Maine Turnpike Authority
2360 Congress Street
Portland, Maine 04102

VIA E–MAIL

August 22, 2017

Mr. Brian Kavanah
Director, Division of Water Quality Management
Bureau of Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

SUBJECT: Maine Turnpike Authority
Stormwater Program Management Plan
Maine DEP Permit # MER043001
Annual Report for Permit Year Four (July 1, 2016 through June 30, 2017)

Dear Mr. Kavanah:

On behalf of Maine Turnpike Authority (MTA), I am pleased to submit this Annual Report for Permit Year Four (PY4, defined as July 1, 2016 through June 30, 2017). This report is intended to satisfy the requirements in ***Part IV(J)*** of the Maine Pollutant Discharge Elimination System (MEPDES) General Permit for Stormwater Discharges from Maine Department of Transportation (MaineDOT) and MTA Municipal Separate Storm Sewer Systems (MS4s).

This Annual Report describes the status of MTA's program of Best Management Practices (BMPs) and Measurable Goals (MGs) for each of the six Minimum Control Measures (MCMs) presented in MTA's Stormwater Program Management Plan (SPMP) (dated December 2, 2013) for PY4.

BACKGROUND

MTA's SPMP was developed in accordance with ***Part IV(A)*** of the MPDES MS4 General Permit 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 located within Urbanized Areas (UAs). For each MCM established in the SPMP, measurable goals have been established to evaluate the effectiveness of the designated BMPs. These goals have been assigned an implementation schedule and/or milestones for implementation of applicable BMPs.

The SPMP has not been modified or updated since its submittal to the Maine Department of Environmental Protection (DEP); therefore, a copy of the SPMP is not included with this report. On November 28, 2016, MTA received correspondence from Maine DEP regarding MTA's PY3 Annual Report. MTA's written response was submitted to Maine DEP on December 22, 2016.

In accordance with ***Part IV(J)(1)*** of the MPDES MS4 General Permit, this Annual Report provides a summary of activities that demonstrate MTA's compliance status with respect to the MS4 permit conditions and progress toward achievement of the goals identified for each MCM in the subsections below. The BMPs identified in the SPMP are appropriate to meet the goals identified for each MCM. No monitoring data or other information was required by the MS4 permit in PY4. Anticipated activities in PY5 include, but are not limited to, additional stormwater infrastructure mapping efforts (BMP 3.1). No changes have been made to measurable goals identified in the SPMP. The subsections below describe the activities, progress, and accomplishments for each of the MCMs.

MTA enforces certain MCMs through construction contract specifications and has developed the Construction Project Environmental Compliance (CPEC) Program to document compliance with MS4 MGs and other stormwater requirements. Relevant elements of the CPEC Program are summarized in **MCMs 1, 4, 5 and 6**. In March 2017, a revised CPEC Program, included as **Attachment A**, was prepared and designed to streamline the process and capture additional environmental compliance reporting information.

MCM 1 - PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Goals*:*
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 through increased awareness and utilization of BMPs.

BMP 1.1 CONTINUE RAISING AWARENESS OF STORMWATER ISSUES AMONGST EMPLOYEES AND CONTRACTORS

MTA's annual stormwater training program was conducted for maintenance personnel and engineering inspectors to address pollution reduction in stormwater runoff. The stormwater training program, which is combined with Spill Prevention, Control and Countermeasures (SPCC) and Erosion and Sedimentation Control (ESC) practices training, was performed in May and June 2017 by regulatory specialists from GZA GeoEnvironmental, Inc. and MTA.

MTA SPCC/Stormwater/ESC training sessions held in 2017 emphasized the following:

- 2013 MS4 Permit obligations;
- MTA's MS4 Urban Impaired Streams (UIS) strategy, which identified Goosefare Brook and Hart Brook as MTA's two designated highest-priority watersheds with consideration of other UIS watersheds (e.g., Capisic Brook, Red Brook, etc.) within the MTA travel corridor;
- Requirements within the Long Creek watershed and other areas where watershed management plans (WMPs) are imminent;
- MTA's Mobile SPCC Plan, which includes procedures for refueling of mobile equipment, such as mowers, loaders, and other heavy equipment (i.e., avoid and minimize refueling within UA and UIS watersheds);
- MTA's revised CPEC program, including the updated post-construction phase checklist and maintenance/inspection requirements once a construction project has been permanently stabilized;
- Quarterly and annual reporting associated with MTA's Memorandum of Agreement (MOA) and Site Location of Development (Site Law), including routine O&M, recertification, etc.; and

- Maintenance (e.g., sweeping, catch basin cleanouts, outfall inspections, etc.) as per MTA's MS4 UIS Strategy, including updates to the Catch Basin Cleaning and Illicit Discharge Detection and Elimination (IDDE) tracking forms.

MTA's Stormwater Awareness Plan was summarized during the employee training sessions to ensure that all MTA employees are aware of their roles in achieving the goals of this plan. Additionally, MTA's CPEC Program requires that contractors conducting work on projects located within MTA's UA or an UIS watershed receive, review, and sign a copy of this plan. By signing the plan, the contractor is acknowledging that they have read, understand, and will disseminate the information in the plan to individuals working on the project. A total of six (6) contractors were provided a copy of MTA's Stormwater Awareness Plan in PY4.

Process Indicators for PY4 are as follows:

- Number employee training sessions: **6**
    - One session was held at each of the following MTA facilities: York, Kennebunk, Crosby/South Portland, Gray, and Gardiner; and
    - One make-up session was held at MTA headquarters (HQ).
- Number of MTA employees trained: **90**

Impact indicators are not required in PY4.

BMP 1.2 CONTINUE ENCOURAGING EMPLOYEES AND CONTRACTORS TO UTILIZE BMPs THAT MINIMIZE STORMWATER POLLUTION

In PY4, MTA maintained and implemented the existing BMP Adoption Plan that identifies target BMPs to be utilized by employees and contractors that minimize stormwater pollution. As part of the UIS strategy associated with this MCM, the BMP Adoption Plan places emphasis on utilizing target BMPs within MTA's two designated highest priority watersheds.

MTA's Targeted BMP Adoption Plan was reviewed during the employee training sessions described in **BMP 1.1** to ensure that all MTA employees are aware of their roles in achieving the goals of this plan. Additionally, MTA's CPEC Program requires that contractors conducting work on projects located within MTA's UA or an UIS watershed receive, review, and sign a copy of this plan. By signing the plan, the contractor is acknowledging that they have read, understand, and will disseminate the information in the plan to individuals working on the project. A total of six (6) contractors were provided a copy of MTA's Targeted BMP Adoption Plan in PY4.

Process Indicators for PY4 are discussed under **BMP 1.1.** Impact indicators are not required in PY4.

BMP 1.3 CONTINUATION OF EXISTING EDUCATION AND OUTREACH EFFORTS

MTA has continued the existing education and outreach efforts established during the previous MS4 permit cycle. MTA requires all contractors to submit training certificates for the delegated On-Site Responsible Party (OSRP) on MTA contracted projects, regardless of the size or location of the project, to ensure they are adequately trained and knowledgeable in ESC from Maine DEP's Non-Point Source (NPS) Training Program or an equivalent program.

Although no contractors were formally trained in the CPEC program in PY4, eight (8) construction projects were completed or ongoing and an additional six (6) construction projects were initiated in the UA and those contractors were required to review and sign copies of MTA's Stormwater Awareness Plan and Targeted BMP Adoption Plan. A total of 11 contractors were retained by MTA for the 14 projects under construction in the UA in PY4. In spring 2017, MTA's environmental coordinator began providing individual CPEC training refreshers for Engineer Inspectors and Resident Engineers during

their CPEC environmental audits for projects under construction. In PY4, two (2) of these one-on-one training sessions were conducted and this individualized training effort will continue through PY5.

MCM 2 – PUBLIC INVOLVEMENT AND PARTICIPATION

Goals:
Involve MTA's community including various departments 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.

BMP 2.1 PUBLIC NOTICE REQUIREMENT

MTA maintains a written public notice policy and complies with the Maine Freedom of Access Act. In PY4, MTA did not host any public meetings involving MS4 stakeholders in the implementation of this General Permit.

BMP 2.2 COORDINATE WITH REGULATED COMMUNITIES

In PY4, the MTA maintained close communication with MS4 communities and their respective Stormwater Coordinators, primarily through participation in the Greater Portland Interlocal Stormwater Working Group (ISWG) and the Southern Maine Stormwater Working Group (SMSWG). Community coordination is also a component of MTA's CPEC program, which includes project development phase communication with host municipalities that addresses planned construction and maintenance activities. Additionally, MTA remains closely involved with the evolving management requirements of UIS watersheds both within and outside of the UA. MTA communicates periodically, through periodic participation in local stormwater group meetings and involvement as a stakeholder, with host municipalities regarding watershed management planning efforts within MTA's ROW. MTA participated in the following efforts in fulfillment of **MCM 2** in PY4:

- MTA personnel (or their designees) have attended and participated in multiple public meetings, seminars, and conferences related to stormwater, including three (3) ISWG meetings and two (2) SMSWG meetings. MTA personnel also monitor agendas and minutes from the Bangor Area Stormwater Working Group (BASWG) and maintain contact with the Lewiston-Auburn MS4 cluster to facilitate collaboration among MS4 communities;
- MTA maintains a position on the Long Creek Watershed Management District Governing Board;
- Displayed "Think Blue" Ducky stickers at MTA facilities in highly visible areas such as toll booths and service plazas; and
- Shared GIS mapping data with the City of Auburn at their request to assist them with identifying interconnected infrastructure.

MCM 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

Goals:
Develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges in MTA's stormwater systems.

BMP 3.1 GROUND VERIFY WATERSHED BASED MS4 INFRASTRUCTURE MAP

The UA within MTA's ROW was mapped during the previous MS4 permit cycle using 2000 Census Bureau data. In PY1, MTA completed the process of identifying the additional UA that requires stormwater infrastructure mapping as a result of the 2010 Census Bureau data. PY2 ground verification of infrastructure in the two highest priority watersheds identified a data gap in MTA's infrastructure mapping at bridge structures associated with intersecting local roads (i.e., over/underpasses). During

PY3, MTA began mapping the drainage infrastructure at bridge structures associated with intersecting local roads (i.e., over/underpasses) and continued this work in PY4. In PY5, MTA plans to ground verify drainage at the local road over/underpasses within MTA's UA.

MTA maintains its stormwater infrastructure mapping data in an ArcGIS Server geodatabase that is not publicly available on the MTA website. A copy of the geodatabase and/or pdf maps can be made available to Maine DEP or other interested parties upon request. MTA typically updates these maps annually to reflect modifications in infrastructure (e.g., infrastructure removal/installation, more accurate mapping data, etc.). Maps and tracking forms are provided to each maintenance facility every spring to facilitate catch basin cleaning and dry weather inspections.

BMP 3.2 CONDUCT DRY WEATHER INSPECTIONS OF OUTFALLS AND IMPLEMENT A COORDINATED INSPECTION PROGRAM

The MTA conducted dry weather inspections at approximately 550 sites in PY4 as part of MTA's prioritized dry weather inspection program. The dry weather inspection program includes inspection and cleanout, as needed, of catch basins (CBs), CB outlets, and outfalls (OFs) within the UA and UIS watersheds. Priority is given to Long Creek, Goosefare Brook, and Hart Brook watersheds; however, maintenance crews also inspect and cleanout, as needed, the remaining stormwater infrastructure in the UA every year to be proactive. MTA continues to use tracking forms to capture dry weather inspection and catch basin cleanout information, which are summarized in **BMP 6.4** and available to Maine DEP upon request.

In PY1, MTA reached out to local MS4 Stormwater Coordinators in MTA's two highest priority watersheds (Hart Brook in Lewiston and Goosefare Brook in Saco) to develop a coordinated dry weather inspection program. An MTA representative met with each municipality's MS4 Coordinator to review outfall inspection techniques as well as the IDDE maps and tracking forms for MTA's ROW in the watershed. Coordinated inspections of select outfalls in Hart Brook in Lewiston were conducted on May 18, 2017, with Justin Early, City of Lewiston Project Engineer. During the coordinated effort with the City of Lewiston in the Hart Brook watershed, a total of four (4) sites were visited. Five (5) catch basins and six (6) outfalls were observed and minor maintenance items, such as additional rip rap stabilization, uncovering a partially submerged outfall, and removal of litter/debris, were noted for follow-up. Coordinated inspections of select outfalls in Goosefare Brook in Saco were conducted on May 19, 2017, with Joe Laverriere, City of Saco Engineer. During the coordinated effort with the City of Saco in the Goosefare Brook watershed, a total of two (2) sites were visited. One (1) catch basin (along with the associated inlet and outlet pipes), one (1) culvert, and two (2) outfalls were observed. Items noted for follow-up included locating design plans for drainage features at the I-195 (Saco Spur) railroad overpass and maintaining/rehabilitating the infrastructure to meet the designed specifications.

BMP 3.3 IMPLEMENT OPEN DITCH ILLICIT DISCHARGE PROGRAM

The MTA IDDE program has been updated and implemented to include MTA's open ditch systems. Open ditch IDDE efforts have been completed within MTA's two highest priority UIS watersheds and within all of MTA's UA.

Ditches that discharge directly to surface water have been included on the same tracking forms used to capture dry weather inspection and catch basin cleanout information, which are summarized under **BMP 6.4**, below, and available to Maine DEP upon request. MTA has also categorized connections from CB drain pipes into its ditch system as OFs and evaluated each of these conveyances for the presence of unauthorized discharges via dry weather inspection. No flows from pipes or other conveyances, other than stormwater and authorized non-stormwater conveyances have been observed to date.

BMP 3.4 CONTINUE TO IMPLEMENT ILLICIT DISCHARGE DETECTION AND ELIMINATION PROCEDURE POLICY

MTA has an established procedure and has developed a form for evaluating and documenting suspected illicit discharges. The catch basin cleanout and IDDE tracking form directs the inspector to complete the Suspected Illicit Discharge Form and notify MTA's Environmental Coordinator who then performs an investigation of each suspected illicit discharge in accordance with MTA's IDDE SOP. To date, no illicit discharges have been identified during MTA's annual dry weather inspections.

In PY4, one illicit discharge was identified in Portland during MTA routine maintenance. The discharge was discovered on August 22, 2016, when MTA staff observed a milky white liquid substance emerging from an earthen embankment located in the rear of the adjacent landowner's property. MTA staff immediately contacted Maine DEP and the City of Portland Department of Permitting & Inspections, who subsequently visited the property and spoke with the landowner on August 30, 2016. In an email from Fred Gallant, Maine DEP, dated August 31, 2016, MTA staff was notified that the landowner agreed to discontinue the illicit discharge from the facility and temporarily direct those flows to a floor drain tied into the City of Portland's sanitary sewer system and work with City of Portland's industrial pretreatment program to gain permit coverage and provide adequate treatment to meet permit conditions.

On February 23, 2017, MTA's Environmental Coordinator emailed a copy of the MTA Illicit Discharge Notification process, included as **Attachment B**, to interconnected MS4 communities and the MaineDOT.

BMP 3.5 IDENTIFY NON-STORMWATER DISCHARGES

Five spills within the UA occurred in PY4, which were reported to Maine DEP and cleaned up immediately without impact to stormwater infrastructure or waters of the State.

- July 10, 2016: A suspected motor vehicle accident at the Exit 32 southbound ramp in Biddeford resulted in the discharge of approximately five (5) gallons of an unknown material (assumed to be diesel fuel). No vehicle was present at the time the spill was discovered, and the cause of the spill is unknown. Sorbent material was spread over the spilled material on the asphalt pavement and sorbent socks were placed around nearby stormwater catch basins. The spilled fluids and absorbent materials were promptly cleaned up and disposed of under the direction of the Maine DEP's spill response personnel.
- July 11, 2016: A truck accident at mile marker (MM) 45 southbound in South Portland resulted in the release of approximately 40-50 gallons of diesel fuel from the truck's saddle tank to the road shoulder and a 15-foot by 15-foot adjacent area of soil. The local fire department, police, Maine DEP, and Clean Harbors responded to the incident. Oil from the truck saddle tank and collected diesel containers was vacuumed and collected by Clean Harbors; contaminated soil was excavated, backfilled, seeded and stabilized. The recovered oil and impacted soil were properly disposed of by Clean Harbors.
- July 26, 2016: A crane rollover accident in a shoulder ditch line at MM 35 northbound in Saco resulted in the release of approximately five (5) gallons of hydraulic oil to the soil, vegetation, and ponded water within the ditch line. Absorbent pads were placed in the ponded water within the ditch line and on the soil and vegetative surfaces. Under the direction of Maine DEP's spill response personnel, MTA applied absorbent pads and booms to the affected area on a daily basis until oil was no longer observed. The impacted sorbent material was promptly cleaned up and disposed of by MTA highway maintenance personnel.
- December 7, 2016: A leaking motor vehicle fuel tank resulted in the release of approximately one quarter gallon of gasoline to pavement located at the MTA Headquarters parking lot area in Portland. Sorbent material was applied to the spilled material. The impacted sorbent material

used to clean the spill was promptly cleaned up and disposed of by Environmental Projects, Inc. (EPI) personnel on December 8, 2016.

- February 16, 2017: A truck accident at MM 5 southbound in York resulted in the release of approximately 50 gallons of diesel fuel to the road shoulder. York Fire Department and Maine State Police responded to the incident. Follow-up cleanup efforts occurred on February 21, 2016. Under the direction of Maine DEP's spill response personnel, Clean Harbors collected the contaminated surface snow using two vacuum trucks and disposed the recovered contaminated materials.

MCM 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Goals:
Continue to implement and enforce MTA's program to reduce pollutants in stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre.

BMP 4.1 CONTINUE TO IMPLEMENT CONSTRUCTION PROJECT ENVIRONMENTAL COMPLIANCE (CPEC) PROGRAM

The CPEC Program is the primary means by which the MTA addresses stormwater management issues, including runoff from construction activities conducted by MTA and/or its contractors. The CPEC Program includes MS4 elements to control stormwater runoff from construction sites such as:

- Including language in the specifications and ESC Plan to notify the contractor that they are in an MS4 project area;
- Requiring contractors to provide training certificates for the delegated OSRP for each contracted construction project, regardless of size or location; and
- Identifying and inspecting structural and non-structural BMPs designed/constructed in an MS4 project area.

In PY4, MTA maintained these requirements, as well as those construction-related requirements associated with Chapter 500 and the MOA. These measures included the requirement to apply MaineDOT's BMP/ESC Manual on all projects, regardless of size or location, thus often exceeding the requirements of the permit.

The MTA submits a separate Annual Progress Report to the Maine DEP to satisfy the requirements in the Stormwater (MOA)[1], as adopted by the Maine DEP, MaineDOT, and MTA. The Annual MOA Report, most recently submitted to Maine DEP in June 2017, summarizes construction projects and associated BMPs (structural and non-structural) performed and anticipated.

- Number of projects with BMPs that were maintained or rehabilitated as part of construction activities during PY4: **5**
    - 2015.09 – Exit 53 Toll Upgrades – Falmouth: repair/maintain existing check dams, culverts, and ditches (project completion anticipated in June 2018);
    - 2016.08 – Interchange 44 ORT Conversion – repair/maintain existing culverts, ditches, catch basins, and riprap slope stabilization (project completion anticipated in late 2019);

[1] The MOA requires all State transportation system projects undertaken by or under the administration, supervision, or oversight of MaineDOT and MTA meet the Basic Standards in Chapter 500, regardless of location or size. Therefore, the Annual MOA Report includes projects within the MS4 UA as well as other construction projects throughout the MTA system.

  - 2017.01 – Pavement Rehab MM80.7-88.6 – replace/maintain existing culverts, catch basins, and riprap aprons (project completion anticipated in October 2017);
  - 2017.05 – Southern Bridge Repairs – maintain existing bridge drains (project completion anticipated in November 2017); and
  - 2017.06 – Northern Bridge Repairs – maintain existing scuppers (project completion anticipated in November 2017).

- Number of <u>new</u> post-construction BMPs that were under construction during PY4: **2**
  - 2015.12 – Exits 32, 36, and 46 NB Toll Upgrades: Two Underdrained Soil Filter (USF) systems will be installed at Exit 32 (project completion anticipated in June 2018).

In PY4 there were six (6) active construction projects within the UA disturbing one (1) acre or more:

- 2014.10 – Interchange improvements to Exit 80, Phase II – Lewiston
- 2015.09 – Toll Plaza Replacement at Interchange 53 – Falmouth
- 2015.12 – Exits 32, 36, and 46 NB Toll Upgrades – Biddeford/Saco/Portland
- 2016.08 – Interchange 44 Barrier Toll Plaza Open Road Tolling Conversion – Scarborough
- 2016.11 – Emergency Vehicle Ramps at Two Rod Road Underpass – Scarborough
- 2017.01 – Pavement Rehabilitation Clear Zone Improvements, Ferry Road Bridge Repairs, and Sabattus Exit 86 Toll System Upgrades – Lewiston/Sabattus

Active construction projects in PY4 were documented under MTA's CPEC Program, which includes inspection documents, stormwater requirements and other environmental compliance considerations. 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; (3) the Maine Construction General Permit (CGP); and (4) the MS4 permit. MTA employees and contractors are trained appropriately on construction site stormwater management controls. Contractors and MTA personnel are required to conduct weekly inspections and maintain inspection documentation for review when performing construction that disturbs land (regardless of whether the disturbance exceeds one acre). The CPEC Program requires projects to be inspected as follows:

- Prior to construction (e.g., photographic documentation, temporary BMPs in place, etc.);
- On a weekly basis during construction by a qualified MTA representative (e.g., Inspector or Engineer) along with the contractor's OSRP, who is appropriately trained;
- When transitioning from construction to post-construction (i.e., prior to submitting the Notice of Termination [NOT] for the CGP); and
- As part of routine CPEC Program environmental audits.

The CPEC Program provides a mechanism to ensure that stormwater requirements and other environmental regulatory obligations, including inspections and corrective actions, are considered and documented during construction and appropriate actions are undertaken to reduce pollutants in stormwater from construction activities. As a result of the effectiveness of the CPEC Program, no significant corrective actions were required in PY4 for projects in which one or more Maine DEP permits may apply (i.e., MS4, CGP, and Ch500/MOA). The non-significant corrective actions required during PY4 included routine housekeeping measures such as:

- Adjusting/reinstalling silt fences;
- Removing accumulated sediment at silt fences;
- Re-staking hay bales; and
- Re-loaming and seeding or mulching areas after a storm event.

MCM 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT

Goals:
1. Continue to implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre.
2. Develop and implement strategies that include a combination of structural and/or non-structural best management practices (BMPs).
3. Develop and implement an approved BMP inspection schedule that at a minimum stipulates that new BMPs are inspected at least once during the first year of installation.

BMP 5.1 CONTINUE TO IMPLEMENT CONSTRUCTION PROJECT ENVIRONMENTAL COMPLIANCE (CPEC) PROGRAM

Similar to **MCM 4**, MTA has continued to implement the CPEC Program to address post-construction stormwater management in new development and redevelopment. In PY4, MTA maintained and enforced these requirements, as well as post-construction standards associated with Chapter 500 and the MOA throughout MTA's ROW regardless of size or location. MTA provides a summary of these annual O&M practices to Maine DEP in the Annual MOA Report, which was most recently submitted to Maine DEP in June 2017.

BMP 5.2 INCLUDE A COMBINATION OF STRUCTURAL AND NON-STRUCTURAL BMPs

As discussed in **BMP 1.2**, MTA maintains and implements their BMP Adoption Plan that identifies target BMPs to be utilized by employees and contractors that minimize stormwater pollution. MTA's CPEC Program requires that contractors conducting work on projects located within MTA's UA or an UIS watershed receive, review, and sign a copy of this plan.

BMP 5.3 INSPECT NEW BMPs AT LEAST ONCE DURING THE FIRST YEAR AFTER INSTALLATION

As part of the CPEC Program and to ensure adequate long-term maintenance of newly constructed BMPs, MTA develops and implements a project-specific post-construction O&M plan for new BMPs installed as part of a construction project. These O&M plans include a GIS-based site plan and an inspection tracking form that are used by Highway Maintenance personnel to conduct quarterly inspections for the first year after permeant stabilization. Following the first year, newly constructed BMPs are incorporated into MTA's IDDE maps and tracking forms, and included in the annual infrastructure inspections completed by MTA's general engineering consultant for long-term inspection and maintenance. Highway Maintenance personnel have been trained and certified under Maine DEP's Non-Point Source (NPS) Program. In addition, these qualified personnel are also trained internally to implement the post-construction O&M plan aspects of CPEC Program. O&M plans are maintained in the project-specific CPEC binders and are available to Maine DEP upon request.

Post-construction BMP summary for PY4:

- Number of new post-construction BMPs discharging directly into waters of the State other than groundwater or into or from their separate storm sewer system: **0**
    - New post-construction BMPs in PY4 were limited to vegetated and riprap areas
- Number of projects with BMPs that were maintained or rehabilitated as part of construction projects completed in PY4: **1**
    - 2016.05 – Bridge Repairs – replaced existing drain trough;

- Number of sites inspected within the first year of installation to document their functioning post-construction BMPs: **6**
  - 2014.11 – Stroudwater River Bridge Repairs – Portland;
  - 2015.01 – Falmouth Pavement Rehab and Clear Zone Improvements – Falmouth;
  - 2015.04 – Southerly Bridge Repairs – MM 11.9 York and Clay Hill Road;
  - 2015.06 – Saco Toll Plaza Lane Addition & VMS Relocation – Saco;
  - 2015.10 – Lunt's Hill Underpass – Litchfield; and
  - 2015.14 – Gray Park and Ride (Exit 63) – Gray.
- Number of sites that required routine maintenance or remedial action to maintain post-construction BMP functionality (not including those maintained during construction above): **0**

MCM 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING

Goals:
Reduce pollutant runoff from MTA's roads, other paved surfaces, infrastructure, and facilities through the development and implementation of an operation and maintenance (O&M) program.

BMP 6.1 INVENTORY POTENTIAL POLLUTANT SOURCES AND OPERATIONS

MTA does not operate any maintenance facilities within the MS4 regulated area, therefore, potential pollutant sources are generally limited to spills associated with vehicular accidents, road-killed wildlife, and MTA deicing operations. MTA began re-evaluating its inventory of potential pollutant sources in PY3. As of June 30, 2017, MTA had completed the following:

- Compiled documentation that summarizes facilities and operations and identifies those that are within the UA and UIS watersheds;
- Identified potential pollution sources for MTA facilities and operations;
- Compiled existing SOPs related to managing pollutant sources; and,
- Updated SOPs to reflect MS4 permit requirements and document pollutant source management (e.g., litter removal, catch basin sediment storage) within a single document.

MTA finalized the MCM 6 Written Procedures in August 2016 and made minor administrative changes in September 2016. A copy of the document is included as **Attachment C** to this Annual Report.

BMP 6.2 ANNUAL EMPLOYEE TRAINING

As discussed in **BMP 1.1**, MTA's existing employee training program addresses stormwater pollution prevention and erosion and sediment control and is revised, as appropriate. MTA's training program also incorporates construction and post-construction inspection and O&M requirements. Approximately 90 MTA employees were trained in stormwater pollution prevention and ESC practices during six 2.5-hour training sessions held in May and June of 2017. The average test score for the PY4 stormwater training was 93%. The testing results provide documentation of the effectiveness of the training.

BMP 6.3 STREET SWEEPING

As reported in previous MS4 permit cycles and the Annual MOA Report, MTA maintains a regular pavement sweeping program ensuring that all paved surfaces within the UA (including interchanges, toll plazas, park-and-ride lots, and other facilities) are swept at least once per year and as soon as possible after snowmelt, with priority given to paved areas within UIS watersheds. Specifics on sweeping and other pollution prevention/good housekeeping measures are tracked as part of the Annual MOA Report,

and have been summarized below. MTA generally reuses the collected sweepings as construction fill material.

UA Street Sweeping Summary for PY4:

- Approximate number of lane miles swept: **136**
- Approximate number of local road overpasses swept: **10**
- Approximate number of toll/interchange areas swept: **13**
- Approximate number of parking areas swept: **2**

BMP 6.4 CLEANING OF STORMWATER STRUCTURES INCLUDING CATCH BASINS

As discussed in **BMP 3.2**, MTA has a prioritized inspection program that includes inspection and catch basin cleanout, as needed, within the entire UA. Priority is given to Long Creek, Goosefare Brook, and Hart Brook watersheds; however, maintenance crews also inspect and cleanout, as needed, the remaining stormwater infrastructure in the UA and UIS watersheds on an annual basis. MTA continues to use tracking forms to capture dry weather inspection and catch basin cleanout information, which are summarized below and available to Maine DEP upon request.

UA Catch Basin Maintenance Summary for PY4:

- Approximate number of catch basins inspected: **503**
- Approximate number of catch basins cleaned: **260**
- Approximate number of catch basins repaired: **8** (replaced broken grates)

Catch basin sediment is sampled in accordance with Maine DEP regulations regarding the beneficial reuse of this material and, depending on the analytical results, MTA either reuses the collected sediment as construction fill material or disposes of the material in accordance with current State regulations (rules). MTA generally reuses the recovered catch basin sediment as construction fill material.

BMP 6.5 MAINTENANCE AND UPGRADING OF STORMWATER CONVEYANCES AND OUTFALLS

As part of MTA's Stormwater MOA, progress reports summarizing current and planned construction projects and maintenance efforts (which may include new drainage infrastructure installed or replaced by MTA maintenance crews) are submitted annually to Maine DEP. In PY4, the majority of MTA construction efforts continued to focus on bridge repair/maintenance projects and pavement rehabilitation. Drainage infrastructure repairs are typically included as part of pavement rehabilitation projects and infrastructure maps and IDDE tracking forms are updated annually to reflect new drainage infrastructure.

An annual inspection of MTA's infrastructure is conducted by a professional engineering consultant. The resulting *Annual Inspection Report* and *Operation and Maintenance Annual Report* is available on MTA's website (http://www.maineturnpike.com/project-and-planning/Transportation-Planning.aspx). These reports summarize the condition of MTA's infrastructure (including drainage infrastructure) and identify any deficiencies observed. MTA uses the information presented in these reports to evaluate and implement a prioritized schedule for repairing or upgrading conveyances, structures, and outfalls as required under this MCM.

BMP 6.6 STORMWATER POLLUTION PREVENTION PLANS (SWPPPs)

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**:

- SPCC Plans with integrated stormwater pollution prevention measures for all MTA Highway/Equipment Maintenance Facilities that address the proper use, storage, and disposal of petroleum products, and additionally address vehicle and equipment storage, maintenance, and refueling practices;
- A Mobile SPCC Plan for all MTA's entire ROW to supplement spill response and prevention measures in the facility-specific SPCC Plans and specifically addresses more stringent practices within UA and UIS watersheds; and
- Quarterly stormwater BMP inspections at its Highway/Equipment Maintenance Facilities.

CONCLUSION

In accordance with the MPDES General Permit ***Part IV(J)***, this Annual Report presents a summary of significant goals achieved during the fourth year (July 2016 through June 2017) of implementation of the MTA's SPMP including an evaluation of BMPs and MGs established for the six MCMs. If you have any questions concerning this Annual Report of MTA's MS4 SPMP, please do not hesitate to call me at (207) 871-7771, ext. 359.

Respectfully,

John M. Branscom
Environmental Coordinator
Maine Turnpike Authority

Attachments: Attachment A – CPEC Program Documents
Attachment B – IDDE Notification Email and Memorandum
Attachment C – MTA MCM6 Written Procedures

cc: Aimee Mountain; GZA GeoEnvironmental, Inc.

Attachment A
CPEC Program Documents

Construction Project Environmental Compliance (CPEC)
Milestone Tracking

Completion Dates
Date CPEC Binder was Returned to MTA
Date Post-Construction O&M Plan was Completed
Date of Final Post-Construction Inspection by Highway Maintenance Foreman

Contract Name:		**Contract #:**	
City/Town:		**MTA Project Manager:**	
Mile Marker(s):		**Design Engineer:**	
MCGP:	☐ **Yes** NOI Date:_____ NOT Date:_____ ☐ **No**	**Resident Engineer:**	
		Contractor:	
MS4 Urbanized Area:	☐ **Yes** _____ *Community Name(s)* ☐ **No**	**Contractor Foreman:**	
		Engineer Inspector:	
Urban Impaired Stream (UIS) Watershed:	☐ **Yes**_____ *UIS Name(s)* ☐ **No**	**Highway Maintenance Territory / Foreman:**	
		MTA ESC:	John Branscom
Net Change (addition/removal) in Impervious Area:	acres	**Final LOD:**	acres

Milestone	**Responsible Party**	**Date**	**Follow-up/Notes**
PRE-CONSTRUCTION PHASE			
Bid Opening			
Contract Awarded			
Binder Audit	MTA ESC		
CONSTRUCTION PHASE			
Break Ground			
Environmental Audit(s)	MTA ESC		
Substantial Completion			
Permanent Stabilization*			*See Final Walkthrough Checklist
Binder Audit and Final Walkthrough	MTA ESC & Resident Engineer		
POST-CONSTRUCTION PHASE			
Binder Audit	MTA ESC		
Post Construction Inspections	Highway Maintenance Foreman		

CPEC Pre-Construction Phase Checklist

Signatures of Completion	
Design Engineer	Date
Resident Engineer	Date
MTA Environmental Coordinator	Date

Project Description (Scope of Work):					
Contract Name:				**Contract #:**	
Estimated Soil LOD:	acres	**Estimated Wetland LOD:**	acres	**Estimated Total LOD:**	acres

Stormwater Best Management Practices (BMPs) Construction & Maintenance		**Yes***	**No**
Are existing permanent stormwater BMPs being maintained as part of this contract?			
Are new permanent stormwater BMPs being installed as part of this contract?			
Permit Applicability			
Regulatory Agency	**Federal Permits**	**Yes***	**No**
US Coast Guard (USCG)	Bridge Permit or Construction Notification Requirements		
Army Corps of Engineers (ACOE)	Category 1- Non-Reporting		
	Category 2- Reporting		
	Individual		
Other Federal Permit(s)			
Regulatory Agency	**State Permits**	**Yes***	**No**
Maine Department of Environmental Protection (Maine DEP) Stormwater Management and Maine Pollutant Discharge Elimination	Chapter 500 Basic Standards: Memorandum of Agreement (MOA) *Include pre-construction photos of the limits of earth disturbance*		
	Chapter 500 General Standards *Document coordination and/or correspondence with Maine DEP*		
	Maine Municipal Separate Storm Sewer System (MS4) Permit *Document coordination with local stormwater coordinator(s)*		
	Chapter 502 Urban Impaired Stream (UIS) *Document coordination with local stormwater coordinator(s)*		
	Maine Construction General Permit (MCGP) *Include NOI Date on CPEC Milestone Tracking Sheet*		
Maine DEP Natural Resources Protection Act (NRPA)	Chapter 305 Permit by Rule (PBR)		
	Chapter 310 Wetlands Tier 1		
	Chapter 310 Wetlands Tier 2		
	Chapter 310 Wetlands Tier 3		
	Chapter 310 Wetlands Individual		
Other State Permit(s)			

**** If yes, include permit and related documentation (including coordination and correspondence) in CPEC binder.***

NOTE: This checklist is modified and abbreviated to help focus on the most likely permit types that would be encountered for routine MTA projects. Not all criteria or standards for permit categories are provided.

CPEC Pre-Construction Phase
Permanent Stormwater BMP Construction and/or Maintenance

Construction and/or Maintenance of Permanent Stormwater BMPs

A stormwater BMP is a structure or practice designed to minimize the flushing by stormwater and the discharge of pollutants to waterbodies by temporarily storing and treating urban runoff.[1]

Standard BMPs	Other BMPs
• Catch Basin • Culvert • Ditch or Swale • Deck Drains • Riprap Downspout • Under-bridge drainage (e.g., scuppers, troughs, etc.)	• Detention Basin • Level Lip Spreader • Underdrained Soil Filter (USF) • Vegetated buffer • Wet Pond • Other _____

Routine Maintenance is performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Paving impervious gravel surfaces while maintaining the original line and grade, hydraulic capacity and original purpose of the facility is considered routine maintenance.[2]

Not Applicable ☐

PROJECT INFORMATION

Standard BMP Type	# Installed	# Removed	# Maintained	Total Quantity	Other BMP Type	# Installed	# Removed	# Maintained	Total Quantity
Catch Basin					Detention Basin				
Culvert					Level Lip Spreader				
Ditch or Swale					Underdrained Soil Filter (USF)				
Deck Drains					Vegetated buffer				
Riprap Downspout					Wet Pond				
Riprap Stabilization					Other (e.g., street sweeping between guard rails):				
Under-bridge drainage (e.g., scuppers, troughs, etc.)									

BINDER DOCUMENTS

☐ Documentation of proposed permanent BMPs (above) and O&M requirements for non-standard or proprietary BMPs

[1] Maine Stormwater BMP Manual: http://www.maine.gov/dep/land/stormwater/stormwaterbmps/vol1/volume%20I%20March%202016.pdf

[2] Stormwater Management. Chapter 500. http://digitalmaine.com/cgi/viewcontent.cgi?article=1017&context=lwq_docs

CPEC Construction Phase Checklist

Signatures of Completion	
Engineer Inspector	Date
Resident Engineer	Date
MTA Environmental Coordinator	Date

Contract Name:		Contract #:	

Construction Documentation Requirements	
☐ **Not Applicable** (no earth disturbance and no permits)	
Applicable Federal Permits ***To Be Completed by Design Engineer***	**CPEC Binder Documentation Requirements for Applicable Permits**
US Coast Guard Bridge Permit or Construction Notification Requirements ☐ Not Applicable	☐ Copy of written request for construction approval
Army Corps of Engineers (ACOE) ☐ Category 1 ☐ Category 2 ☐ Individual ☐ Not Applicable	☐ Copy of Work Start Notification ☐ Copy of Pre-Construction Meeting Agenda and Signed Roster
Applicable State Permits ***To Be Completed by Design Engineer***	**CPEC Binder Documentation Requirements for Applicable Permits**
Maine Department of Environmental Protection (Maine DEP) Stormwater and Site Development (*check all that apply*) ☐ Chapter 500 Basic (MOA) ☐ Chapter 500 General ☐ MCGP ☐ MS4 ☐ UIS	☐ Contractor ESC training and certifications (or PE certification) ☐ Blank ESC inspection form ☐ Completed weekly ESC inspection reports ***NOTE:*** *Weekly ESC inspection reports are required until the site has reached permanent stabilization. Reporting can be suspended when the ground freezes, but must be resumed when the ground thaws.* ☐ Photographs of ESC issues and corrective actions ☐ Completed Periodic CPEC Construction Phase Environmental Audits ☐ Revised LOD plan (if applicable) Revised LOD:_____acres ☐ Revised NOI (if applicable) Revised NOI Date:_____ **For MS4 and UIS projects:** ☐ Copy of Pre-Construction Meeting Agenda and Signed Roster ☐ Signed Targeted BMP Adoption and Stormwater Awareness Plans
Natural Resources Protection Act (NRPA) (*check all that apply*) ☐ Chapter 305 ☐ Chapter 310 ☐ Not Applicable	☐ Copy of Pre-Construction Meeting Agenda and Signed Roster
Winter Construction (Nov. 1 – Apr. 15) ☐ Not Applicable	☐ Completed CPEC Winter Construction Checklist

CPEC Winter Construction Checklist

For projects with active construction occurring between November 1st and April 15th.

Contract Name:		**Contract #:**	

Category	Requirement	Completed	Corrective Action
Site Stabilization	• Construction areas stabilized by November 15th • Hay mulch applied at twice the temporary stabilization rate. • Hay mulch not applied on top of snow. • Areas at final grade stabilized at the end of each construction day.	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:
Sediment Barriers	• Double row of sediment barriers installed for all areas within 75 feet of protected natural resource	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:
Ditches	• Vegetated ditch lines not stabilized before November 1st or being worked during the winter were stabilized with an appropriate stone lining backed by gravel bed or geotextile.	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:
Slopes	• Slopes greater than 8% stabilized with (check all that apply): ☐ Mulch netting ☐ Erosion control blankets ☐ Erosion control mix ☐ Other (describe):	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:

CPEC Construction Phase Environmental Audit

Contract Name:		Contract #:	

Date:
Weather Conditions:
Attendees:

Observations, Comments, and Corrective Actions Required:

CPEC Construction Phase Final Walkthrough Checklist

Contract Name:		**Contract #:**	

Date:
Attendees:

Category	Requirement	Completed	Corrective Action
Stormwater BMPs	• Temporary BMPs have been removed, including: o Temporary sediment controls (silt fence) o Accumulated sediments • Permanent BMPs present and stable	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:
Site Stabilization	• Permanent stabilization has been reached (check all that apply)[1]: ☐ **Seeded areas**: 90% cover of healthy plants with no evidence of washing or rilling of the topsoil. ☐ **Permanent mulch**: total coverage of the exposed area. ☐ **Riprap**: Stabilized slopes with appropriate backing of a well-graded gravel or approved geotextile. Riprap sized appropriately. ☐ **Ditches, channels, and swales**: Channel is stabilized with a 90% cover of healthy vegetation, well-graded riprap lining, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. ☐ **Other** (describe):	☐ Yes ☐ No	☐ Yes ☐ No Action: Date: Initials:

Notes:

[1] These measures adapted from *Maine Erosion and Sediment Control Best Management Practices Manual for Designers and Engineers*, dated October 2016 (http://www.maine.gov/dep/land/erosion/escbmps/esc_bmp_engineers.pdf).

CPEC Post-Construction Phase Checklist

Signatures of Completion	
Resident Engineer	Date
MTA Maintenance Supervisor	Date
MTA Environmental Coordinator	Date

Contract Name:		Contract #:	

Permits with Post-Construction Documentation Requirements	
☐ **Not Applicable** (no earth disturbance and no permits required)	
Applicable Permits ***To Be Completed by Design Engineer***	**CPEC Binder Documentation Requirements for Applicable Permits**
ACOE Category 2 or Individual Permit ☐ Not Applicable	☐ Copy of Compliance Certification Form and date submitted to ACOE: _____
Chapter 500 ☐ Basic Standards (MOA) ☐ General Standards	☐ Post-Construction photographs showing final stabilization of all disturbed areas Date Completed: _____
New Stormwater BMP(s) ☐ Not Applicable	**Post-Construction O&M Plan is Required** ☐ Developed O&M Plan Date Completed: _____ ☐ Notified Highway Maintenance Foreman to assume responsibility for O&M Date Completed: _____ ☐ Assigned identifier(s) for new permanent stormwater BMPs and updated maps and tracking forms Date Completed: _____
MCGP ☐ Not Applicable	☐ Post-Construction photographs showing final stabilization of all disturbed areas Date Completed: _____ ☐ Copy of Notice of Termination (NOT) and date submitted to Maine DEP: _____

MAINE TURNPIKE AUTHORITY
Summary of MTA Facilities and Other Features within UA

REGULATED SMALL MS4 COMMUNITY	2013 Permit [1] MILE MARKER DELINEATION [2] Southern Boundary	2013 Permit [1] MILE MARKER DELINEATION [2] Northern Boundary	LINEAR ROW ONLY: LINEAR DISTANCE OF UA SEGMENT (linear miles)	LINEAR ROW ONLY: ASSUMED AREA [3] OF UA SEGMENT (sq. miles)	MTA FACILITIES: ASSUMED AREA [3] WITHIN UA (approx. acreage)	MTA FACILITIES: ASSUMED AREA [3] WITHIN UA (sq. miles)	MTA FACILITIES: MTA FACILITY FEATURES [3] WITHIN UA (Roadway and ROW assumed)	LAKES [4]	MM	STREAMS [4]
SABATTUS	**MM 83.6** Lewiston / Sabattus Town Line	**MM 84.3** Lisbon Road Underpass	**0.7**	**0.04**			*None identified*	*None identified*		*None identified*
LEWISTON	**MM 78.9** Androscoggin River	**MM 83.6** Lewiston / Sabattus Town Line	**4.7**	**0.27**	**25**	**0.04**	**Exit 80** Interchange (ramps) **Exit 80** Park and Ride (parking lot)	*None identified*	83.4 82.6 80.3 79.9 79.6 79.4 78.9	Unnamed tributary of No Name Brook (crosses Turnpike south of Grove Street overpass) No Name Brook **Hart Brook** [5] (aka Dill Brook) crosses 4 times At Alfred A Plourde Parkway overpass North of Goddard Road South of Goddard Road South of River Road Androscoggin River
AUBURN	**MM 78.8** Riverside Drive	**MM 78.9** Androscoggin River	**0.1**	**0.01**			*None identified*	*None identified*	78.9	Androscoggin River
	MM 75.0 Kitty Hawk Avenue Underpass	**MM 75.8** Danville Corner Road Underpass	**0.8**	**0.05**	**25**	**0.04**	**Exit 75** Interchange (ramps) **Exit 75** Park and Ride (parking lot)			*None identified*
	MM 73.5 New Gloucester / Auburn Town Line	**MM 74.5** Canadian National Railroad	**1.0**	**0.06**			*None identified*		74.4	Moose Brook
FALMOUTH	**MM 51.8** Presumpscot River Portland / Falmouth Town Line	**MM 53.4** Mountain Road Underpass	**1.6**	**0.09**	**25**	**0.04**	**Exit 53** Interchange (ramp) **Exit 53** Toll Plaza **Exit 53** West Falmouth Park and Ride	*None identified*	52.5	Unnamed tributary of Presumpscot River (crosses Turnpike near Exit 53 NB on-ramp)
	Falmouth Spur (F3.5) Just South of Falmouth Road / Middle Road (Route 9) Overpass	**Falmouth Spur (F3.8)** Rail Road Overpass (MaineDOT)	**0.3**	**0.02**			*None identified*			*None identified*
	Falmouth Spur (F0.2) Presumpscot River Portland / Falmouth Town Line	**Falmouth Spur (F1.8)** Just North of Falmouth Road Underpass	**1.6**	**0.09**			*None identified*		F2.4 51.8 F1.2	Johnson Branch of Presumpscot River Presumpscot River (crosses Turnpike and Falmouth Spur)
PORTLAND	**Falmouth Spur (F0.2)** Portland / Falmouth Town Line	**Falmouth Spur (F0.0)** Exit 52 Interchange	**0.2**	**0.01**	**25**	**0.04**	**Exit 52** Interchange (ramps and spur)	*None identified*	51.8 F1.2	Presumpscot River (crosses interstate and spur)
	MM 46.5 Congress St. Overpass	**MM 51.8** Presumpscot River	**5.3**	**0.30**	**25** **25**	**0.04** **0.04**	**Exit 48** Interchange (ramps) **Exit 48** Toll Plaza **Exit 47** Interchange (ramps) **Exit 47** Toll Plaza **Exit 47** Westbrook Park and Ride (parking lot) Administration Building (HQ)		50.8 49.8 48.7 47.8 46.8	Northerly unnamed tributary of Presumpscot River (crosses Turnpike south of Riverside Street overpass) Southerly unnamed tributary of Presumpscot River (crosses Turnpike south of Route 302 overpass) **Capisic Brook** [5] (within Turnpike ROW south of Warren Ave overpass) **Nasons Brook** [5] (crosses Turnpike south of Brighton Ave and RR overpass) Stroudwater River
	MM 46.4 Portland / South Portland Line	**MM 46.5** Congress St. Overpass					**Exit 46** Jetport Interchange **Exit 46** Jetport Park and Ride			
SOUTH PORTLAND	**MM 44.8** Scarborough / South Portland Town Line	**MM 46.4** South Portland / Portland town line					**Exit 45 South Portland/I-295 Interchange**		45.9 45.0	**Long Creek** [5] Unnamed Tributary of Long Creek
SCARBOROUGH	**MM 44.6** Approximately 200 ft North of Cummings Rd Overpass	**MM 44.8** Scarborough / South Portland Town Line						*None identified*	44.4 43.5 41.6	**Red Brook** [5] Nonesuch River Unnamed tributary of Beaver Brook
	MM 41.2 Just South of Beechridge Rd Underpass	**MM 44.6** Approximately 200 ft North of Cummings Rd Overpass	**3.4**	**0.19**	**25** **25**	**0.04** **0.04**	**Exit 44** Interchange (ramps) **Exit 42** Interchange (ramps) **Exit 42** Scarborough Park and Ride (parking lot)		 - 41.5 41.2	(crosses Turnpike south of Two Rod Road underpass) Unnamed tributary of Mill Brook (flows into) Beaver Brook Finnerd Brook
SACO	**MM 33.0** Saco River	**MM 35.9** Goosefare Brook	**2.9**	**0.16**	**25**	**0.04**	**Exit 36** Interchange (ramps) Saco Hotel and Conference Center Exit	*None identified*	35.9 33.6 33.4 33.0	**Goosefare Brook** [5] Deep Brook Cole Brook Saco River
BIDDEFORD	**MM 30.6** Arundel / Biddeford Town Line	**MM 33.0** Saco River	**2.4**	**0.14**	**25**	**0.04**	**Exit 32** Interchange (ramps) **Exit 32** Biddeford Park and Ride (parking lot)	*None identified*	33.0 32.7 32.2 31.9	Saco River **Thatcher Brook** [5] (crosses MTA ROW 3 times) South of South Street and runs parallel MTA ROW North of Biddeford connector (Ex 32) South of Biddeford connector (Ex 32)
YORK	**MM 6.2** Cider Hill Road	**MM 7.5** North of York Toll / Little River	**1.3**	**0.07**	**25**	**0.04**	**Exit 7** Interchange (NB ramps) **Exit 7** York Barrier Toll Plaza **Exit 7** Park and Ride	*None identified*	7.5 6.8 5.2	Little River Unnamed tributary of Moulton Brook York River
	MM 4.8 Beech Ridge Road	**MM 5.3** York River	**0.5**	**0.03**					5.2	York River
KITTERY	**MM 0.3** [8] Approximately 75 feet north of the Piscataqua River Bridge	**MM 4.2** Kittery / York Town Line	**3.9**	**0.22**	**25** **25** **25**	**0.04** **0.04** **0.04**	**Exit 3** Interchange **Exit 2** Interchange **Exit 1** Interchange	*None identified*	4.0 3.6 2.7 2.3 1.7 1.2	Libby Brook (crosses Turnpike in two places near Welcome Plaza) Unnamed tributary of Fuller Brook (Crosses Turnpike south of Cutts Road) Spruce Creek Chickering Creek Unnamed tributary of Chickering Creek
MaineDOT Territory [7] (not included in summation of	**MM 0.0** Maine / New Hampshire State Line	**MM 0.3** [8] Approximately 75 feet north of the Piscataqua River Bridge	0.3	0.02					0.0	Piscataqua River
SUMMATION OF MTA PROPERTY			30.7	**1.74**	350	**0.55**				

Maine Pollutant Discharge Elimination System (MEPDES) Permit coverage has already been obtained by MTA for this area under DEP's
General Permit - Post-Construction Discharge of Stormwater in the Long Creek Watershed [6]

2.30 **TOTAL SQUARE MILES OF MTA PROPERTY WITHIN UA (As of January 21, 2015)**

NOTES:

1.) UA for 2013 Permit is based on 2010 Census data downloaded from DEP's website. The 2013 UA maps that apply to MTA ROW have been attached as Figures 1 through 5. Corresponding MM designations were determined using features identified on MTA's *Mileage Chart with Stationing - 2012* (printed September 24, 2012).

2.) 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.

3.) MTA facility features identified within each host MS4 communities include the roadway (i.e., paved roads, bridges, etc.) and ROW (i.e., approximate 300-foot wide corridor along MTA roadway), as well as interchanges, park-and-ride lots and toll plazas as indicated (i.e., each interchange is estimated to be 25 acres on average). "*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.**

4.) In 2013, streams were identified by using the National Hydrography Dataset (NHD), available from USGS. The NHD is a digital vector dataset used by geographic information systems (GIS). It contains features such as lakes, ponds, streams, rivers, canals, dams and streamgages. These data are designed to be used in general mapping and in the analysis of surface-water systems."*None identified*" indicates that no waterbodies are present within the UA delineation.

5.) Maine DEP classifies several specific waterways within the state designated as Urban Impaired Streams (UIS) in Code of Maine Rules Chapter 502. These streams crossing MTA's ROW in UA have been identified in **emboldened text**, including Hart Brook (aka Dill Brook, Lewiston), Capisic Brook (Portland), Nasons Brook (Portland), Red Brook (Scarborough), and Goosefare Brook (Saco). Maine DEP data lists Thatcher Brook (Biddeford) as impaired. This waterbody is scheduled for inclusion in the next revision of Chapter 502. For the purpose of the 2013 Permit, Thatcher Brook is an Urban Impaired Stream. Streams included in the statewide Impervious Cover Total Maximum Daily Load (IC TMDL) Assessment for Impaired Streams are presented in **red text**.

6.) Orange highlighted areas indicate coverage under MEPDES Long Creek General Permit.

7.) Blue highlighted areas indicate that MaineDOT owns/operates this portion of I-95.

8.) MTA purchased an additional 1.9 miles of I-95 in Kittery on January 21, 2015 that was formarly owned by MaineDOT.

Maine Turnpike Authority
MS4 Stormwater Awareness 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 2013.

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. In addition, MTA distributes 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.

SIGNATURE

By signing below, you acknowledge that you have read, understand, and will disseminate this information to individuals working in an urbanized area or urban impaired stream watershed.

Name	Title
Signature	Date

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 2013.

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. In addition, MTA distributes 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.

SIGNATURE

By signing below, you acknowledge that you have read, understand, and will disseminate this information to individuals working in an urbanized area or urban impaired stream watershed.

Name	Title
Signature	Date

Attachment B
IDDE Notification Email and Memorandum

Aimee Mountain

From: Branscom, John M. <JBranscom@maineturnpike.com>
Sent: Thursday, February 23, 2017 10:37 AM
To: zhenderson@woodardcurran.com; dgoyette@auburnmaine.gov; abeaulieu@auburnmaine.gov; Milligan, Tom; jreynolds@town.falmouth.me.us; jkellogg@kitteryme.org; JEarly@lewistonmaine.gov; kAS@portlandmaine.gov; NEG@portlandmaine.gov; dar@portlandmaine.gov; townmanager@sabattus.org; jlaverriere@sacomaine.org; mshaw@ci.scarboroug.me.us; ablanchette@ci.scarborough.me.us; SBuckley@ci.scarborough.me.us; Dillon, Frederick (fdillon@southportland.org); dthomes@southportland.org; lhinz@yorkmaine.org; Kristie Rabasca (krabasca@integratedenv.com); Poirier, Rhonda (Rhonda.Poirier@maine.gov); Newkirk, Peter
Cc: Aimee Mountain; Van Note, Bruce A.
Subject: MTA - MS4 IDDE Memo
Attachments: FINAL MS4 Illicit Discharge Notification 022317.pdf

Attached is the Maine Turnpike Authority's (MTA's) illicit discharge notification policy. This policy is to inform you of our standard operating procedure regarding illicit discharges to the MTA's Municipal Separate Storm Sewer System (MS4) .

If you have any questions concerning this illicit discharge notification policy, please do not hesitate to call me at my office telephone number at (207) 871-7771, x 359.

Thank you,

Sincerely,

John Branscom
Environmental Services Coordinator
Maine Turnpike Authority

Maine Turnpike Authority
2360 Congress Street
Portland, Maine 04102

M E M O R A N D U M

To: MS4 Municipalities

From: John Branscom, Environmental Coordinator

Date: February 23, 2017

Re: Maine Turnpike Authority Illicit Discharge Notification

Under the terms of the 2013 Maine General Permit for the Discharge of Stormwater from the Municipal Separate Storm Sewer (MS4), the Maine Turnpike Authority (MTA) must continue to coordinate with the interconnected MS4 permittees on illicit discharge detection and elimination (IDDE) efforts in order to improve the health of Maine's water resources. See MS4 General Permit, Section IV, H, 2 (a) (ii). To satisfy this requirement, the Maine Department of Transportation has developed a formal notice procedure of such discharges, the MTA has determined it will follow such process as well.

MTA has interconnections with your MS4 or stormwater outfalls discharging to shared water resources. We maintain an IDDE policy and procedure that includes notification to interconnected MS4s of any illicit discharges on MTA property or right-of-way that could affect the MS4 or shared water resources. In the case of an illicit discharge that is discovered by MTA staff during an inspection or routine maintenance, we will contact the MS4's Stormwater Coordinator (or other MS4 contact) and work with the MS4 to eliminate the source of the illicit discharge and coordinate cleanup, as needed. In the case of a spill emergency outside of normal business hours, we will immediately contact the MS4's Public Safety Dispatch and will follow-up with the Stormwater Coordinator (or other MS4 contact) the following business day.

We ask that you please contact MTA's Environmental Coordinator, John Branscom, if an illicit discharge is discovered during normal business hours or MTA's Communication Center at 207-871-7771, extension 4, in the event of a spill emergency that has the potential to affect MTA's MS4 or shared water resources.

I would appreciate it if you would forward this request to any first responders or other municipal staff who may be in a position to coordinate spill response efforts with MTA. Please contact me if you have any questions and thank you for your cooperation.

Attachment C
MTA MCM6 Written Procedures

MAINE TURNPIKE AUTHORITY

GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM MAINE DEPARTMENT OF TRANSPORTATION AND MTA MUNICIPLE SEPARATE STORM SEWER SYSTEMS

MINIMUM CONTROL MEASURE 6 WRITTEN PROCEDURES

prepared for

Prepared by

GZA GeoEnvironmental, Inc.
477 Congress Street
Suite 700
Portland, Maine 04101

Prepared: August 2016

09.0025776.02 Task 1

MTA - Minimum Control Measure 6 Written Procedures

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APPENDICES

MTA - Minimum Control Measure 6 Written Procedures

1. INTRODUCTION

The Maine Turnpike Authority (MTA) implements and maintains a Stormwater Program Management Plan (SPMP) dated December 2013 to comply with the State of Maine Department of Environmental Protection (Maine DEP) Bureau of Land and Water Quality's *General Permit for the Discharge of Stormwater from Maine Department of Transportation and MTA Municipal Separate Storm Sewer Systems* (MS4 Permit). This document has been prepared to act as a supplement to show MTA's compliance with fulfilling Minimum Control Measure 6 (MCM 6) of the MS4 Permit.

The goal of MCM 6 is pollution prevention and good housekeeping in community/facility operations. **Table 1** identifies the MS4 Permit MCM 6 BMPs and their documentation requirements.

Table 1: MCM 6 BMPs

BMP	Description	MS4 Documentation
BMP 6.1	Implement structural and nonstructural controls to reduce stormwater pollution from facilities, buildings, and roadways.	See Section 3
BMP 6.2	Train employees on pollution prevention as well as erosion and sediment control.	MCM 1 Training Documentation
BMP 6.3	Sweep paved areas at least once per year as soon as possible after snowmelt.	MOA Quarterly reporting
BMP 6.4	Complete annual catch basin cleanout, and inspect stormwater outfalls within the urbanized area.	Catch basin cleaning & IDDE reporting form
BMP 6.5	Inspect infrastructure (including stormwater conveyance structures and outfalls) and prioritize repairs and upgrades.	MTA Annual Comprehensive Inspection report
BMP 6.6	Implement Stormwater Pollution Prevention Plans (SWPPPs) for vehicle maintenance facilities operated by the permittee within the Urbanized Area.	Not Applicable

2. APPROACH

The following sub-sections describe MTA's approach for implementing the pollution prevention and good housekeeping BMPs identified in MCM 6.

2.1 BMP 6.1: STRUCTURAL AND NONSTRUCTURAL POLLUTION PREVENTION CONTROLS

The MTA has developed an inventory of potential pollutant sources and associated operations which is summarized in **Section 3** along with the Operations and Maintenance (O&M) procedures that are implemented in company policies and Standard Operating Procedures (SOPs) to reduce stormwater pollution. Policies/SOPs are referenced in the text and/or included in the **Appendices** of this document.

Table 2 identifies the structural and nonstructural controls to reduce stormwater pollution from each operational area.

Table 2: Operations, Potential Pollutants, and Policy/SOP Names

Operation(s)	Potential Pollutant Source	Policy/SOP Name	Document Location
Catch Basin Cleaning	Catch Basin Sediment	Catch Basin Sediment Management SOP	Appendix A
Equipment & Vehicle Maintenance	Hazardous Materials and/or Hazardous Waste	Hazardous Waste Management Plan	On file in Environmental Services Coordinator office and Environmental File at each Maintenance Facility.
Fuel Oil Delivery	Petroleum Products	Notice to Oil/Fuel Delivery Truck Drivers	Posted at Loading/Unloading Areas
Mobile Equipment Refueling	Petroleum Products	Mobile Refueling SPCC Plan	On file in Environmental Services Coordinator office.
Road-Killed Wildlife	Solid Waste	Road Kill Policy	Appendix B
Solid Waste Collection	Solid Waste	Litter Removal and Solid Waste Management SOP	Appendix C
Spills from Motor Vehicle Accidents	Petroleum and/or Hazardous Materials	Approaching Collisions and Hazardous Material Incidents - First on the Scene Emergency Procedures	On file in Environmental Services Coordinator office.
Street Sweeping	Street Dust Within the Travel Lanes	Street Sweepings Management SOP	Appendix D
Universal Waste Collection	Universal Waste	Hazardous Waste Management Plan	On file in Environmental Services Coordinator office and Environmental File at each Maintenance Facility.
Vegetation Management	Landscaping Chemicals (e.g., Pesticides, Herbicides, etc.)	Mowing Policy	Appendix E
		Pesticide Manual	On file in Environmental Services Coordinator office.
Winter Road Maintenance	Deicer Products	Snow and Ice Control Procedures Manual	On file in Environmental Services Coordinator office.
		Draft Winter Maintenance BMP Manual	On file in Environmental Services Coordinator office.

2.2 BMP 6.2: ANNUAL STAFF TRAINING

The MTA conducts annual training for its staff (in accordance with the SPMP implementation guidelines for MCM 1) that includes awareness and pollution prevention SOPs for the source areas listed above. The annual training meets local, State, and federal regulatory training requirements.

2.3 BMP 6.3: ANNUAL STREET SWEEPING PROGRAM

The MTA conducts annual street-sweeping to remove grit and fines associated with winter road maintenance activities each spring after snow-melt. Materials recovered during the annual sweeping operations are managed in accordance with the Street Sweepings Management SOP (**Appendix D**).

2.4 BMP 6.4: ANNUAL CATCH BASIN CLEANING AND OUTFALL INSPECTION IN THE URBANIZED AREA

The MTA conducts annual catch basin cleanout and outfall inspections within the Urbanized Area. Materials recovered during the annual catch basin cleanout are managed in accordance with the Catch Basin Sediment Management SOP (**Appendix A**).

2.5 BMP 6.5: STORMWATER INFRASTRUCTURE INSPECTION

A comprehensive inspection of the MTA infrastructure is conducted on an annual basis by MTA's general engineering consultant. This annual inspection includes observation of all MTA-owned infrastructure, including conveyance structures and outfalls. A prioritized list of repairs and upgrades are then presented to MTA Highway Maintenance and/or Engineering for consideration.

2.6 BMP 6.6: STORMWATER POLLUTION PREVENTION PLANS FOR VEHICLE MAINTENANCE FACILITIES WITHIN THE URBANIZED AREA.

The MTA does not currently operate any vehicle maintenance facilities within the Urbanized Area.

3. FACILITIES, OPERATIONS, AND POTENTIAL POLLUTANTS

The following sub-sections describe MTA facilities, the associated operations, and an inventory of potential pollutant sources.

3.1 TOLL PLAZAS

The MTA operates both barrier and interchange toll plazas along their corridor. **Table 3** summarizes the toll plazas within the Maine Turnpike corridor, and those which are located in the urbanized area and subject to MS4 permit requirements are indicated with an asterisk (*).

Table 3: Toll Plaza Facilities List

Plaza Name	Mile Marker	Plaza Name	Mile Marker
York Barrier Toll Plaza*	7.3	Exit 47 Toll Plaza*	47.3
Exit 19 Toll Plaza	19.3	Exit 48 Toll Plaza*	48.5
Exit 25 Toll Plaza	25.5	Exit 52 Toll Plaza*	51.6
Exit 32 Toll Plaza*	31.6	Exit 53 Toll Plaza*	52.4
Exit 36 Toll Plaza*	35.7	Exit 63 Toll Plaza	63.1
Exit 42 Toll Plaza*	42.5	New Gloucester Barrier Toll Plaza	67.0
Exit 44 Toll Plaza*	44.3	West Gardiner Barrier Toll Plaza	100.2
Exit 45 Toll Plaza*	44.9	Exit 102 Toll Plaza	102.0
Exit 46 Toll Plaza*	46.3	Exit 103 Toll Plaza	103.0

* Indicates a toll plaza located in the Urbanized Area.

The toll plazas are operated solely for toll fare collection purposes and generally include an employee building, multiple toll booths, and an employee parking area. Potential pollutants at the toll plazas include petroleum products from motor vehicle accidents, universal waste, deicer products from winter maintenance operations, and solid waste.

3.2 MAINTENANCE FACILITIES

The MTA operates eight maintenance facilities along their corridor (**Table 4**). None of the maintenance facilities are located within the Urbanized Area.

Table 4: Maintenance Facilities List

Facility Name	Mile Marker	Facility Name	Mile Marker
York Maintenance Facility	6.3	Gray Maintenance Facility	63.3
Kennebunk Maintenance Facility	25.3	Auburn Maintenance Facility	76.9
Crosby (South Portland) Maintenance Facility	45.8	Litchfield Maintenance Facility	92.6
Sign Shop/Central Inventory Warehouse (Cumberland)	58.3	West Gardner Maintenance Facility	101.8

Various potential pollutant sources are associated with each facility depending on the operations performed and materials stored at a respective facility. Typical operations include equipment maintenance, equipment storage, loading/unloading of bulk products (e.g., liquid deicer, sand, and salt), and fuel delivery. In an effort to address potential pollutant sources, the MTA has implemented Spill Prevention and Stormwater Best Management Practices (SW BMP) Plans at the maintenance facilities (with the exception of the Sign Shop). The Plans are reviewed and modified as appropriate to address changes at a respective facility.

The MTA conducts annual training for maintenance personnel that includes stormwater pollution prevention, facility-specific spill prevention and SW BMP plan elements, erosion and sediment control practices, hazardous/universal waste management, and emergency response procedures.

3.3 SERVICE PLAZAS

The MTA operates five service plazas along their corridor (**Table 5**). None of the service plazas are located within the Urbanized Area.

Table 5: Service Plazas

Facility Name	Mile Marker	Facility Name	Mile Marker
Kennebunk Service Plaza	25.5 (NB)	Gray Service Plaza	59.0 (NB)
Kennebunk Service Plaza	25.5 (SB)	West Gardiner Service Plaza	101.7 (NB)
Cumberland Service Plaza	58.5 (SB)		

The service plazas generally include restaurants, gas/diesel stations, and a parking area. Potential pollutants at the service plazas include petroleum products (fuel loading/unloading, motor vehicle refueling and motor vehicle accidents), universal waste, deicer products from winter maintenance operations, and solid waste.

3.4 PARK AND RIDE LOTS

The MTA owns and operates nine (9) park and ride lots along their corridor (**Table 6**), and those which are located in the urbanized area and subject to MS4 permit requirements are indicated with an asterisk (*).

Table 6: Park and Ride Lots List

Facility Name	Capacity	Facility Name	Capacity
Exit 19, Wells	100	Exit 63, Gray	129
Exit 25, Kennebunk	52	Exit 75, Auburn*****	137
Exit 32, Biddeford*	155	Exit 80, Lewiston*****	92
Exit 42, Scarborough*	66	Exit 102, West Gardiner	54
Exit 46, South Portland*	68		

* Indicates Park & Ride Lot located in the Urbanized Area

The park and ride lots are intended for commuter use only, for 24 hours or less. Recreational vehicles and commercial trucks are not allowed in these lots. Potential pollutants at the park and ride lots include petroleum products from motor vehicle accidents and deicer products from winter maintenance operations.

3.5 ADMINISTRATIVE BUILDING

The MTA operates an administrative building located at 2360 Congress Street in Portland. The administrative building was constructed in 2007 and maintains a Chapter 500 Stormwater Discharge Permit which is recertified every 5 years. The potential pollutant sources at the administrative building include universal waste, deicer products from winter maintenance operations, and solid waste.

3.6 MAIN LINE (TRAVEL LANES) AND INTERCHANGES

The MTA operates 109 miles of travel lanes and associated access ramps and rights-of-way that are maintained along the Main Line corridor. The primary sources of pollutants along the Main Line corridor are related to motor vehicle usage and maintenance of the roadways and rights of way. Such pollutant sources include mobile refueling, vegetation management, and winter maintenance. Occasionally motor vehicle accidents (between vehicles as well as between vehicles and animals) may result in additional pollutant sources.

APPENDIX A - CATCH BASIN SEDIMENT MANAGEMENT SOP

MAINE TURNPIKE AUTHORITY

Storage, Handling and Management Procedures

For Catch Basin Sediment

- All catch basin sediment collected from roadways and parking areas that are not managed under other programs (i.e., Hazardous Waste) will be managed in accordance with the Maine DEP's *Guidance on Disposal & Use of Assorted Solid Wastes Generated in Maine* beneficial reuse requirements.
- Sediment shall be collected and stockpiled at a nearby maintenance facility prior to sampling, disposal, and/or reuse.
- Four composite samples representative of catch basin sediment removed in one year shall be analyzed for Total Petroleum Hydrocarbons (TPH) prior to reuse.
- Up to 200 cubic yards of sediment per maintenance facility per year with a TPH concentration of less than 500 ppm may be used as non-residential construction fill as defined in Chapter 400.1.GG on MTA-owned property.
- If the composite sample analytical result shows a TPH concentration greater than 500 ppm, the sediment shall be disposed of in accordance with current State regulations (rules).

Last Updated: July 28, 2016

APPENDIX B – ROAD KILL POLICY

Chapter 9

Road Kill Disposal

MAINE TURPIKE AUTHORITY ROAD KILL POLICY
Issued: DRAFT

Introduction

This policy documents details the Maine Turnpike Authority's position on animal road kill disposal procedures resulting from Turnpike roadway.

Notification

MTA employees while on duty on the Turnpike roadway must notify the radio dispatcher at Headquarters as soon as possible upon discovery of a dead animal in the turnpike right-of-way.

Disposal Options:

Option #1:
The MTA employee will move the dead animal out of the Turnpike right-of-way and if feasible, will place the animal carcass into the adjacent woods as a means of disposal.

Option #2:
If there are nearby residential and or commercial property that makes this option not feasible, then the MTA employee will transport the animal carcass to the nearest MTA Highway Maintenance Facility located at (Gardiner, Litchfield, Auburn, Gray, Crosby, or York) for burial.

The MTA employee will bury the animal carcass in the back section of the highway maintenance facility. MTA prohibits burying dead animals into wetlands adjacent to the existing yard at the highway maintenance facilities.

APPENDIX C - LITTER REMOVAL AND SOLID WASTE MANAGEMENT SOP

MAINE TURNPIKE AUTHORITY

Storage, Handling and Management Procedures

For Litter Removal and Solid Waste Management

- Periodically MTA staff shall remove litter from MTA-owned roadways, parking areas, and facilities. All solid waste collected from roadways and parking areas that are not managed under other programs (i.e., Hazardous Waste) must be properly disposed of in solid waste collection areas.

- Solid waste receptacles (dumpsters) shall be covered, maintained to minimize leakage, and placed on a flat surface so as not to obstruct any stormwater infrastructure such as catch basins or ditches.

- The area around the solid waste receptacles shall be kept clean and free of litter and debris.

- Solid waste receptacles shall be emptied periodically and contents disposed of at a licensed solid waste disposal facility.

Last Updated: July 28, 2016

APPENDIX D – STREET-SWEEPINGS MANAGEMENT SOP

MAINE TURNPIKE AUTHORITY

Storage, Handling and Management Procedures For Street Dust Sweepings

- All sweepings collected from roadways and parking areas that are not managed under other programs (i.e., Hazardous Waste) may be reused as construction fill.

- Sweepings shall be collected and stockpiled at a nearby maintenance facility for reuse as construction fill.

Last Updated: July 28, 2016

APPENDIX E – MOWING POLICY

MAINE TURNPIKE AUTHORITY

Standard Operating Procedure

For Mowing and Vegetation Control

- For the purposes of this SOP, four vegetation control areas have been defined: the mainline, the interchanges, the toll plazas, and the service plazas.

- The mowing timelines have been developed in order to provide ground-nesting birds the opportunity to raise a brood and to permit insects the opportunity to complete their lifecycles. These timelines also allow vegetation to regenerate and provide nesting cover the following year.

- The mainline mowing of the median and side slopes will occur as required to keep the area free of obstructions. Ditch mowing will begin no earlier than July 15, and the side slopes will not be mowed prior to August 1.

- The interchange ramp mowing will be conducted the in the same manner as the mainline, median and side slopes. The interchange infield area (generally the area between the ramp and the mainline) will not be mowed prior to August 1st.

- The toll plaza and service plaza areas will be mowed as required.

Last Updated: July 28, 2016