean-out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at inlet any grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).
 - (v) Inspect resource and treatment buffers at least once a year for evidence of erosion, concentrating flow, and encroachment by development. If flows are concentrating within a buffer, site grading, level spreaders, or ditch turn-outs must be used to ensure a more even distribution of flow into a buffer. Check down slope of all spreaders and turn-outs for erosion. If erosion is present, adjust or modify the spreader's or turnout's lip to ensure a better distribution of flow into a buffer. Clean-out any accumulation of sediment within the spreader bays or turn-out pools.
- (c) Regular maintenance
- (i) Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader. Grading of gravel roads, or grading of the gravel shoulders of gravel or paved roads, must be routinely performed to ensure that stormwater drains immediately off the road surface to adjacent buffer areas or stable ditches, and is not impeded by accumulations of graded material on the

road shoulder or by excavation of false ditches in the shoulder. If water bars or open-top culverts are used to divert runoff from road surfaces, clean-out any sediments within or at the outlet of these structures to restore their function.

- (ii) Manage each buffer's vegetation consistently with the requirements in any deed restrictions for the buffer. Wooded buffers must remain fully wooded and have no disturbance to the duff layer. Vegetation in non-wooded buffers may not be cut more than three times per year, and may not be cut shorter than six inches.

NOTE: Contact the department's Division of Watershed Management (Maine DEP) for assistance developing inspection and maintenance requirements for other drainage control and runoff treatment measures installed on the site. The maintenance needs for most measures may be found in the Maine DEP's "Stormwater Management for Maine: Best Management Practices."

- (d) Documentation. Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.

The log must be made accessible to department staff and a copy provided to the department upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

- 3. **Maintenance contract.** Contract with a third-party or other qualified professional, as approved by the department, for the removal of accumulated sediments, oils, and debris within any proprietary devices and the replacement of any absorptive filters. The frequency of sediment clean-out and filter replacements must be consistent with the unit's storage capacity and the estimated pollutant load from the contributing drainage area. This clean-out frequency is usually established by the manufacturer of the proprietary system when sizing the device for the project.
- 4. **Re-certification.** Submit a certification of the following to the department within three months of the expiration of each five-year interval from the date of issuance of the permit.
 - (a) Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.
 - (c) Maintenance. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

Municipalities with separate storm sewer systems regulated under the Maine Pollutant Discharge Elimination System (MPDES) Program may report on all regulated systems under their control as part of their required annual reporting in lieu of separate certification of each system. Municipalities not regulated by MPDES, but that are responsible for maintenance of permitted stormwater systems, may report on multiple stormwater systems in one report.

- 5. Duration of maintenance.** Perform maintenance as described and required in the permit unless and until the system is formally accepted by the municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the department stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with department standards. Upon such assumption of responsibility, and approval by the department, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.
- 6. Additional requirements.** Additional requirements may be applied on a site-specific basis.

APPENDIX C. Housekeeping

These performance standards apply to all projects.

- 1. Spill prevention.** Controls must be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- 2. Groundwater protection.** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

See Appendix D for license by rule standards for infiltration.

NOTE: Lack of appropriate pollutant removal best management practices (BMPs) may result in violations of the groundwater quality standard established by 38 M.R.S.A. §465-C(1).

- 3. Fugitive sediment and dust.** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

NOTE: An example of the use of BMPs to control fugitive sediment and dust is as follows. Operations during wet months that experience tracking of mud off the site onto public roads should provide for sweeping of road areas at least once a week and prior to significant storm events. Where chronic mud tracking occurs, a stabilized construction entrance should be provided. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

NOTE: Dewatering a stream without a permit from the department violates state water quality standards and the Natural Resources Protection Act.

- 4. Debris and other materials.** Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

NOTE: To prevent these materials from becoming a source of pollutants, construction and post-construction activities related to a project may be required to comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine hazardous waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

- 5. Trench or foundation de-watering.** Trench de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe

construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the department.

NOTE: For guidance on de-watering controls, consult the Maine Erosion and Sediment Control BMPs", Maine Department of Environmental Protection."

6. **Non-stormwater discharges.** Identify and prevent contamination by non-stormwater discharges.
7. **Additional requirements.** Additional requirements may be applied on a site-specific basis.



ATTACHMENT B

LOGS OF PUBLIC MEETINGS, NOTICES & OTHER EVENTS

ATTACHMENT B - MEETING LOGS

MTA MS4 Annual Progress Report

Stormwater Meetings and Events Attended by MTA

<u>Date</u>	<u>Activity Attended and Location</u>	<u>Persons Attended</u>
5/18/2010	Mtg at Scarborough Town Office to kick off Red Brook WMP efforts	R.S.
5/7/2010	Mtg in Augusta of DEP stakeholders for proposed revisions to Chapter 500	R.S.
4/28/2010	Mtg with MaineDOT and MaineDEP to discuss alternative General Permit in Long Creek	MTA management plus J.B. & R.S.
4/22/2010	Capisic Brook WMP Policy and Planning Team meetings	R.S.
4/13/2010	Mtg with Long Creek Watershed Management District to discuss applicable credits and SILOP	R.S.
	Mtg in Augusta of DEP stakeholders for proposed revisions to Chapter 500	R.S.
4/1/2010	Capisic Brook WMP Policy and Planning Team meetings	
3/31/2010	Mtg with MaineDOT to discuss alternative General Permit in Long Creek	MTA management plus J.B. & R.S.
3/29/2010	In house CPEC binder training for MTA and HNTB personnel	
3/29/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
3/25/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
3/24/2010	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
3/16/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
3/3/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
2/26/2010	Mtg in Augusta of DEP stakeholders for proposed revisions to Chapter 500	R.S.
2/24/2010	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
2/19/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
2/17/2010	Mtg in Augusta of DEP stakeholders for proposed revisions to Chapter 500	R.S.
2/11/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
2/5/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
2/3/2010	In house mtg for CPEC development and coordination	J.B. & R.S. & S.L. & S.T. & R.D.
2/3/2010	Mtg in Augusta of DEP stakeholders for proposed revisions to Chapter 500	R.S.
1/28/2010	Kick off stakeholders meeting for Capisic Brook	R.S.
1/27/2010	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
1/7/2010	BEP hearing on Ch 521 (i.e., IP language)	R.S.
1/7/2010	Mtg at Scarborough Town Office for Red Brook Watershed Management Plan	R.S.
1/4/2010	Joint MTA/MaineDOT Environmental Meeting	MTA management plus J.B. & R.S.
12/10/2009	Capisic Brook kickoff meeting of "working group"	R.S.
	Webinar for transportation agencies regarding EPA's proposed Effluent Limitation Guidelines (ELGs) for construction projects (40 CFR 450)	R.S.
11/16/2009	Long Creek public meetings regarding the Participating Landowners Agreement (PLA)	J.A.
	DEP subcommittee meeting regarding proposed redevelopment standards in Chapter 500	R.S.
11/4/2009	Long Creek public meetings regarding the Participating Landowners Agreement (PLA)	J.A.
10/28/2009	Long Creek Assessment with DEP and CCSWCD	R.S. & J.A. & J.B.
10/14/2009	Mtg at PWD to discuss Long Creek PLA	R.S. & J.A. & J.B.
10/8/2009	Mtg at MaineDOT with DEP regarding Long Creek process and other topics relative to State transportation agencies	MTA management plus J.B. & R.S.
10/2/2009	Long Creek public meeting	J.A.
9/30/2009	Mtg at DEP for Chapter 500 Stakeholders	R.S.

ATTACHMENT B - MEETING LOGS

MTA MS4 Annual Progress Report

Stormwater Meetings and Events Attended by MTA

<u>Date</u>	<u>Activity Attended and Location</u>	<u>Persons Attended</u>
9/29/2009	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
9/23/2009	Mtg at Fairchild Semiconductor for anticipated O&M requirements in Long Creek PLA	R.S. & J.A.
9/17/2009	Mtg at DEP for Chapter 500 Stakeholders	R.S.
9/16/2009	Mtg at PWD to discuss Long Creek PLA	R.S. & J.A.
9/10/2009	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
9/3/2009	Mtg at MTA with MaineDOT to discuss Long Creek PLA	R.H. & P.N. & J.A. & R.S.
8/27/2009	Mtg at Fairchild Semiconductor to discuss Long Creek PLA	J.A. & R.S. & P.N.
8/26/2009	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
8/13/2009	Mtg at MTA with MaineDOT to discuss Long Creek PLA	J.A. & S.T. & R.S. & P.N. & R.H. & T.K.
8/12/2009	Mtg at PWD to discuss Long Creek PLA	J.A. & R.S. & P.N. & R.H.
8/7/2009	In house Environmental/Planning meeting	MTA management plus J.B. & R.S.
8/5/2009	Mtg at PWD to discuss Long Creek PLA	JA & JB & RS & RP & RH
8/5/2009	Mtg at MTA with MaineDOT to discuss Long Creek PLA	JA & JB & RS & RP & RH
7/31/2009	Mtg at Sable Oaks to discuss Long Creek PLA	RS & TK & RP
7/16/2009	MTA Supervisors Mtg to discuss Post-Construction requirements	RS & JB & WJ & BW & Foremen
7/15/2009	DEP Public Meeting on Long Creek GP	JA & JB & RS
7/9/2009	Mtg at PWD to discuss Long Creek PLA	RS & JA
7/6/2009	In-house meeting to discuss Post-Construction requirements	RS & ST & PM & SL & BW
6/24/2009	Conf call w/MaineDOT re Long Creek permitting requirements	RS & SN & JB & PN & RH & RP
6/16/2009	Conf call w/DEP, MaineDOT and CCSWCD	JB & SN & RS & ST & TLP & DW
6/11/2009	Mtg at PWD for Long Creek Landowners	JB & SN & RS
6/9/2009	Mtg at DEP to discuss Long Creek stormwater requirements	JB & JA & ST & RS & SN & JD & DW
5/28/2009	Public Meeting for Town Councilors of Long Creek watershed	SN & RS & RH
5/24/2009	Site walk of MTA property in Long Creek w/DEP	JB & RS & JD
4/16/2009	Facilitated meeting at MM 23.2 Branch Brook Tour at Retention Basins (Wells/Kennebunk Water District)	J.B. & Southern Maine Source Water Protection & Collaboration Workshop
4/16/2009	MTA Supervisors Mtg to discuss annual MS4 IDDE inspections at Crosby Maintenance - refresher training on CB/Ofs Insp. & Cleaning	RS & JB & WJ & BW & Foremen
4/16/2009	MTA Board Meeting (address Long Creek)	JA & PM & ST
4/14/2009	Mtg at DEP to discuss Long Creek stormwater requirements	JB & SN & RS & ST & JA & DW & JD
4/3/2009	MTA Supervisors Meeting to review Ch 500/MOA and BMP requirements	JB & RS & WJ & BW & Foremen
3/31/2009	In-house MTA meeting to review contract language and BMPs	JB & RS & ST & RD
3/27/2009	Long Creek Steering Committee Meeting at PWD	SN & TLP
3/25/2009	DEP Meeting re: Long Creek watershed	SN & RS & JB & DW & TLP
3/18/2009	Long Creek Monitoring Committee Meeting	RS & PN & JD & DW & TLP
2/27/2009	In-house meeting to review draft MS4 Awareness and BMP Adoption Plans	JB & RS
2/11/2009	In-house meeting to review stormwater BMPs in Long Creek	JB & RS & SN & PM & ST & RD
1/30/2009	Long Creek Steering Committee Meeting at PWD	SN & JB & RS & DW & TLP
1/22/2009	Long Creek Stakeholders Meeting	JB & SN & RS & DW & TLP
12/18/2009	Long Creek Steering Committee Meeting	JB & RS & SN & DW & TLP
12/16/2008	Annual Environmental Briefing to MTA Authority BD.	J.B. & MTA Executive Mgm't & Auth. BD.

ATTACHMENT B - MEETING LOGS

MTA MS4 Annual Progress Report

Stormwater Meetings and Events Attended by MTA

<u>Date</u>	<u>Activity Attended and Location</u>	<u>Persons Attended</u>
12/8/2008	M&O Committee Meeting	RS & PN & RH & DW & JD & TLP
11/21/2008	Long Creek M&O Committee meeting	RS & JB & SN & PN & JD & DW & TLP
11/20/2008	Supervisors Meeting to review IDDE MGs accomplished/to be accomplished	JB & RS & WJ & BW & Foremen
11/19/2008	In-house MTA meeting to review draft SPMP and MGs	JB & RS & SN & PM & ST & RD
11/5/2008	Mtg at MaineDOT w/DEP to discuss Long Creek and MEPDES MOA	JB & RS & SN & PN & RH & DW & DL & JD
10/29/2008	Conf call w/MaineDOT to discuss stormwater BMPs	JB & SN & RS & PN & RH
10/21/2008	Long Creek M&O Committee Meeting	JB & SN & RS & PN & RH & DW & TLP
9/17/2008	Long Creek M&O Committee Meeting	JB & SN & RS & PN & RH & DW & TLP
9/3/2008	Mtg at MaineDOT: Long Creek transportation infrastructure committee	JB & RS & PN & RH
8/14/2008	Long Creek M&O Committee Meeting	JB & SN & RS
8/8/2008	Conf call w/DEP re UIS watershed prioritization	SN & RS & DL
8/6/2008	Mtg at MaineDOT: Long Creek transportation infrastructure committee	JB & SN & RS & PN & RH
7/9/2008	Long Creek Technical Advisory Committee Meeting	JB & SN & RS & PN & RH & DW & TLP
6/24/2008	Hart Brook "DRAFT" Water Management Plan Meeting - Lewiston/Auburn	R.S., J.B.
6/24/2008	Stormwater Seminar - Lorman Ed. Services - Portland	J.B., R.S., S.N. & R.H
6/12/2008	Stormwater Utility Workshop - Portland Water District	R.S., S.N.
5/7/2008	Long Creek Watershed Management Meeting (Sable Oaks, S. Portland)	R.S., J.B.
5/2/2008	Long Creek Watershed Steering Committee Meeting (Sable Oaks, S. Portland)	R.S., J.B.
4/28/2008	IBTTA Conference - Presentation on Stormwater BMPs - Florida	J.B. ,W.J., S.T.,
4/25/2008	Long Creek Models & Outreach Committee(Fairchild, S. Portland)	J.B., S.N.
4/9/2008	Site Walk With Zak Henderson along Long Creek on MTA Property	J.B.
3/4/2008	Long Creek Steering Committee Meeting (S.Portland West Side Fire Station)	R.S.; J.B.
1/10/2008	Long Creek TAC Meeting(DEP,Portland)	J.B.
11/13/2007	Long Creek TAC Meeting(Sable Oaks,Portland)	J.B.
6/21/2007	Stormwater Seminar	J.B. & R.S.
6/20/2007	Long Creek Watershed Management Meeting (Convening Committee Meeting)	R.S., J.B.
6/11/2007	MOA Revision Meeting with DEP and DOT	R.S, S.N, S.T., J.B, W.F
5/22/2007	Long Creek Watershed Management Meeting (Preliminary Meeting)	R.S., J.B.
5/16/2007	DEP Stormwater Training for Public Works Facilities	M.A.
5/7/2007	Hart Brook Watershed Management Plan (Stakeholders Workshop)	R.S.
4/30/2007	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
4/5/2007	Hart Brook Watershed Management Plan (Public Meeting)	R.S.
3/15/2007	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
12/20/2006	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
6/15/2006	Chapter 500 Stakeholders Meeting	R.S. and S.N.
6/2/2006	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
5/30/2006	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
5/16/2006	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.

ATTACHMENT B - MEETING LOGS

MTA MS4 Annual Progress Report

Stormwater Meetings and Events Attended by MTA

<u>Date</u>	<u>Activity Attended and Location</u>	<u>Persons Attended</u>
5/3/2006	MOA Revision Meeting with DEP and DOT	R.S., S.N., S.T., R.D., W.F.
4/13/2006	DEP NPS Training for inspectors to control construction site runoff	R.S.
3/30/2006	Maine Chamber of Commerce Environmental Policy Meeting	R.S.
3/7/2006	Annual MOA Meeting with DEP and DOT	R.S., S.N., S.T., R.D.
4/25/2005	Conference L.I.D. Stormwater BMP's-Civic Ctr, Augusta, ME.	J.B. & S.T. & B.F.
4/8/2005	Mtg w/Scott Lachance on Year 2 Mapping and Inventory	J.B. & S.L.
4/7/2005	Mtg w/GZA to discuss Year 2 Progress Report	J.B. & R.S. & P.S.
10/21/2004	A.S.C.E. Meeting/Dinner: Low Impact Development	J.B. & P.M. & S.T. & B.F. & S.W.
8/24/2004	W.H. Shurtleff Erosion, Sediment & Stormwater Seminar, Portland	J.B. & B.T. & A.P. & B.W. & B.F.
4/6/2004	IDDE Workshop, MEDEP, PWD, Portland	J.B. & S.L. & P.S. & W.F.
11/19/2003	State Wide, DEP Educational Media Comp. Auburn	J.B & S.N & R.G
11/3-11/5/2003	Facilitated at Intl.Cold Climate SW Conf.	J.B
10/28/2003	Mtg w/ Mark Curtin, HNTB ref. SW Mapping & Invt	J.B
9/24/2003	In House Mtg on SWMP - Annex	J.B & S.L & S.T
9/11/2003	Getting-In-Step Wrk Shop, Augusta	R.S
9/10/2003	Interprogress review mtg at Annex	P.M & J.B & S.T & WJ & BW & JA & CR
8/13/2003	In House Mtg SWPll interprogress review, Annex	J.B & R.S & S.N
6/19/2003	Mtg with EER, Inc on SWPll, ref. Sabattus MSA & MTA	R.S & A.G
5/29/2003	Assist Software Trng- MENG Armory	R.S & A.G & J.B & S.N
5/6/2003	APWA - Case Studies in SWPll, Portland Pub. Works	A.G & R.S & J.B
5/2/2003	In House SWPll & Car Fire Accident MTG	J.B & R.S & C.R & B.W
4/10/2003	In House Mtg SWPll, Annex	S.N & J.B & P.M
4/4/2003	In House Mtg SWPll, Annex	S.N & J.B & P.M
3/20/2003	Assist Software Trng- SWPll, Augusta	A.G & R.S
3/10/2003	In House Mtg - SWPll, Pat Bnoid Plan	R.S & S.N & J.B
3/6/2003	In House No I Mtg- SWPll	R.S & J.B & A.G
1/30/2003	In House Mtg with Peter M.	JB & P.M
1/21/2003	Public Notice of Gen. Permit - Barron Ctr, PTLD	J.B
1/21/2003	Brighton Ctr, PTLD	J.B & S.N & W.J
11/19/2002	MTA/MDOT SW Pll - DOT HQ Winthrop	C.O & S.N & J.B
10/18/2002	MDEP/MTA/MDOT Interlocal Gp Mtg, Augusta	J.B & D.L & S.N & J.E
10/10/2002	P & F Office with DOT	C.O & P.N & S.N & J.B
6/27/2002	Mtg at MDEP w/MDOT & MTA Non Traditonal	J.B & S.N & C.O & P.N & D.L
6/21/2002	Mtg at DOT to begin SW drafting - MDOT HQ	P.N & C.O & J.B

LEGEND:

AG	Amy Grace	MTA Environmental Specialist/Training Coordinator
JB	John Branscom	MTA Environmental Services Coordinator
RS	Robyn Saunders	GZA GeoEnvironmental, Inc. Representating MTA
SN	Sharon Newman	Preti & Flaherty, LLC. Representing MTA
PM	Peter Merfeld	MTA Chief Operations Officer
SL	Scott Lachance	MTA Right-Of-Way Specialist
ST	Steve Tartre	MTA Director, Engineer and Building Maintenance
BF	Bill Franklin	MTA Deputy Director, Engineering and Building Maintenance
WJ	Wes Jackson	MTA Director, Highway and Equipment Maintenance
BW	Bill Wells	MTA Deputy Director, Highway and Equipment Maintenance
JA	Jon Arey	MTA Staff Attorney

ATTACHMENT B - MEETING LOGS

MTA MS4 Annual Progress Report

Stormwater Meetings and Events Attended by MTA

<u>Date</u>	<u>Activity Attended and Location</u>	<u>Persons Attended</u>
RD	Bob Driscoll	HNTB
PN	Peter Newkirk	Maine DOT
RH	Ryan Hodgman	Maine DOT
CO	Chris Olson	Maine DOT
TK	Toni Kimmerle	Maine DOT
RP	Rhonda Poirier	Maine DOT
DL	David Ladd	Maine DEP
DW	Don Witherill	Maine DEP
JD	Jeff Dennis	Maine DEP
TLP	Tamara Lee	Cumberland County Soil & Water Conservation District (CCSWCD)



ATTACHMENT C

STORMWATER COORDINATORS FOR SELECT HOST MS4 COMMUNITIES

ATTACHMENT C

Stormwater Coordinators for Select Host MS4 Communities

<u>Name</u>	<u>MS4 Community</u>
Sarah Wojocoski	Scarborough and Saco
Kathi Earley	Portland
Doug Roncarti	Portland
Angela Blanchette	Saco
Bob Malley	Cape Elizabeth
Tom Milligan	Biddeford
Fred Dillon	South Portland
Steve Johnson	Cumberland
Gary Lamb	Old Orchard Beach
Bob Burns	Gorham
Dave Thomes	South Portland
Al Presgraves	Freeport
Dan Jellis	Yarmouth
Doug Fortier	Windham
Mike Shaw	Scarborough
Mark Gallup	SMCC
Jay Reynolds	Falmouth
Jan Patterson	Lewiston
Ryan Hodgman	MaineDOT
Rhonda Poirier	MaineDOT



ATTACHMENT D
UPDATED IDDE FIELD SHEETS

Outfall: OF0188

Mile Marker 45.9 Suspected Illicit Discharge (Yes / No) Needs Cleaning (Yes /No)
 Location SB If yes Please Explain in Notes If yes Please Explain in Notes

ODOR	COLOR	FLOATABLES	DEPOSITS/ STAINING	ABNORMAL VEGETATION	DAMAGE	Type Of Flow	Viscosity
Petroleum Rancid/Sour Sewage/Septic Sulfide Organic Other None	Brown Green Orange Black Other None	Excessive Algae Petroleum Sewage Foam Garbage Sheen Other None	Petroleum Along Flow Line Leaves Iron Sediment Other None	Excessive Growth Stressed Vegetation None	Cracking/Chipping Corrosion Obstructions Under Mining Heaving Other None	Flowing Water or stream Stagnant Pool Dry/NONE	Low Viscosity- Water High Viscosity- Gear Oil

Notes:

Associated Catch Basin: CB0270

Mile Marker 45.9 Suspected Illicit Discharge (Yes / No) Cleaned Out (Yes / No)
 Location SB If yes Please Explain in Notes Needs Cleaning (Yes /No)
 Median

ODOR	COLOR	FLOATABLES	DEPOSITS/ STAINING	ABNORMAL VEGETATION	DAMAGE	Type Of Flow	Viscosity
Petroleum Rancid/Sour Sewage/Septic Sulfide Organic Other None	Brown Green Orange Black Other None	Excessive Algae Petroleum Sewage Foam Garbage Sheen Other None	Petroleum Along Flow Line Leaves Iron Sediment Other None	Excessive Growth Stressed Vegetation None	Cracking/Chipping Corrosion Obstructions Under Mining Heaving Other Grate Damaged None	Flowing Water or stream Stagnant Pool Dry/NONE	Low Viscosity- Water High Viscosity- Gear Oil

Notes:

Associated Catch Basin: CB0271

Mile Marker 45.9
 Location SB
 Median

Suspected Illicit Discharge (Yes / No)
 If yes Please Explain in Notes

Cleaned Out (Yes / No)
 Needs Cleaning (Yes /No)

ODOR	COLOR	FLOATABLES	DEPOSITS/ STAINING	ABNORMAL VEGETATION	DAMAGE	Type Of Flow	Viscosity
Petroleum Rancid/Sour Sewage/Septic Sulfide Organic Other None	Brown Green Orange Black Other None	Excessive Algae Petroleum Sewage Foam Garbage Sheen Other None	Petroleum Along Flow Line Leaves Iron Sediment Other None	Excessive Growth Stressed Vegetation None	Cracking/Chipping Corrosion Obstructions Under Mining Heaving Other Grate Damaged None	Flowing Water or stream Stagnant Pool Dry/NONE	Low Viscosity- Water High Viscosity- Gear Oil

Notes:

Associated Catch Basin: CB0272

Mile Marker 45.9
 Location SB
 Median

Suspected Illicit Discharge (Yes / No)
 If yes Please Explain in Notes

Cleaned Out (Yes / No)
 Needs Cleaning (Yes /No)

ODOR	COLOR	FLOATABLES	DEPOSITS/ STAINING	ABNORMAL VEGETATION	DAMAGE	Type Of Flow	Viscosity
Petroleum Rancid/Sour Sewage/Septic Sulfide Organic Other None	Brown Green Orange Black Other None	Excessive Algae Petroleum Sewage Foam Garbage Sheen Other None	Petroleum Along Flow Line Leaves Iron Sediment Other None	Excessive Growth Stressed Vegetation None	Cracking/Chipping Corrosion Obstructions Under Mining Heaving Other Grate Damaged None	Flowing Water or stream Stagnant Pool Dry/NONE	Low Viscosity- Water High Viscosity- Gear Oil

Notes:

Associated Catch Basin: CB0273

Mile Marker 45.9
 Location SB
 Median

Suspected Illicit Discharge (Yes / No)
 If yes Please Explain in Notes

Cleaned Out (Yes / No)
 Needs Cleaning (Yes /No)

ODOR	COLOR	FLOATABLES	DEPOSITS/ STAINING	ABNORMAL VEGETATION	DAMAGE	Type Of Flow	Viscosity
Petroleum Rancid/Sour Sewage/Septic Sulfide Organic Other None	Brown Green Orange Black Other None	Excessive Algae Petroleum Sewage Foam Garbage Sheen Other None	Petroleum Along Flow Line Leaves Iron Sediment Other None	Excessive Growth Stressed Vegetation None	Cracking/Chipping Corrosion Obstructions Under Mining Heaving Other Grate Damaged None	Flowing Water or stream Stagnant Pool Dry/NONE	Low Viscosity- Water High Viscosity- Gear Oil

Notes:

**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 defined 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."

Note: This form is to be completed in its entirety each permit year per Maine Department of Environmental Services.

DIRECTIONS:

Indicate "YES" or "NO" for any of the information collected.

IF "YES" is correct, please describe your observations as follows:

POSSIBLE DESCRIPTIONS FOR EACH CATEGORY

Petroleum	Grey	Algae/scum	Low, if like water	Sediments (if more than half full, must be cleaned out)
Rancid/Sour	Black	Foam/suds	High, if like oil or molasses	Petroleum
Sewage/Septic	Brown	Oil/sheen		Leaves
Organic	Green	Garbage/debris		ABNORMAL VEGETATIO Iron staining (which is red-orange-brown discoloration of soils)
Other	Other	Sewage		Excessive growth
None	Clear	Other		Stressed/dry/discolored
				None

DATA COLLECTED FOR PERMIT YEAR # _____

JULY _____ TO JUNE _____

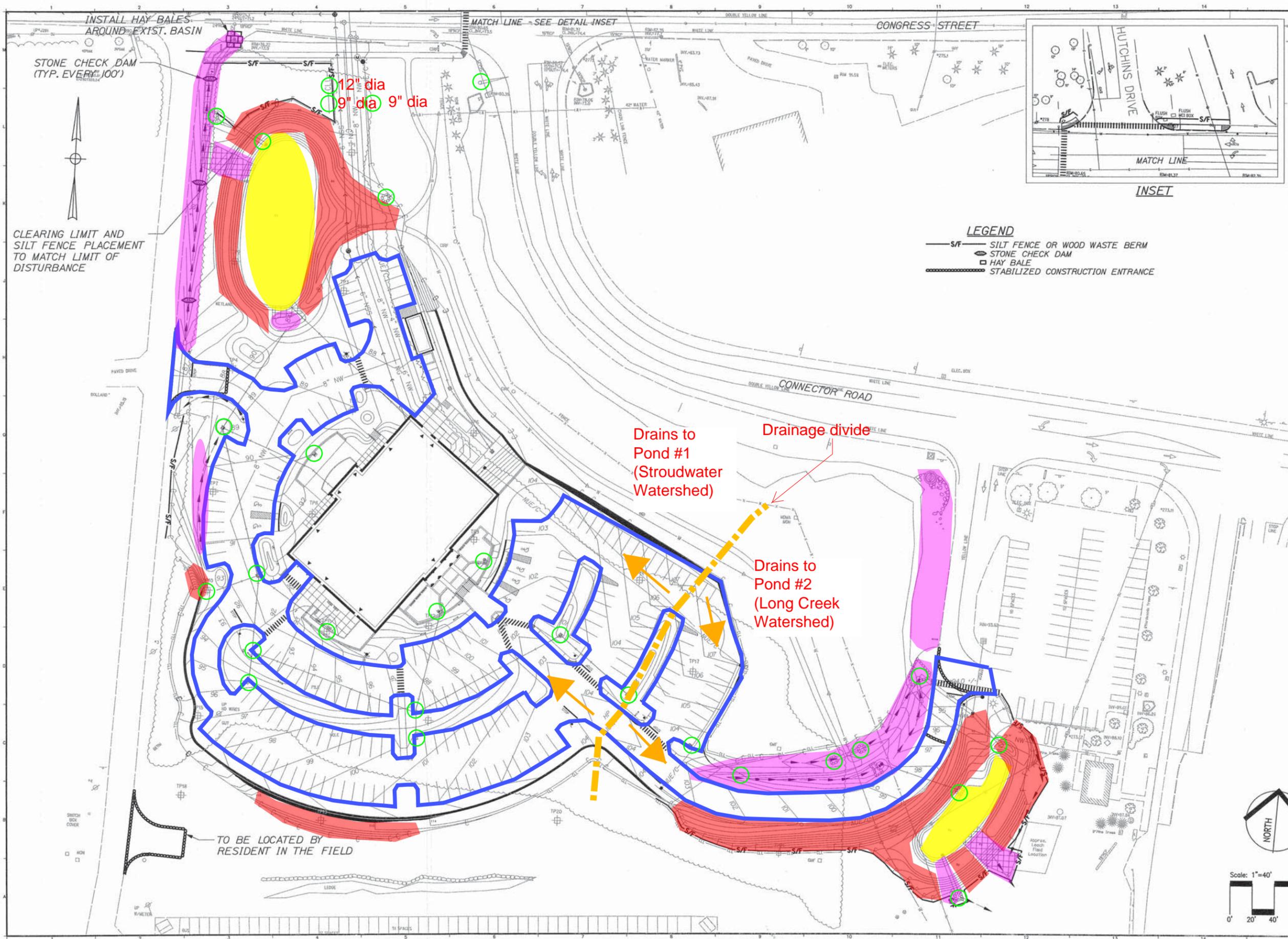
DATE OF ACTIVITY	CB IDENTIFIER	CB LOCATION with nearest Mile Marker (Example: 41.77 NB/Med. Shoulder)			TOWN	ASSOCIATED OUTFALL	COLLECT DATA AS PART OF CATCH BASIN (CB) CLEANOUT								COLLECT DATA AS PART OF ANNUAL INSPECTIONS								SUSPECTED ILLICIT DISCHARGE	CLEANED OUT Yes/No	NEEDS CLEANING Yes/No	INITIALS OF INSPECTOR AND ANY COMMENTS <small>include other suspicious characteristics and/or any damage observed</small>									
							ODOR		COLOR (Yes or No)		FLOATABLES (Yes or No)		VISCOSITY		DEPOSITS OR STAINING		ABNORMAL VEGETATION		DAMAGE		TYPE OF FLOW														
							CB	OF	CB	OF	CB	OF	CB	OF	CB	OF	CB	OF	CB	OF	CB	OF													
	CB0106	Median	Median	35.75	Saco**	OF0066		X		X		X		X		X		X		X															
	CB0107	SB	Median	35.75	Saco**	OF0066		X		X		X		X		X		X		X															
	CB0108	Median	Median	35.79	Saco**	OF0067																													
	CB0109	SB	Shoulder	35.87	Saco**	OF0068																													
	CB8852	Median	Median	35.9	Saco**	OF8863																													
	CB8901	Median	Median	Exit 36	Saco**	OF8901																													
	CB8902	Median	Median	Exit 36	Saco**	OF8902																													
	CB8827	Median	Median	Exit 36	Saco**	OF8833																													
	CB8826	Median	Median	Exit 36	Saco**	OF8834																													
	CB8825	Median	Median	Exit 36	Saco**	OF8835																													
	CB8824	Median	Median	Exit 36	Saco**	OF8836																													

Indicate amount of sediments observed, if >50% of catchment, must be cleaned out

** Goosefare Brook Watershed



ATTACHMENT E
O&M SCHEDULE
MTA ADMINISTRATION BUILDING



INSTALL HAY BALES AROUND EXIST. BASIN

STONE CHECK DAM (TYP. EVERY 100')

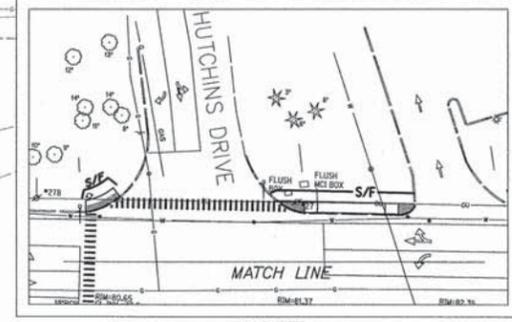


CLEARING LIMIT AND SILT FENCE PLACEMENT TO MATCH LIMIT OF DISTURBANCE

12" dia
9" dia 9" dia

MATCH LINE - SEE DETAIL INSET

CONGRESS STREET



INSET

LEGEND

- S/F — SILT FENCE OR WOOD WASTE BERM
- ◻ STONE CHECK DAM
- ◻ HAY BALE
- STABILIZED CONSTRUCTION ENTRANCE

Drains to Pond #1 (Stroudwater Watershed)

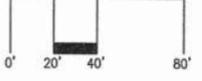
Drainage divide

Drains to Pond #2 (Long Creek Watershed)

TO BE LOCATED BY RESIDENT IN THE FIELD

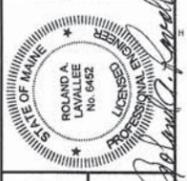


Scale: 1"=40'



PREPARED BY:
HNTB
HNTB CORP.
2 THOMAS DRIVE
WESTBROOK, ME 04092

SM RT
ARCHITECTURE ENGINEERING PLANNING
SMRT
144 Fore Street/P.O. Box 618
Portland, Maine 04104
tel. (207) 772-3946
fax. (207) 772-1070



PROJECT TITLE:
MAINE TURNPIKE AUTHORITY
ADMINISTRATION BUILDING
PORTLAND, MAINE
ISSUED FOR BIDDING/CONSTRUCTION
7-9-07

REV	DESCRIPTION	DATE
4	DOCS FOR OWNER REVIEW	6-11-07
3	ISSUED FOR CITY REVIEW	5-03-07
2	100% OWNER REVIEW	3-23-07
1	ISSUED FOR PERMITTING	2-09-07
0	PRE-SUBMITTAL	1-16-07

GRAPHIC SCALE:
0" 1"
SCALE: AS NOTED
PROJECT MANAGER: GAB
JC/DRAWN BY: MPC
A/E OF RECORD: GAB
CAD FILE: X
PROJECT NO.: 2007.07
DATE: 01/07
SHEET TITLE:
EROSION AND SEDIMENT CONTROL PLAN
SHEET No. CS301



ATTACHMENT F
DEP CORRESPONDENCE

INVOICE

Bill to:
 NATURAL RESOURCES SERVICE CENTER
 ATTN MEAGHAN FOSTER
 155 STATE HOUSE STATION
 AUGUSTA Maine 04333-0155

Customer Name MAINE TURNPIKE AUTHORITY		Page 1
Customer Number 06AMSTWMER043001	Invoice Number MSTW700602038	Invoice Date 06-03-10
	AR Dept BPRO	Due Date 07-07-10
	06A:MSTW	
	Amount Due \$132.00	Amount Enclosed

Bill to:
 MAINE TURNPIKE AUTHORITY
 ATTN: JOHN BRANSCOM
 2360 CONGRESS ST
 PORTLAND Maine 04102

Payment Method: Check Money Order

Please check if address has changed. Write correct address on back of stub and attach with payment

Please write Invoice No on front of check or Money Order. DO NOT MAIL CASH

Please detach the above stub and return with your remittance payable to TREASURER STATE OF MAINE



ENVIRONMENTAL PROTECTION
ORIGINAL

Customer Number 06AMSTWMER043001	Orig. Inv. Date 06-02-10	Orig. Due Date 07-07-10
Customer Name MAINE TURNPIKE AUTHORITY	Invoice Number MSTW700602038	Invoice Date 06-03-10

Invoice Charges

Ref Line No.	DESCRIPTION	Date of Service	No. of Units	Unit Measure	Unit Price	Charges/Credit
1	DEP # MER043001 2008 MS4 ANNUAL FEE FOR PERMIT YEAR 3	06-02-10				\$132.00
TOTAL INVOICE Charges						\$132.00

Other Charges

DESCRIPTION	Date	Charges
	06-02-10	

Credit Payments Applied		\$0.00
Total Amount Due By	07-07-10	\$132.00

Instructions

PLEASE NOTE: Interest at a rate of 1.25% per month will be applied to any balance not received by the Due Date on the original invoice.

CONTACT:	David Ladd	207-267-5404	david.ladd@maine.gov
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*pd.
 6/24/10
 CK #14572
 Posted 7/02/10*



August 4, 2010

John Branscom
Environmental Services Coordinator
Maine Turnpike Authority
2360 Congress Street
Portland, Maine 04102-1908

Dear John,

The Department has reviewed the Maine Turnpike Authority's ("MTA's") Permit year ("PY") one annual report for the 2008 MS4 General Permit. Your General Permit number is MER043001. I have reviewed all the Minimum Control Measures ("MCMs"), and have found MTA to be in substantial compliance with the terms and conditions of the 2008 General Permit my comments on MTA's annual report are as follows. DEP finds that MTA has met and in some cases exceeded the MS4 permit requirements.

Minimum Measure	Status
1 - Education & Outreach	Exceeds
2 - Public Participation	Meets
3 - Illicit Discharge Detection & Elimination	Exceeds
4 - Construction Site Runoff Control	Exceeds
5 - Post-Construction Runoff Control	Meets
6 - Pollution Prevention/Good Housekeeping	Meets

Minimum Control Measure 1. Education & Outreach

Stormwater Pollution Reduction Training: MTA continues to do an excellent job implementing this BMP. I appreciate MTA's supporting data in Table I and attachment "A". I'm particularly pleased with MTA's training assessment.

Collaboration: MTA has been a good partner with other regulated MS4s and has been an active participant in various watershed meetings to improve efficiencies in watershed management plans as well as Maine's MS4 stormwater program.

Minimum Control Measure 2. Public Participation/Involvement

Public Notice. MTA Complied with Maine Freedom of Access Act (“FOAA”).

Minimum Control Measure 3. Illicit Discharge Detection & Elimination

BMP 3a. Mapping/Prioritization: MTA has completed this requirement during the first five year permit cycle and no updates were required during PY one.

BMP 3b. Inspections: This is a key BMP for the success of this MCM; MTA has developed and implemented excellent inspection and data tracking methodology. Your report supplies great documentation as required by the General Permit. MTA does a great job training staff for inspections and for illicit and non-stormwater discharges; MTA has exceeded expectations for this MCM.

Minimum Control Measure 4. Construction Site Runoff Control

MTA has done a good job applying appropriate engineering design, building practices and inspections for its construction projects within and outside of the UA even those activities that disturb less than one acre in size. These efforts exceed permit requirements.

Minimum Control Measure 5. Post Construction Site Runoff Control

MTA has a good job complying with this MCM and providing supporting data in its annual report.

Minimum Control Measure 6. Pollution Prevention/Good Housekeeping

MTA has done an excellent job developing and implementing its training programs. Your street sweeping, catch basin cleaning and infrastructure maintenance meet the requirements of the 2008 General Permit.

Conclusion

MTA has substantially complied with PY of the 2008 Transportation MS4 General Permit. Your report was well organized and the Department appreciates the electronic submittal as well as your comprehensive approach in addressing my questions from permit year five’s review.

I appreciate MTA's involvement and commitment to Maine's municipal stormwater program. Your organization has kept pace with the many challenges of this program and has developed the necessary internal leadership to successfully comply with Maine's MS4 General Permit requirements. I hope to see MTA build on its successes in subsequent permit years to actively work towards pollution detection and reduction.

If you have any questions do not hesitate to contact me.

Sincerely,



David Ladd
Municipal and Industrial Stormwater Coordinator
Maine DEP

17 State House Station
Augusta, ME 04333-0017
(207) 287-5404
FAX: (207) 287-7826

[MAILTO:david.ladd@maine.gov](mailto:david.ladd@maine.gov)

Think Blue

Clean Water Starts With You!

Cc: File MER043001