

**United States Environmental Protection Agency (EPA)
National Pollutant Discharge Elimination System (NPDES)**

**GENERAL PERMITS FOR STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 U.S.C. 1251 *et seq.*), any operator of a small municipal separate storm sewer system who

- Is located in the permit areas described in Part 1.1;
- Is eligible for coverage under Part 1.2 and Part 1.9; and
- Submits a complete and accurate Notice of Intent in accordance with Part 1.7.1 of this permit and receives written authorization from EPA

is authorized to discharge in accordance with the conditions and the requirements set forth herein.

The following appendices are also included as part of these permits: Appendix A - Definitions of permit-specific terms used in this permit; Appendix B- Standard permit conditions applicable to all authorized discharges; Appendix C – Conditions related to the Endangered Species Act; Appendix D – Conditions related to the National Historic Preservation Act; Appendix E – Information required for the Notice of Intent (NOI); and Appendix F – Requirements for NH Small MS4s Subject to Approved TMDLs.

These permits become effective on **[insert date of FR publication]**.

These permits and the authorization to discharge expire at midnight, **[insert date 5 years from the effective date]**.

Signed this day of

Stephen S. Perkins, Director
Office of Ecosystem Protection
United States Environmental Protection Agency
One Congress Street – Suite 1100
Boston, Massachusetts 02114

1.0 Introduction

This document consists of six (6) general permits covering the areas listed in Part 1.1. Each general permit is applicable to either a particular area or particular entity within an area. Many of the permit terms and conditions are identical across all six permits, and therefore are presented just once in Parts 1 -3, Part 5, and Appendices A through E. Other conditions are applicable to a particular covered geographic area or particular covered entity; these terms and conditions are included in Parts 4, 6 and 7 and Appendix F. Throughout the permit, the terms “this permit” or “the permit” will refer to all six general permits.

1.1 Areas of Coverage

This permit covers small municipal separate storm sewer systems (MS4s) located in:

- The State of New Hampshire
 - Traditional Cities and Towns
 - State owned properties (Non-traditional)
 - State transportation agency
- Indian Country lands within the States of Connecticut and Rhode Island
- Federal Facilities within the State of Vermont

1.2 Eligibility

The MS4 must meet the eligibility provisions described in Part 1.2 and Part 1.9 to be eligible for coverage under this permit.

1.2.1 Small MS4s Covered

This permit covers the discharge of stormwater from small MS4s as defined at 40 CFR § 122.26(b) (16). This includes municipalities designated under 40 CFR §122.32(a) (1) and (a) (2). An MS4 is eligible for coverage under this permit if it is:

- An operator of a small MS4 within the permit area described in Part 1.1;
- Not a large or medium MS4 as defined in 40 CFR §§122.26(b)(4) or (7);
- Located either fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census (the 2000 Census); or
- Located in a geographic area designated by EPA as requiring a permit.

A small municipal separate storm sewer system means all separate storm sewers that are:

- Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- Not defined as large or medium municipal separate storm sewer systems pursuant to 40 CFR § 122.26(b) (4) and (b) (7) or designated under 40 CFR § 122.26(a) (1) (v).

This term includes systems similar to separate storm sewer systems in municipalities such as systems at military bases, large hospital or prison complexes, and highways and other

thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

1.3 Limitations on Coverage:

This permit does not authorize the following stormwater discharges:

a. - Discharges mixed with sources of non-stormwater unless such non-stormwater discharges are:

- ☐ In compliance with a separate NPDES permit; or
- ☐ A non-stormwater discharge as detailed in Part 1.4.

b. - Discharges associated with industrial activity as defined in 40 CFR 122.26 (b) (14) (i)-(ix) and (xi).

c. - Discharges associated with construction activity as defined in 40 CFR 122.26(b) (14) (x) or (b) (15).

d. – Discharges currently covered under another permit, including discharges covered under other regionally issued general permits.

e. – Discharges or discharge related activities that are likely to adversely affect any species that are listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA. The permittee must follow the procedures detailed in Appendix C to make a determination regarding eligibility. The permittee must certify compliance with this provision on the submitted NOI.

f. – Discharges whose direct or indirect impacts do not prevent or minimize adverse effects on any Essential Fish Habitat.

g. – Discharges, or implementation of a stormwater management program, which adversely affects properties listed or eligible to be listed on the National Register of Historic Places. The permittee must follow the procedures detailed in Appendix D to make a determination regarding eligibility. The permittee must certify compliance with this provision on the submitted NOI.

h.– Discharges to territorial seas, the waters of the contiguous zone, and the oceans.

i. – Discharges prohibited under 40 CFR 122.4.

j. – Discharges to the subsurface subject to state Underground Injection Control (UIC) regulations. Although the permit includes provisions related to infiltration and groundwater recharge, structural controls that dispose of stormwater into the ground may be subject to UIC regulation requirements. Authorization for such discharges must be obtained from the relevant authority depending on the location of the discharge. (New Hampshire: New Hampshire Department of Environmental Services, Groundwater Discharge Permitting and Registration Program; Indian Lands (CT and RI): EPA-Region I, Underground Injection Control Program;

and Vermont Federal Facilities: Vermont Department of Environmental Conservation, Wastewater Management Division, Underground Injection Program).

k. – Discharges that cause or contribute to an instream exceedance of a water quality standard, including jeopardizing public and private drinking water sources.

l. - New discharges (as defined in 40 CFR § 122.2) to waters designated as Tier 3 for antidegradation purposes under 40 CFR § 131.13 (a) (3).

1.4 Non-Stormwater Discharges

The following non-stormwater discharges do not need to be addressed unless the permittee, EPA, or the state or tribal agency determines that they are significant contributors of pollutants to the MS4. These discharges are acceptable non-stormwater discharges unless identified by EPA or the permittee as significant sources of pollutants to Waters of the United States or as causing or contributing to a violation of water quality standards. If the permittee identifies these discharges as significant contributors to the MS4, the permittee must address them as part of the Illicit Discharge Detection and Elimination Program described in Part 2.3.4 of this permit

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Rising ground water
- e. Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
- f. Uncontaminated pumped ground water
- g. Discharge from potable water sources
- h. Foundation drains
- i. Air conditioning condensation
- j. Irrigation water, springs
- k. Water from crawl spaces pumps
- l. Footing drains
- m. Lawn watering
- n. Individual resident car washing
- o. Flows from riparian habitats and wetlands
- p. De-chlorinated swimming pool discharges
- q. Street wash waters and
- r. Residential building wash waters without detergents

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters of the United States.

1.5 Permit Compliance

Any non-compliance with the requirements of this permit constitutes a violation of the permit

and the CWA and may be grounds for an enforcement action and may result in the imposition of injunctive relief and/or penalties.

1.6 Continuation of this Permit

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect for discharges that were covered prior to expiration. If a small MS4 was granted permit coverage prior to the expiration date of this permit, it will automatically remain covered by this permit until the earliest of:

- Authorization for coverage under a reissued general permit, following timely and appropriate submittal of a complete and accurate NOI requesting authorization to discharge under the new permit; or
- Issuance or denial of an individual permit for the MS4's discharges; or authorization or denial under an alternative general permit.

1.7 Obtaining Authorization to Discharge

1.7.1 How to Obtain Authorization to Discharge

To obtain authorization under this permit, a small MS4 must:

- Be located in a State or Indian Country identified in Part 1.1 of this permit;
- Meet the eligibility requirements in Part 1.2 and Part 1.9;
- Submit a complete and accurate Notice of Intent (NOI) in accordance with the requirements of Part 1.7.2 and Appendix E of this permit; and
- Receive written authorization from EPA.

1.7.2 Notice of Intent

a. Operators of Small MS4s seeking authorization to discharge under the terms and conditions of this permit must submit a Notice of Intent that contains the information identified in Appendix E.

b. The NOI must be signed by an appropriate official (see Appendix B Subparagraph 11).

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

Print the name and title of the official, followed by signature and date.

d. Small MS4s in New Hampshire not covered by the previous permit must use the form designated by the New Hampshire Department of Environmental Services (NHDES). NH requires the use of this form. EPA does not require the use of this form, but will accept information submitted on this form. All signatures must be originals. This form is available at: http://des.nh.gov/organization/divisions/water/stormwater/documents/nhnoi_ms4gp.pdf

e. The NOI must be submitted **within 90 days of the effective date of the permit**. If an MS4 is designated under 40 CFR 122.32(a) (2) or (b), the NOI must be submitted within 180 days of receipt of notice unless granted a longer period of time by EPA.

1.7.3 Submission of Notice of Intent

a. All small MS4s must submit a complete and accurate Notice of Intent to EPA-Region 1 at the following address:

United States Environmental Protection Agency
Industrial Permits Branch – CIP
One Congress Street – Suite 1100
Boston, Massachusetts 02114
ATTN: Thelma Murphy

b. Small MS4s located in New Hampshire must also submit a copy of the NOI to the New Hampshire Department of Environmental Services at the following address:

New Hampshire Department of Environmental Services
Water Division – Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095
ATTN: Jeff Andrews

c. Late notification: A small MS4 is not prohibited from submitting a Notice of Intent after the dates provided in Part 1.7.2. However, if a late NOI is submitted, authorization is only for discharges that occur after permit coverage is granted. EPA reserves the right to take enforcement actions for any unpermitted discharges.

1.7.4 Public Notice of NOI and Effective Date of Coverage

a. EPA will provide a public notice and opportunity for comment on the contents of the submitted NOIs. The public comment period will be a minimum of 30 calendar days. A small MS4 will be authorized to discharge under the terms and conditions of this permit upon written receipt of notice from EPA.

b. Based on a review of a small MS4's NOI or other information, EPA may grant authorization, extend the public comment period, or deny authorization under this permit and require submission of an application for an individual or alternative NPDES permit. (See Part 1.8)

c. If permit coverage for a small MS4 under the May 1, 2003 Small MS4 general permit (MS4 – 2003) was effective as of May 1, 2008, authorization to discharge under the MS4 -2003 is automatically continued on an interim basis for up to 180 days from the effective date of this permit. Interim coverage will terminate earlier than the 180 days when a complete and accurate NOI has been submitted and coverage under this permit is either granted or denied. If a municipality was previously covered under the MS4 -2003 and submitted an accurate and complete NOI in a timely manner, and notification of authorization under this permit has not occurred within 180 days from the effective date of this permit, authorization under the MS4 - 2003 permit will be automatically continued on an interim basis. Interim coverage will terminate after authorization under this permit or upon issuance of an alternative permit or an individual permit.

1.8 Alternative Permits

1.8.1 EPA Requiring Coverage under an Alternative Permit

a. EPA may require a small MS4 to apply for and obtain coverage under either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition EPA in accordance with the provisions of 40 CFR 122.26(f) to require a small MS4 to apply for and/or obtain coverage under either an individual NPDES permit or an alternative NPDES general permit. If EPA requires a small MS4 to apply for an individual or alternative NPDES permit, EPA will notify the small MS4 in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will provide application information. In addition, if the small MS4 is an existing permittee covered under this permit, the notice will set a deadline to file the application, and will include a statement that on the effective date of the individual NPDES permit, or the alternative general permit as it applies to the small MS4, coverage under this general permit will automatically terminate. EPA may grant additional time to submit the application following a request by the small MS4. If a small MS4 is covered under this permit and fails to submit an individual NPDES or an alternative general permit NPDES permit application as required by EPA, then the applicability of this permit to the small MS4 is automatically terminated at the end of the date specified by EPA as the deadline for application submittal. EPA may take enforcement action for any subsequent unpermitted discharge.

b. When EPA issues an individual NPDES permit or a small MS4 is authorized to discharge under an alternative NPDES general permit, coverage under this permit will be terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.8.2 Permittee Requesting Coverage under an Individual or Alternative Permit

a. A municipality may request to be excluded from coverage under this general permit by applying for an individual permit. In such a case, a municipality must submit an individual permit application in accordance with the requirements of 40 CFR §122.33(b) (2) (i) or §122.33(b) (ii), with reasons supporting the request, to EPA at the address listed in Part 1.7.3 of this permit. The request may be granted by issuance of an individual permit or authorizing

coverage under an alternative general permit if reasons stated by the municipality are adequate to support the request. (See 40 CFR § 122.28(b) (3))

b. When an individual NPDES permit is issued, or a municipality authorized to discharge under an alternative NPDES general permit, coverage under this permit is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.9 Special Eligibility Determinations

1.9.1 Documentation Regarding Endangered Species. The small MS4 must certify eligibility regarding endangered species in the NOI required in Part 1.7.2. The Stormwater Management Plan (SWMP) must include documentation supporting the permittee's eligibility determination with regard to Federal Endangered and Threatened Species and Critical Habitat Protection, including:

- Information on whether federally listed endangered or threatened species, or critical habitat are found in proximity to the municipality's stormwater outfalls or stormwater BMPs;
- Whether such species or habitat are likely to be adversely affected by the stormwater discharges or stormwater discharge-related activities, e.g., BMP installation;
- Results of the Appendix C endangered species screening determinations; and
- If applicable, a description of the measures the municipality must implement to protect federally listed endangered or threatened species, or critical habitat, including any conditions imposed by the Services. If a permittee fails to document and implement such measures, those discharges are ineligible for coverage under this permit.

1.9.2 Documentation Regarding Historic Properties. The small MS4 must certify eligibility regarding historic properties on the NOI required in Part 1.7.2. The SWMP must include documentation supporting the municipality's eligibility determination with regard to Historic Properties Preservation, including:

- Information on whether the permittee's stormwater discharges, allowable non-stormwater discharges, or stormwater discharge-related activities would have an effect on a property that is listed or eligible for listing on the National Register of Historic Properties (NRHP);
- Where such effects may occur and any written documents that have been sent to or written agreements the permittee has made with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other Tribal representative to mitigate those effects;
- Results of the Appendix D historic property screening investigations; and
- If applicable, a description of the measures the permittee must implement to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed by the SHPO or THPO. If the permittee fails to

document and implement such measures, those discharges are ineligible for coverage under this permit.

1.10 Stormwater Management Program (SWMP)

a. The permittee must develop a written SWMP. The SWMP must be signed in accordance with Appendix B, Subsection 11, including the date of signature. A signature and date is required for initial program preparation and for any significant revisions to the program. The written SWMP must be completed within 120 days following the permittee's receipt from EPA of authorization to discharge under the permit.

b. Permittees covered by the MS4 -2003 must modify or update their existing Best Management Practices (BMPs) and measurable goals to meet the terms and conditions of this permit within 120 days of the date of authorization. These modifications and updates must be reflected in the written SWMP.

c. The permittee is encouraged to maintain an adequate funding source for the implementation of this program. Adequate funding means that a consistent source of revenue exists for the program.

1.10.1 Stormwater Management Program Availability

a. The permittee must retain a copy of the current SWMP required by this permit at the office or facility of the person listed as the program contact on the submitted Notice of Intent (NOI). The SWMP must be immediately available to representatives from EPA; a State agency; a Tribal agency; the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request.

b. The permittee must provide a copy of the SWMP as soon as practicable to any member of the public who makes such a request in writing. A reasonable fee may be charged for copying. EPA encourages permittees to post the SWMP online.

1.10.2 Contents of the Stormwater Management Program

The SWMP must contain the following:

- Identification of names and titles of people responsible for program implementation. If a position is currently unfilled, list the title of the position and modify the SWMP with the name once the position is filled;
- Listing of all receiving waters, their classification, any impairments, and number of outfalls that discharge to each water. In addition to the receiving water, the permittee is encouraged to document in the SWMP all public drinking surface water and groundwater that may be impacted by the discharges.
- Documentation of compliance with Part 1.9.1;
- Documentation of compliance with Part 1.9.2;
- The map of separate storm sewer system required by Part 2.3.4.5;
- Description of practices to achieve water quality (Part 2.1);

For each permit condition in Part 2.1 identify:

- The person(s) or department responsible for the measure;
- The BMPs for the control measure or permit requirement;
- The measurable goal(s) for each BMP. Measurable goals must include milestones and timeframes for implementation and have a quantity or quality associated with its endpoint. Each goal must have a measure of assessment associated with it.

- Description of practices to achieve technology based limitations (MEP) (Part 2.3);

For each permit condition in Part 2.3 identify:

- The person(s) or department responsible for the measure;
- The BMPs for the control measure or permit requirement;
- The measurable goal(s) for each BMP. Measurable goals must include milestones and timeframes for implementation and have a quantity or quality associated with its endpoint. Each goal must have a measure of assessment associated with it.

- Description of measures to avoid or minimize impacts to public drinking surface water and groundwater. The permittee is also encouraged to include provisions to notify public water supplies in the event of an emergency. (For more information or assistance, contact: NH- New Hampshire Department of Environmental Services, Drinking Water Source Protection Program; Indian Lands (CT and RI); EPA Region 1, Drinking Water Program; and VT (federal facilities) – Vermont Department of Environmental Conservation, Water Supply Division).
- Documentation of compliance with Part 3.0;
- Documentation of compliance with Part 4.0;
- Annual program evaluation (Part 5.1).

1.10.3 Requirements for New Permittees

Permittees not covered by the MS4 2003 must meet all deadlines contained in this permit except the following:

- Mapping requirement in Part 2.3.4.5 must be completed three (3) years from the effective date of the permit;
- Monitoring requirements in Part 3.0 must begin by year four (4) of the permit. If the map required by Part 2.3.4.5 is complete prior to the deadline specified above; the permittee must begin monitoring within three (3) months of completion of the map; and
- The ordinances required by Parts 2.3.4, 2.3.5 and 2.3.6 must be completed by the end of the permit term.

2.0 Non-Numeric Effluent Limitations

2.1 Water Quality Based Effluent Limitations

Pursuant to Clean Water Act 402(p)(3)(B)(iii), this permit includes provisions to ensure that discharges from the permittee's small MS4 do not cause or contribute to exceedance of water quality standards, in addition to requirements to reduce the discharge of pollutants to the maximum extent practicable set forth in Part 2.3. The requirements found in Part 2.1., along with certain requirements in Part 2.2 that relate to discharges to impaired waters for which an approved TMDL exists, constitute the water quality based effluent limits of this permit.

2.1.1 Requirements to Meet Water Quality Standards

- a. Discharges shall not cause or contribute to an exceedance of applicable water quality standards (including numeric and narrative water quality criteria) for the receiving water. Applicable water quality standards are the State standards that are in place upon the effective date of this permit. In the absence of information suggesting otherwise, discharges will be presumed to meet the applicable water quality standards if the permittee fully satisfies the provisions of this permit.
- b. For each waterbody that receives a discharge from the small MS4, the permittee must identify the water quality standards applicable to that waterbody. Applicable water quality standards are compiled at <http://www.epa.gov/waterscience/standards/wqslibrary/> . They are also available from the State or Tribal environmental protection agency. (NH: www.des.state.nh.us/rules/env-wq1700.pdf)
- c. If at any time the permittee becomes aware or EPA or NHDES determines that a discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must within 60 days of becoming aware of the situation eliminate the conditions causing or contributing to an exceedance of water quality standards. Within 30 days of eliminating the condition, the permittee must document the measures used to correct the condition in the Stormwater Management Program. The permittee must comply with any additional requirements or schedules established by EPA or the state or tribal agency, including any requirement to submit additional information concerning the potential cause of the exceedance. EPA reserves the right to notify the permittee that an alternative permit is necessary in accordance with Part 1.8 and to take any enforcement action allowed under the CWA.

2.2 Discharges to Impaired Waters

Impaired waters are those waters that the State agency has identified pursuant to Section 303(d) of the Clean Water Act as not meeting applicable state water quality standards. Impaired waters include both those with approved Total Maximum Daily Loads (TMDLs), and those for which TMDL development has been identified as necessary, but for which a TMDL has not yet been approved.

2.2.1 Discharge to an Impaired Water with an Approved TMDL

- a. Approved TMDLs within the areas of coverage are listed in Appendix F. Appendix F identifies those small MS4s for which there are approved TMDLs that are applicable to them and the expected measures the small MS4 must implement to be consistent with the terms of the approved TMDL. EPA may also notify the small MS4 of the need to comply with additional requirements that are consistent with the Waste-Load Allocation (WLA) or that an individual permit application is necessary in accordance with Part 1.8.
- b. For any discharge from the MS4 to an impaired water with an approved TMDL, the permittee must comply with the specific terms of Part 2.1 and must implement specific BMPs to support

the achievement of the WLA. Permittee must describe in the SWMP and annual reports all the measures that are being used to address the terms of the WLA.

c. If the applicable TMDL does not specify a wasteload allocation or other requirements either individually or categorically for the MS4 discharge (including disallowing such discharge), and the permittee has complied with Part 2.1 and the terms and conditions of this permit, and has undertaken measures and documented them in the SWMP to address the pollutant of the TMDL, then compliance with these conditions will be presumed adequate to meet the requirements of the TMDL, unless otherwise notified by EPA.

d. “Applicable TMDLs” for discharges from the permittee’s MS4 are those that have been approved by EPA as of the effective date of this permit.

e. The permittee shall highlight in its annual report all control measures currently being implemented or planned to be implemented to control the pollutants identified in the approved TMDLs. The permittee shall include in the annual report and the SWMP the basis supporting the permittee’s determination that such controls are adequate to meet the TMDL.

2.2.2 Discharge to an Impaired Water without an Approved TMDL

If there is a discharge from the MS4 to an impaired water without an approved TMDL, the permittee must comply with Part 2.1 of this permit and address in its SWMP and annual reports how the discharge of pollutant(s) identified as causing the impairment will be controlled such that they do not cause or contribute to the impairment. The permittee shall:

- a. evaluate discharges to impaired waters;
- b. identify additional or modified BMPs in its SWMP to ensure that discharges do not cause or contribute to the impairment; and
- c. implement such BMPs and include the status of each in its annual report.

2.2.3 Discharge to a Chloride Impaired Water in New Hampshire

a. The permittee shall develop and implement a written plan to reduce chloride in discharges from the permittee’s MS4 to those chloride impaired surface waters. The requirements in this plan shall apply to all parking lots, roads, and chloride-based deicing chemical piles that drain directly or indirectly to the permittee’s MS4¹. The plan shall include the following:

- ☐ A requirement that private and public owners of parking lots and roads annually report to the permittee the amount of chloride-based deicing chemicals applied for each storm event. For the purposes of this provision, a storm event is any event that triggers the use of the deicing chemicals.
- ☐ The preparation of an annual written report that summarizes the amount of chloride-based deicer usage by each user, and the total application of chloride-based deicer chemicals to

¹ The permittee may choose to implement the chloride reduction plan throughout its jurisdiction.

areas that discharge directly or indirectly to the MS4 for the previous winter's application season. The report shall be submitted as part of the annual report required in Part 5.2.

- A requirement for all public and private chloride applicators to use application rates that are at least as stringent as those specified in the State of Minnesota guidance documents: Table 19 on page 35 of *Winter Parking Lot and Sidewalk Maintenance Manual (Revised edition June 2008)* for parking lots (<http://www.pca.state.mn.us/publications/parkinglotmanual.pdf>) and for roads, the application guidelines on page 17 of *Minnesota Snow and Ice Control: Field Handbook for Snow Operators (August 2005)* (<http://www.mnltap.umn.edu/pdf/snowicecontrolhandbook.pdf>)
- A requirement that public and private chloride applicators regularly calibrate spreading equipment in accordance with guidelines at least as stringent as those specified in of the above referenced *Winter Parking Lot and Sidewalk Maintenance Manual (Revised edition June 2008)* (pp9-13).
- A requirement to cover all piles containing chloride in order to prevent exposure to precipitation and runoff to the MS4 either directly or indirectly and a requirement to implement appropriate measures to minimize exposure resulting from adding to or removing materials from the pile.
- A program to educate users of deicing materials on best management practices (storage, use, and housekeeping) for their uses and effects on the environment. Education efforts shall include those audiences in Part 2.3.2.1(c). Education efforts must be summarized in the permittee's annual report required in Part 5.2.

b. The permittee shall report the status of the development and implementation of the plan described above in its annual report including the amount of annual chloride use and education efforts.

2.2.4 New or Increased Discharges to Impaired Waters

For the purposes of this permit, EPA considers new discharges to be new outfalls constructed or created by the permittee after the authorization date of this permit and are under the jurisdiction of the MS4.

a. The permittee must notify EPA and the state agency a minimum of thirty (30) days prior to commencement of a new discharge or increased discharge from the MS4 with a description of the discharge and information demonstrating that the discharge will satisfy the antidegradation provisions of the state water quality standards including an alternatives analysis. Such discharges will become authorized thirty (30) days after the permittee's notification unless EPA or the state notifies the permittee that it has failed to demonstrate compliance with the antidegradation provisions. Before commencing any new or increased discharge, the permittee shall identify in its SWMP the BMPs it will implement to ensure compliance with antidegradation provisions and the terms of this permit.

- b. New discharges to impaired waters are not eligible for coverage unless the permittee:
- i. Prevents all exposure to stormwater of the pollutants(s) for which the waterbody is

- impaired, and retain documentation of procedures taken to prevent exposure with the SWMP; or
- ii. Document that the pollutant(s) for which the waterbody is impaired is not present and retain documentation of this finding with the SWMP; or
 - iii. Provide data to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data with the SWMP. To do this, the permittee must provide data and other technical information to EPA sufficient to demonstrate:
 - For discharges to waters without an EPA approved TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
 - For discharges to waters with an EPA approved TMDL, that there are sufficient remaining wasteload allocations in an EPA approved TMDL to allow the discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.
- c. New discharges are eligible if the permittee receives an affirmative determination from EPA that the discharge will not contribute to the existing impairment, in which case the permittee must maintain such determination onsite with the SWMP, or if EPA fails to respond within 30 days of submission of data.
- d. At the same time that the permittee submits information to EPA and the state agency, it shall make it available to the public. The permittee shall retain documentation of its demonstration in its SWMP and annual reports.
- e. New or increased discharge to surface waters (including those waters designated by the state as Tier 2 for anti-degradation purposes under 40 CFR § 131.12 (a)) must receive certification from the state agency that the discharge will not violate water quality standards, including antidegradation. Prior to commencing the discharge, the permittee must submit the certification, or any waiver of certification to EPA. Such discharges will become authorized thirty (30) days after permittee's notification unless EPA notifies the permittee that it has failed to demonstrate compliance with the antidegradation provisions of the surface water quality standards.

2.3 Requirements to Reduce Pollutants to the Maximum Extent Practicable (MEP)

- a. The BMPs and control measures in this part are non-numeric effluent limitations.
- b. The permittee shall reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). MEP is generally a focus on pollution prevention and source control in combination with structural controls and treatment. MEP is an iterative process.

2.3.1 Control Measures

- a. Permittees authorized under the MS4 2003 must continue to implement their existing SWMPs while updating their SWMPs pursuant to the new permit. This permit does not extend the

compliance deadlines set forth in the MS4-2003.

b. Implementation of one or more of the minimum control measures described in Parts 2.3.2-2.3.7 or other permit requirements may be shared with another entity or the other entity may fully implement the measure or requirement, if the following requirements are satisfied:

- The other entity, in fact, implements the control measure.
- The particular control measure, or component of thereof, is at least as stringent as the corresponding permit requirement.
- The other entity agrees to implement the control measure on the permittee's behalf. A legally binding written acceptance of this obligation is required. This acceptance may be in the form of a contract, a Memorandum of Understanding, or other written documentation and it must outline roles and responsibilities of each party. This document must be included as part of the SWMP. If the other entity agrees to report on the control measure, the permittee must supply the other entity with the reporting requirement contained in this permit under Part 5.3.
- The permittee remains legally responsible for permit compliance and implementation of the control measure if the other entity fails to implement.

c. Cooperation between interconnected municipal separate storm sewer systems is strongly encouraged. The permittee shall identify all interconnections within the system. The permittee shall depict interconnections on the map required by Part 2.3.4.4.

2.3.2 Public Education and Outreach

Objective: The permittee must implement an education program that includes educational goals based on specific stormwater issues within the community. The program must include a focus on pollutants of concern for impaired waters and priority waters within the community. Priority waters include beaches, shellfishing areas, and drinking water supplies. The ultimate goal of a public education program is to create a change in behavior and knowledge so that pollutants in stormwater are reduced.

2.3.2.1 - The permittee must continue to implement the public education program required by the MS4-2003 by distributing educational material to the community. The educational program must express specific messages, define the targeted audience for each message, and identify responsible parties for implementation. If appropriate for the target audience, materials may be developed in a language other than English. At a minimum, the program must provide information concerning the impact of stormwater discharges on water bodies within the community especially those waters that are impaired or identified as priority waters. The program must identify steps and/or activities that the public can take to reduce the pollutants in stormwater runoff and their impacts to the environment.

a. The educational program must include education and outreach efforts for the following four (4) audiences: (1) residents, (2) businesses, institutions, and commercial facilities, (3) developers (construction), and (4) industrial facilities.

b. Beginning the first year of the permit the permittee must distribute a minimum of two (2) educational messages over the permit term to each audience identified in Part 2.3.2.1(a) (The permittee must distribute a minimum of at least eight educational messages.) The distribution of materials to each audience must be spaced at least a year apart. Educational messages may be printed materials such as brochures or newsletters; electronic materials such as websites; mass media such as newspaper articles or public service announcement (radio or cable); or poster displays in a public area such as town/city hall. The permittee may use existing materials if they are appropriate for the message the permittee chooses to deliver or the permittee may develop its own educational materials.

c. The permittee must at a minimum consider the topics listed in paragraphs 2.3.2.1 (c) (i – iv) when developing the outreach/education program. The topics are not inclusive and the permittee must focus on those topics most relevant to the community.

i. Residential program: maintenance of septic systems; effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers); benefits of appropriate on-site infiltration of stormwater; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and proper management of pet waste. If the municipality has greater than 50 percent of its residents serviced by septic systems, the municipality must include maintenance of septic systems as part of its education program.

ii. Business/Commercial/Institution program: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate on-site infiltration of stormwater; building maintenance (use of detergents); use of salt or other de-icing and anti-icing materials (minimize their use); proper storage of salt or other de-icing/anti-icing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping).

iii. Developers and Construction: proper sediment and erosion control management practices; information about Low Impact Development principles and technologies; and information about EPA's construction general permit (CGP). This education can also be a part of the Construction Site Stormwater Runoff Control measure detailed in Part 2.3.5.

iv. Industrial program: equipment inspection to ensure timely maintenance; proper storage of industrial materials (emphasize pollution prevent); proper management and disposal of wastes; proper management of dumpsters; minimization of use of salt or other de-icing/anti-icing materials; proper storage of salt or other de-icing/anti-icing materials (cover/prevent runoff to storm system and ground water contamination); benefits of appropriate on-site infiltration (areas with low exposure to industrial materials such as roofs or employee parking); and proper maintenance of parking lot surfaces (sweeping).

2.3.2.2 - An effective program must show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. The permittee must define the specific messages for each audience. The permittee must identify methods that the

municipality will use to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge. One method of evaluation of the program may be an evaluation of audience knowledge prior to commencement of the educational message followed by an evaluation after delivery of the message, such as a survey.

2.3.2.3 - The permittee must modify any ineffective messages or distribution techniques prior to the next scheduled message delivery.

2.3.2.4 - The permittee must report on the messages for each audience; the method for distribution; the measures/methods used to assess the effectiveness of the messages, and the method/measures used to assess the overall effectiveness of the education program in the annual report.

2.3.3 Public Involvement and Participation

Objective: The permittee must provide opportunities to engage the public to participate in the review and implementation of the municipality's SWMP.

2.3.3.1 - All public involvement activities must comply with state public notice requirements (NH: RSA-91A). The SWMP and all annual reports must be available to the public.

2.3.3.2 - The permittee must annually provide the public an opportunity to participate in the review and implementation of the stormwater management program.

2.3.3.3 - The permittee must report on the activities undertaken to provide public participation opportunities including compliance with Part 2.3.3.1. Public participation opportunities pursuant to Part 2.3.3.2 may include, but are not limited to, websites; hotlines; clean-up teams; monitoring teams; or an advisory committee.

2.3.4 Illicit Discharge Detection and Elimination (IDDE) Program

Objective: The permittee must implement an IDDE program to systematically find and eliminate sources of non-stormwater from the separate storm sewer system and to implement defined procedures to prevent illicit connections and discharges.

2.3.4.1- The permittee shall prohibit illicit discharges and sanitary sewer overflows ("SSOs") to its MS4 and require removal of such discharges consistent with Part 2.3.4.2 of this permit. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of stormwater. Exceptions are discharges pursuant to a separate NPDES permit (other than the NPDES permit for discharges from the municipal sewer system) and non-stormwater discharges listed in Part 1.4. An SSO is a discharge of untreated sanitary wastewater. SSOs are illegal and must be eliminated.

2.3.4.2 –Illicit discharges to the MS4 are prohibited, and any such discharges violate this permit and remain in violation until they are eliminated. Upon detection, the permittee shall eliminate illicit discharges as expeditiously as possible and require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 2.3.4.6.a. Where elimination of an illicit discharge within 30 days of its confirmation is not possible, the permittee shall establish an expeditious schedule for its elimination. No later than 6 months after confirmation such discharges shall be eliminated or appropriate enforcement actions shall be initiated. In the interim, the permittee shall take all reasonable and prudent measures to minimize the discharge of pollutants to its MS4.

a. Discharges from SSOs to the MS4 are prohibited and any such discharges violate this permit and remain in violation until they are eliminated. Upon detection, the permittee shall eliminate SSOs as expeditiously as possible and take all reasonable and prudent interim mitigation measures to minimize the discharge of pollutants from its MS4 until elimination is achieved.

b. The permittee shall identify all known SSOs that have not yet been eliminated or for which the underlying cause has not yet been identified or corrected. This shall include SSOs resulting, during dry or wet weather, from inadequate conveyance capacities, or where interconnectivity of the storm and sanitary sewer infrastructure allows for communication of flow between the systems. This shall not include SSOs resulting from isolated episodes of pipe blockages or collapses that have not recurred since addressed. Within 60 days of the effective date of the permit, the permittee shall develop an inventory of the identified SSOs indicating:

- ☐ Location (approximate street crossing/address and receiving water, if any);
- ☐ Date(s) and time(s) (i.e., beginning and end of discharge);
- ☐ Estimated volume(s);
- ☐ Description of the occurrence indicating known or suspected cause(s);
- ☐ Mitigation and corrective measures completed with dates implemented; and
- ☐ Mitigation and corrective measures planned with implementation schedules.

Upon becoming aware of an SSO, the permittee shall provide written notice to EPA and the state or tribal agency in accordance with Paragraph B.12 of Appendix B. The permittee shall maintain the inventory as a part of the SWMP and update the inventory annually. The permittee shall include a summary of this information in the annual report.

c. Schedules for the mitigation or elimination of SSOs shall be established pursuant to compliance orders issued by EPA or the state or tribal agency; or in the absence of a compliance order addressing a particular SSO, the permittee shall implement mitigation or corrective actions according to schedules established and identified pursuant to Part 2.3.4.2.b.

d. The permittee shall include in its annual report the status of mitigation and corrective measures implemented by the permittee to address each SSO identified pursuant to this part.

2.3.4.3 – During the development of the new components of the IDDE program required by this permit, permittees authorized by the MS4-2003 must continue to implement the IDDE program required by the MS4-2003 to detect and address non-stormwater discharges to the separate storm

sewer system (see Part II.B.3, Part III.B.3, Part IV B.3 and Part V B.3 of the MS4-2003) including illegal dumping.

2.3.4.4 - The sources of non- stormwater listed in Part 1.4 of this permit need not be eliminated provided a determination has been made by the permittee that these discharges do not impact the quality of its stormwater such that they cause or contribute to an instream exceedance of a water quality standard. The permittee must evaluate the sources of non-stormwater discharges in Part 1.4 and determine whether these sources are significant contributors of pollutants to the municipal system. If the permittee determines these sources are significant, the permittee must implement measures to control the sources so they are no longer significant contributors of pollutants or to prohibit the sources. The permittee must document in the SWMP its determinations on each of the non-stormwater discharges listed in Part 1.4.

2.3.4.5 - The permittee must develop a map of the separate storm sewer system. The map of the separate storm sewer system must be finished by two (2) years from the effective date of this permit. This permit does not provide additional time for completion of the map that was required by the MS4-2003. The map must include the entire separate storm sewer system and all structures associated with the system, including, at a minimum, catch basins, manholes associated with the storm sewer system, pipes, interconnections to other small MS4s, and treatment structures associated with the separate storm sewer system. The map must show outfalls, receiving waters, and resource waters such as drinking waters. The map may also show the locations of sanitary sewers, a description of the land use areas including amounts of impervious cover, the drainage area of each outfall and the land use associated with that drainage. The map may be a hard copy or on a Geographic Information System (GIS). The permittee must report on the status of the complete map required by this permit in the annual report.

2.3.4.6 - The IDDE program must be a written document and must describe the elements detailed in Parts 2.3.4.6 (a-g). If the IDDE program does not contain all the elements, the IDDE program must include written documentation or rationale as to why an element is not applicable to the permittee. The permittee must maintain all records used to develop the IDDE program as described in Part 5.2.1.

a. The IDDE program must have adequate legal authority to accomplish the following tasks: prohibit illicit discharges; investigate suspected illicit discharges; eliminate illicit discharges and enforce the program. Adequate legal authority consists of a currently effective ordinance, by-law, or other regulatory mechanism. For permittees authorized by the MS4-2003, the ordinance, by-law, or other regulatory mechanism was a requirement of the MS4-2003 and was required to be effective by May 1, 2008. The written IDDE program must include a reference or citation of the authority the permittee will use to implement all aspects of the IDDE program.

b. The permittee must assess the illicit discharge potential of all catchments of the MS4. This assessment will aid in the identification of priority areas for beginning the systematic investigations for illicit discharges. The permittee may draw from existing information about the MS4 for initial characterization of the illicit discharge potential of all catchments of the MS4. If the permittee has knowledge of drainage catchments or alignments with known or highly

suspected contributions of illicit discharges or SSOs, the MS4 is not required to rank these catchments of the MS4 pursuant to Part 2.3.4.6.b(ii) and (iii). In this situation, the permittee shall continue, or initiate, isolation and removal procedures for known illicit discharges and SSOs based on the permittee's procedure established pursuant to Part 2.3.4.6.d of this permit. For the purpose of this permit, a catchment is the area that is tributary to an individual outfall.

i. The permittee shall delineate the small MS4 into catchments and evaluate each catchment for illicit discharges. This delineation can be on hard copy maps or on a GIS system. Once delineated, each catchment shall be assessed based on currently available data to determine the potential for illicit discharges.

If the boundaries of the catchment extend beyond the boundaries of the MS4, the permittee is encouraged to work with neighboring MS4s to ensure an accurate assessment.

ii. The permittee shall rank delineated catchments as “high”, “medium”, or “low” for its potential to have illicit discharges. The ranking shall be based on screening factors that are reflective of existing circumstances of the MS4. The purpose of the ranking is to identify and prioritize areas in the MS4 with a high potential for illicit discharges and to identify areas where the impact of discharges is already known. The permittee must begin implementation of the illicit discharge detection protocol required in Part 2.3.4.6.d of this permit in areas of the MS4 identified as “high” or with the highest ranking based on the factors detailed below. At a minimum, the permittee shall consider the following list of factors:

- Past Discharge complaints and reports – any area of the municipality that has a high frequency of complaints should be considered for high illicit discharge potential.
- Poor dry weather receiving water quality- the following guidelines are recommended to identify waters as having a high illicit discharge potential: exceeding fecal coliform or *E. Coli* water quality standards; ammonia-nitrogen levels of 0.30 mg/l; total phosphorus levels of 0.40 mg/l; or any other available sources of dry weather water quality data including state agencies or watershed associations.
- Density of generating sites - Generating sites are those places, including institutional, municipal, commercial, or industrial sites, with a potential to generate pollutants that could contribute to illicit discharges. Examples of these sites include, but are not limited to, car dealers; car washes; gas stations; garden centers; industrial manufacturing areas; colleges and residential areas (septic systems, swimming pools, dumping).
- Stormwater outfall density – Stormwater outfall density is the number of stormwater outfalls per stream mile. Receiving waters with 20 or more outfalls in a stream mile may be considered to have a high illicit discharge potential.
- Age of surrounding development – Developments 50 years or older will probably have a high illicit discharge potential. Developments 20 years or younger will probably have a low illicit discharge potential.
- Sewer conversion – Catchments that were once serviced by septic systems, but have been converted to sewer connects may have a high illicit discharge potential.
- Historic combined sewer systems – Catchments that were once serviced by a combined sewer system, but have been separated may have a high illicit discharge potential.
- Presence of older industrial operations – Older industrial areas tend to have a high potential for cross connections. Older industrial areas are those area that are 40 years or

older.

- Aging or failing sewer infrastructure – Sewer systems where the age of the system exceeds 50 years have a high illicit discharge potential.
- Density of aging septic systems – Septic systems 30 years or older are prone to have failures. Areas with older septic system density of 100 units per square mile may have a high illicit discharge potential.
- Culverted streams – any river or stream that is culverted for distances greater than a simple roadway crossing may be considered “high”.

The following is a list of waterbodies that the permittee may consider as priorities for evaluation for illicit discharges, but are not necessarily indicators of the presence of illicit connections or discharges

- Waterbodies that receive a discharge from the MS4 and are drinking water supplies, shell fishing areas, or beaches.
- Impaired waterbodies that receive a discharge from the MS4 with the potential to contain the pollutant identified as the cause of impairment.
- Waters with approved TMDLs and identified WLA applicable to the permittee.

The permittee must consider all factors listed above, but not all factors may apply. The permittee must include the results of the evaluation of the factors as part of the written IDDE program. The permittee may add additional location specific relevant screening factors. If the permittee develops other factors, the permittee must include the additional factors and the metric used for its evaluation in its written IDDE program. The permittee must include the results of the evaluation of the factors as part of the IDDE program.

iii. For each factor relevant to the MS4 listed in Part 2.3.4.6 (b) (ii) above, the permittee shall rate each factor as “low”, “medium” or “high” for its potential to have illicit discharges. The permittee shall then use the results of the factors in each catchment to prioritize each catchment as “low”, “medium” or “high” for its illicit discharge potential. The permittee must begin systematic implementation of the illicit discharge detection protocol as described in Part 2.3.4.6 (d) in all catchments identified as priorities by the MS4 or with the highest ranking in the illicit discharge potential ranking. The permittee shall continue the systematic implementation of the illicit detection protocol described in Part 2.3.4.6(d) until all catchments within the MS4 have been investigated. The permittee shall retain the results of the prioritization as part of the written IDDE program. The permittee must document in the SWMP and the annual reports the basis of any decisions not to implement the protocol in any catchment identified as a priority.

iv. The illicit discharge potential assessment and prioritization must be completed by one (1) year from the effective date of the permit. The permittee must document the results of the ranking in the SWMP and must report the results of the ranking for each catchment in the annual report. The annual report shall also include information on catchments that the permittee did not evaluate using the factors listed in Part 2.3.4.6 due to prior knowledge of known or suspected illicit discharges or connections.

c. The permittee must establish a written protocol that clearly identifies responsibilities with regard to eliminating illicit discharges. The protocol must describe who is responsible for

eliminating identified illicit connections and other problems identified during investigations; the appropriate methods for elimination of the illicit connection or identified problem; the process for confirmation and verification of removal of the connection or the discharge and a procedure for tracking progress towards the overall program goals. The written responsibility protocol must be complete one (1) year from the effective date of the permit. The permittee must report on the status of this protocol in each annual report.

d. The permittee must develop a written systematic procedure for locating illicit connections. The procedure, at a minimum, must include walking all stream miles (walking the banks of all waters in the MS4) and observing the outfalls including editing any existing maps to reflect actual field conditions; conducting dry and wet weather monitoring (see Parts 2.3.4.6.d (ii) and 3.0 of this permit) of outfalls; determining the potential source of any non-stormwater discharges; and documenting the elimination of the discharge. The written systematic procedure must be completed no later than two (2) years from the effective date of the permit. The permittee must report on the status of this procedure in the annual report. If the systematic procedure is completed prior to two (2) years from the effective date of the permit, the permittee must begin implementing the protocol within 3 months of its completion.

i. The systematic procedure to locate the presence and the source of an illicit discharge may either start from the outfall and work up the system or start from the upper parts of the catchment and work down the system or be a combination of both practices. Either method must, at a minimum, include an investigation of each junction manhole within the MS4. The illicit discharge detection procedure must describe the method the municipality will use.

ii. The permittee must begin systematically locating illicit discharges using the procedure developed in accordance with Part 2.3.4.6 (d) no later than 27 months (2 years and 3 months) from the effective date of the permit. In accordance with Part 2.3.4.2, the permittee must address any illicit discharges identified prior to completion of the procedure.

The systematic procedure for locating illicit discharges and connections must include the following activities:

- **Outfall Inventory** – The purpose of the inventory is to record the actual location of an outfall and to provide a characterization of its condition (size, material, flow, etc). The permittee must conduct an outfall inventory for each stream mile within its regulated jurisdiction. The inventory must begin with the catchments identified as priorities in the ranking and assessment required by Part 2.3.4.6 (b) of this permit. Each outfall must be labeled with a unique identifier. The following information shall be recorded for each outfall: dimensions, shape, material (concrete, PVC), spatial location (GPS), and physical condition. Additionally, any sensory observations shall also be recorded. Sensory observations include odor, color, turbidity, floatables, or oil sheen. The permittee must complete an inventory for 25 percent of the outfalls each year of this permit, beginning in year 2 of the permit. An outfall means a point source as defined by 40 CFR § 122.2 at the point where the municipal separate storm sewer discharges to waters of the United States. An outfall does not include open conveyances connecting two municipal separate storm sewers or pipes, tunnels or other conveyances that connect segments of the

same stream or other waters of the United States and are used to convey waters of the United States.

- If flow is observed at the outfall during the inventory, a sample of the flow shall be collected. At a minimum, the permittee shall sample for the following parameters: conductivity, turbidity, pH, chlorine, temperature, surfactants (as MBAS), potassium, ammonia and *E.coli* or enterococcus (as appropriate depending on whether a discharge is to a fresh water or a marine water). The outfall sampling conducted as part of the outfall inventory may be performed in conjunction with the Dry Weather Outfall Monitoring requirements of Part 3.0 provided the appropriate conditions have been met.
- Tracking and Identification of an Illicit Source –The systematic procedure shall describe a storm drain network investigation which involves systematically and progressively sampling and evaluating all junction manholes in the MS4 to narrow the location of a suspected illicit connection or discharge to an isolated pipe segment between two manholes. Prior to beginning the investigation, the permittee must determine where in the system to begin investigations and what indicators will be used to determine if the manhole is clean (no illicit) or dirty (suspected illicit). Each junction manhole shall be opened and inspected for visual evidence of illicit connections (e.g., excrement, toilet paper, or sanitary products present). If visual evidence is present, the permittee must identify the source in accordance with the procedure developed in Part 2.3.4.6(d). If flow is observed in a junction manhole, the permittee shall sample the flow for ammonia and surfactants and identify the source. The permittee may sample for other indicators. The permittee may use methods such as caulk dams, dye testing, video testing, or smoke testing to locate the source.

iii. When the source of an illicit discharge is identified and confirmed, the permittee must record the following information: the location of the discharge, a description of the discharge, the method of discovery, date of discovery, date of removal, repair, or enforcement action; date, and method of removal verification; and estimate of the volume of flow removed. Pursuant to Part 2.3.4.2, the time frame between detection of an illicit discharge or connection and elimination or enforcement must not be longer than six months. The permittee must include this information as part of each annual report.

e. The permittee must develop and implement mechanisms and procedures designed to prevent illicit discharges and SSOs. The following are examples that the permittee may use: spill response and prevention procedures including identification of spills, reporting procedures, containment procedures, and documentation; public awareness (this may be a part of the education program required by Part 2.3.2); reporting (hotlines) and training of public employees on ways to identify potential illicit discharges and SSOs.

f. The permittee must define or describe indicators for tracking program success. At a minimum, indicators must include measures that demonstrate an elimination of pollutant sources and/or improvement to water quality and number of illicit discharges removed. Other examples include number of days without beach closure; decrease in algae blooms; or water quality monitoring results. The permittee must evaluate and report the overall effectiveness of the program based on the tracking indicators in the annual report.

g. The permittee must, at a minimum, annually train employees about the IDDE program including how to recognize illicit discharges and SSOs. The permittee must document in the SWMP the training given to or received by employees. The permittee must report on the frequency and type of employee training in the annual report.

2.3.5 Construction Site Stormwater Runoff Control

Objective: The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on site so that it is not transported in stormwater and allowed to discharge to the MS4 or the environment.

Although there may be regulatory overlap, the construction site stormwater runoff control program required by this permit is a separate and distinct program from EPA's stormwater construction program.

2.3.5.1 – Permittees authorized under the MS4-2003 must continue to implement and enforce a program to reduce pollutants in any stormwater runoff discharged to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee's program must include disturbances less than one acre if that disturbance is part of a larger common plan.

2.3.5.2 - The permittee does not need to apply its construction program provisions to projects that receive a waiver from EPA under the provisions of 40 CFR § 122.26(b) (15) (i).

2.3.5.3 - The construction site runoff control program must include the following elements in Paragraphs a through e of this Part:

a. An ordinance or regulatory mechanism that requires the use of sediment and erosion control practices at construction sites. Development of an ordinance or other regulatory mechanism was a requirement of the MS4-2003 (See Part II.B.4 and Part III.B.4). The ordinance or other regulatory mechanism required by the MS4-2003 must have been effective by May 1, 2008.

b. The construction site stormwater runoff control program must include written procedures for site inspections and enforcement of sediment and erosion control measures at construction sites. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The permittee must have the authority to the extent authorized by law to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP.

c. The construction site stormwater runoff control program must require construction site operators with the MS4 jurisdiction to implement a sediment and erosion control program that includes BMPs appropriate for the conditions at the construction site. The program may include references to BMP design standards in state manuals or design standards specific to the MS4. EPA supports and encourages the use of design standards in local programs. Examples of appropriate sediment and erosion control measures for construction sites include local requirements to:

- i. minimize the amount of disturbed area and protect natural resources;
- ii. stabilize sites when projects are complete or operations have temporarily ceased;
- iii. protect slopes on the construction site;
- iv. protect all storm drain inlets and armor all newly constructed outlets;
- v. use perimeter controls at the site;
- vi. stabilize construction site entrances and exits to prevent off-site tracking;
- vii. inspect stormwater controls at consistent intervals; and
- viii. control or manage a specific volume of runoff (e.g. design sediment and erosion control measures to manage 1 inch of runoff).

d. The construction site stormwater runoff control program must require construction site operators within the MS4 jurisdiction to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes. These wastes may not be discharged to the MS4.

e. The construction site stormwater runoff control program must have written procedures for site plan review. Site plan review must include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development. The review procedure must incorporate procedures for the consideration of potential water quality impacts; procedures for pre-construction review; and procedures for receipt and consideration of information submitted by the public. Site plan review procedure must include evaluation of opportunities for use of low impact design and green infrastructure and when the opportunity exists, encourage project proponents to incorporate into the site design. The permittee must track the number of site reviews, inspections, and enforcement actions in the SWMP. This information must be included as part of each annual report required by Part 5.3.

2.3.5.4 - EPA may notify a municipality that their local construction site stormwater runoff control program meets the requirement of a qualifying local program (QLP) (defined at 40 CFR 122.44(s)) or a municipality may ask EPA to make a determination that their program meets the requirements of a QLP. Being identified as a QLP means that the municipality's program can be referenced in EPA's Construction General Permit as being consistent with the terms of that permit. Construction projects in municipalities with a QLP would meet the requirements of the CGP by meeting the local requirements.

2.3.6 Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management)

Objective: The objective of this control measure is for the hydrology associated with new

development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of stormwater.

2.3.6.1 – Permittees authorized under the MS4-2003 must continue to implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the municipal stormwater system.

2.3.6.2 - The new development/ redevelopment program must include projects less than one acre if the project is part of a larger common plan of development or redevelopment which disturbs greater than one acre.

2.3.6.3. - The new development/redevelop program must include an ordinance or regulatory mechanism that regulates runoff from new development and redevelopment projects. Development of an ordinance or other regulatory mechanism was a requirement of the MS4-2003 (See Part II.B.5 and Part III.B.5). The ordinance must have been effective by May 1, 2008.

2.3.6.4 – The permittee’s new development/redevelopment program must have procedures to ensure that any stormwater controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. These procedures may include requirements to avoid development in areas susceptible to erosion and sediment loss; requirements to preserve areas in the municipality that provide important water quality benefits; requirement to implement measures for flood control; and requirements to protect the integrity of natural resources. For new development or redevelopment projects greater than one acre, the program shall include a process, if practicable, to require the implementation of low impact development practices that infiltrate, evapotranspire, or capture for reuse the first 1 inch of rainfall from a 24 hour storm preceded by 48 hours of no measurable precipitation.

2.3.6.5 –The permittee shall require the submission of as-built plans within 90 days of completion of construction projects that include controls designed to manage the stormwater associated with the completed site (post construction stormwater management). The new development/redevelopment program must have procedures to ensure adequate long-term operation and maintenance of stormwater management practices that are put in place after the completion of a construction project. This may include the use of dedicated funds or escrow accounts for development projects or the adoption by the permittee of all privately owned BMPs. This may also include the development of maintenance contracts between the owner of the BMP and the permittee. The maintenance contract shall include verification of maintenance practices by the owner, allow the municipality to inspect the maintenance practices and perform maintenance if inspections indicate neglect by the owner. The procedures to require submission of as-built plans and ensure long term operation and maintenance shall be a part of the SWMP. The permittee shall report in the annual report on the measures that the permittee has utilized to meet this requirement.

2.3.6.6 Within two (2) years of the effective date of this permit, the permittee shall develop a report assessing current street design and parking lot guidelines and requirements that affect the creation of impervious cover. This assessment shall be used to provide information to allow the permittee to determine if changes to design standards for streets and parking lots can be modified

to support low impact design options. If the assessment indicates that changes can be made, the assessment shall include recommendations and proposed schedules to incorporate policies and standards to relevant documents and procedures to minimize impervious cover attributable to parking and street designs. The local planning board and local transportation board should be involved in this assessment. This assessment shall be part of the SWMP. The permittee must report in each annual report on the status of this assessment including any planned or completed changes to local regulations and guidelines.

2.3.6.7 Within three (3) years from the effective date of the permit, the permittee must develop a report assessing existing local regulations to determine the feasibility of making the following green infrastructure practices allowable when appropriate site conditions exist:

- i. Green roofs;
- ii. Infiltration practices such as rain gardens, curb extensions, planter gardens, porous and pervious pavements, and other designs where the intent is to manage stormwater using landscaping and structured or augmented soils; and
- iii. Water harvesting devices such as rain barrels and cisterns, and the use of stormwater for non-potable uses.

The assessment should indicate if the practices are allowed in the MS4 jurisdiction and under what circumstances. If the practices are not allowed, the permittee shall determine what hinders the use of these practices, and what changes in local regulations must be made to make them allowable. The permittee must report in each annual report on its findings and progress towards making the practices allowable.

2.3.6.8 – Directly Connected Impervious Area

a. Within one (1) year from the effective date of the permit, the permittee shall estimate the number of acres of impervious area (IA) and directly connected impervious area (DCIA) tributary to its MS4 jurisdiction. The permittee shall report the tabulated results and its estimation methodology in the first annual report. The permittee shall tabulate its estimates by the sub-basins and receiving waterbodies². EPA recommends that the sub-basins and watersheds be those included in the New Hampshire Hydrographic Database (<http://www.granit.unh.edu>). Alternatively, the permittee may tabulate its estimates by the catchments it has delineated pursuant to Part 2.3.4.6(b) (i) of this permit or an alternative delineation of sub-basins. To facilitate the permittee's implementation of this permit requirement, EPA will provide for the permittee's use estimates of IA and DCIA for each regulated small MS4 in New Hampshire.

For the purposed of this part, IA includes conventional pavements, sidewalks, driveways, roadways, parking lots, and rooftops. DCIA is the portion of IA with a direct hydraulic connection to the permittee's MS4 or a waterbody via continuous paved surfaces, gutters, pipes and other impervious features. DCIA typically does not include isolated impervious areas with an indirect hydraulic connected to the MS4 (e.g., swale or detention basin) or that otherwise drain to a pervious area.

b. Two (2) years from the effective date of this permit, the permittee shall complete an inventory

² At a minimum, the areas reported must include those portions located within the urbanized area of the MS4, but may also include the total area within permittee's jurisdiction.

and priority ranking of MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with BMPs designed to reduce the frequency, volume, and peak intensity of stormwater discharges to and from its MS4. In determining the potential for retrofitting, the permittee shall consider factors such as the complexity and cost of implementation; public safety; access for maintenance purposes; subsurface geology; depth to water table, proximity to aquifers and subsurface infrastructure including sanitary sewers and septic systems; and opportunities for public use and education. In determining its priority ranking, the permittee shall consider factors such as schedules for planned capital improvements to storm and sanitary sewer infrastructure and paving projects; current storm sewer level of service; and control of discharges to impaired waters, first or second order streams, and critical receiving waters. For the purposes of this part, critical receiving waters include public swimming beaches, public drinking water supply sources, and shellfish growing areas. The permittee may also include in its inventory non-MS4 properties such as commercial or industrial parcels.

c. Beginning with the second year annual report and in each subsequent annual report, the permittee shall estimate for each sub-basin identified pursuant to Part 2.3.6.8(a) the number of acres of DCIA tributary to its MS4 that have been added or removed during the prior year. The permittee shall include in its estimates the additions or reductions resulting from development, redevelopment, or retrofit projects undertaken directly by the permittee; or by private developers and other parties in a voluntary manner or in compliance with the permittee's regulations pursuant to Part 2.3.6.3 of this permit.

d. Beginning with the third year annual report and in each subsequent annual report, the permittee shall report on those MS4 owned properties and infrastructure that have been retrofitted with BMPs designed to reduce the frequency, volume, and peak intensity of stormwater discharges. The permittee may also include in its annual report non-MS4 owned property that has been retrofitted with BMPs designed to reduce the frequency, volume, and peak intensity of stormwater discharges.

2.3.7 Good House Keeping and Pollution Prevention for Permittee Owned Operations

Objective: The permittee must implement an operations and maintenance program for permittee-owned operations that includes a training component and has an ultimate goal of preventing or reducing pollutant runoff from all permittee-owned operations and protecting water quality.

2.3.7.1 - Operations and Maintenance Programs

Within one (1) year from the effective date of the permit, the permittee must develop a written operations and maintenance procedures for the following municipal activities listed below in Parts 2.3.7.1 (a–c). These written procedures must be included as part of the SWMP.

The permittee must develop an inventory of all such facilities within six (6) months of the effective date of this permit. The permittee must review this inventory annually and update as necessary.

a. Parks and open space: Establish procedures to address the proper use, storage, and disposal of

pesticides and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction. Evaluate lawn maintenance and landscaping activities to ensure practices are protective of water quality. Protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials (drought resistant planting). Establish procedures for management of trash containers at parks (scheduled cleanings; sufficient number), and for placing signage in areas concerning the proper disposal of pet wastes.

b. Buildings and facilities: This includes schools, town offices, police, and fire stations, pools, parking garages and other permittee-owned or operated buildings or utilities. Evaluate the use, storage, and disposal of both petroleum and non-petroleum products. Ensure, through employee training, that those responsible for handling these products know proper procedures. Ensure that Spill Prevention Plans are in place, if applicable, and coordinate with the fire department as necessary. Develop management procedures for dumpsters and other waste management equipment. Sweep parking lots and keep areas surrounding the facilities clean to minimize runoff of pollutants. Within 6 months of the effective date of the permit, develop an inventory of all floor drains within all permittee-owned buildings. The inventory must be updated annually. Ensure that all floor drains discharge to appropriate locations.

c. Vehicles and Equipment: Establish procedures for the storage of permittee-owned vehicles. Vehicles with fluid leaks shall be stored indoors or in contained areas until repaired. Evaluate fueling areas for permittee-owned vehicles. If possible, place fueling areas under cover in order to minimize exposure. Establish procedures to ensure that vehicle wash waters are not discharged to the municipal storm sewer system or to surface waters. This permit does not authorize such discharges.

d. Roadways and Storm Systems: Within six (6) months of the effective date of the permit:

- i. establish procedures for catch basin inspections, cleaning, and repairs. Catch basins shall be inspected annually. Catch basins shall be cleaned a minimum of once every other year. The municipality shall clean a catch basin more frequently if the catch basin is located in a priority sub-catchment identified as part of the IDDE program or if inspections indicate an excessive accumulation of sediment. Excessive accumulation is greater than 50 percent filled.
- ii. establish procedures for sweeping streets, sidewalks, and permittee-owned parking lots. These areas shall be swept a minimum of twice per year, once in the spring (following winter activities) and once in the fall (leaf clean up). Ensure proper disposal of the cleanings.
- iii. establish procedures for winter road maintenance including the use and storage of salt and sand. Minimize the use of chloride and other salts, and evaluate opportunities for use of alternative materials. Ensure that areas used for snow disposal will not result in discharges to waters.
- iv. establish inspection and maintenance frequencies and procedures for the storm drain systems and for all structural stormwater BMPs such as swales; retention/detention basins or other structures. All permittee-owned stormwater structures must be inspected annually at a minimum.

e. The permittee must report in the annual report on the status of the inventory and any subsequent updates; the status of the O&M programs for the permittee owned facilities and activities in Parts 2.3.7.1(a – d) of this section; and the maintenance activities associated with

each.

f. The permittee must maintain all records associated with maintenance and inspection activities consistent with Part 5.2.1.

2.3.7.2 - Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP must be developed and implemented for each of the following permittee-owned facilities: maintenance garages, public works facilities, transfer stations, and other waste handling facilities. If facilities are located at the same property, the permittee may develop one SWPPP for the entire property. The SWPPP is a separate document from the SWMP required in Part 1.10. A SWPPP does not need to be developed if a permittee-owned facility is covered by a currently effective Multi-Sector General Permit or other NPDES permit.

a. One year from the effective date of the permit, the permittee must develop and implement a written SWPPP for the facilities described above. The SWPPP must be signed in accordance with the signatory requirements of Appendix B – Subparagraph 11.

b. The SWPPP must contain the following elements:

i. Pollution Prevention Team

Identify the staff on the team, by name and title. If the position is unstaffed, the title of the position should be included and the SWPPP updated when the position is filled. The role of the team is to develop, implement, maintain, and revise, as necessary, the SWPPP for the facility.

ii. Description of the facility and identification of potential pollutant sources

The SWPPP shall include a map of the facility and a description of the activities that occur at the facility. The map must show the location of the stormwater outfalls, receiving waters, and any structural controls. Identify all activities which occur at the facility and the potential pollutants associated with each activity including the location of any floor drains. These may be included as part of the inventory required by Part 2.3.7.1.

iii. Identification of stormwater controls

The permittee must select, design, install, and implement the best available control measures to minimize or eliminate pollutants in the stormwater discharges from the permittee owned facilities.

The selection, design, installation, and implementation of the control measures must be in accordance with good engineering practices and manufacturer's specifications. The permittee must also take all reasonable steps to control or address the quality of discharges from the site that may not originate at the facility.

If the discharge from the facility is to an impaired water and the facility has the potential to discharge the pollutant identified as causing the impairment, the permittee must identify the

control measures that will be used to address this pollutant at the facility so that the discharge does not cause or contribute to a violation of a water quality standard.

iv. The SWPPP must include the following management practices:

Minimize or Prevent Exposure: The permittee must to the extent practicable either locate materials and activities inside, or protect them with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to receiving waters or to the MS4 or if discharges are authorized under another NPDES permit.

Good Housekeeping: The permittee must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals (at a minimum monthly). Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers; and store leaking vehicles needing repair indoors.

Preventative Maintenance: The permittee must regularly inspect, test, maintain, and repair all equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater to receiving waters. Inspections must occur at a minimum once per quarter.

Spill Prevention and Response: The permittee must minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee must have procedures that include:

- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
- Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks must be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team ; and
- Contact information for individuals and agencies that must be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period, the permittee must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 as soon as the permittee has knowledge of the

discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information must be in locations that are readily accessible and available.

Erosion and Sediment Control: The permittee shall use structural and non-structural control measures at the facility to stabilize and contain runoff from exposed areas minimize or eliminate onsite erosion and sedimentation. Efforts to achieve this may include the use of flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion.

Management of Runoff: The permittee must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize or, to the extent achievable, eliminate pollutants in the discharges. The permittee must implement stormwater runoff management practices, e.g., permanent structural control measures that are necessary to minimize or, to the extent achievable, eliminate pollutants in the discharge. Nothing in this permit relieves the permittee of the obligation to implement additional control measures required by other Federal authorities, or by a State or local authority. Nothing in this permit relieves the permittee of the obligation to obtain appropriate permits from other such authorities Structural control measures that inject stormwater below the surface of the ground may need to be registered or require an Underground Injection Control permit before the structural control measure will be authorized to operate. Structural control measures, which involve the discharge of dredge or fill material into any receiving waters (e.g., wetlands) may require a separate permit under section 404 of the CWA before installation.

Salt Storage Piles or Piles Containing Salt: In order to prevent exposure to precipitation, the permittee must enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes, including maintenance of paved surfaces. The permittee must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if stormwater runoff from the pile will not be discharged directly or indirectly to the MS4 or if discharges from the piles are authorized under another NPDES permit. The permittee is encouraged to store piles in such a manner as not to impact ground water resources, recharge areas, and wells.

Employee Training: The permittee must annually train all employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team. Training must cover both the specific components and scope of the SWPPP and the control measures required under this Part, including spill response, good housekeeping, material management practices, any best management practice operation and maintenance, etc.

Maintenance of Control Measures: The permittee must maintain all control measures, required by this permit, in effective operating condition. The permittee must keep documentation onsite that describes procedures and a regular schedule for preventative maintenance of all control

measures and discussions of back-up practices in place should a runoff event occur while a control measure is off-line. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel trained).

v. The permittee must conduct the following inspections:

Routine facility inspection: Inspect all areas that are exposed to stormwater and all stormwater control measures. Inspections must be conducted at least quarterly (i.e., once each calendar quarter). More frequent inspections may be required if significant activities are exposed to stormwater. Inspections shall be performed when the facility is in operation. At least one of the quarterly inspections shall occur during a period when a stormwater discharge is occurring.

Document the following information for each routine facility inspection:

- The inspection date and time
- The name of the inspector
- Weather information and a description of any discharge occurring at the time of the inspection
- Identification of any previously unidentified discharges from the site
- Any control measures needing maintenance or repair
- Any failed control measures that need replacement

Comprehensive Site Inspections: Annually inspect all areas of the facility affected by the requirements of this permit including the areas identified as potential pollutant sources, areas where materials or activities are exposed to stormwater, any control measures, and any areas where spills or leaks have occurred.

Document the following for each comprehensive site inspection:

- The date of the inspection
- The name of the inspector
- All observations relating to the implementation of control measures including: previously unidentified discharges; previously unidentified pollutant sources; control measure needing maintenance or repair; failed control measures that need replacement; and any additional control measures needed to address any condition requiring corrective action
- Any SWPPP changes required as a result of the inspection

vi. If during the inspections, or any other event or observation, the permittee identifies control measures that are not operating effectively, the permittee must repair or replace them before the next anticipated storm event if possible, or as soon as practicable following that storm event. In the interim, the permittee must have back-up measures in place to ensure that the quality of the stormwater discharge is not diminished. There is no grace period for making repairs to any control measures.

c. The permittee must report the information in Part 2.3.7.2. (b)(v) of this section in the annual report.

d. The permittee must maintain all records associated with the development and implementation of the SWPPP required by this section consistent with the requirements of Part 5.2.1.

3.0 Outfall Monitoring Program

3.1 Monitoring Frequency and Location

3.1.1 - The permittee shall implement an outfall monitoring program that shall begin no later than one (1) year from the effective date of the permit unless otherwise indicated in the permit. The monitoring program shall begin with the outfalls in the catchments with the highest priority ranking as designated pursuant to Part 2.3.4.6 (b) to the extent practicable.

3.1.2 - The permittee shall conduct at least one dry weather screening and analytical monitoring and at least one wet weather analytical monitoring of each outfall within 5 years of the effective date of this permit, attaining the schedule milestones described in Parts 3.2.1 and 3.3.2.

3.1.3 -In addition to conducting dry and wet weather screening and analytical monitoring of all outfalls as described in Part 3.2 and Part 3.3, the permittee must also conduct field screening and analytical monitoring at locations where stormwater from the MS4 is transferred to another MS4. The interconnected monitoring shall occur at the first accessible location upgradient of the MS4 jurisdictional boundary.

3.2 Dry Weather Screening and Analytical Monitoring

3.2.1 – Dry weather outfall screening shall proceed only when no more than 0.1 inches of rainfall has occurred in the previous 24-hour period. The permittee must conduct dry weather screening on a minimum of 25 percent of the outfalls each year of the permit beginning in the second year of the permit with completion by the end of the permit term. When a flow is observed at an outfall, a sample of the flow shall be collected and analyzed. The permittee must document the number of outfalls screened and any monitoring results each year in the SWMP and the annual report. Dry weather screening can be conducted at the same time the permittee conducts the outfall inventory required in Part 2.3.4.6(d).

3.2.2 - Dry weather discharges shall be analyzed for: ammonia, chlorine, conductivity; *E.Coli.* or enterococcus (as appropriate depending on whether a discharge is to a fresh water or a marine water); pH; potassium; surfactants (as MBAS); temperature and turbidity. The permittee must identify the source of any dry weather discharge and must identify any necessary follow-up actions consistent with the protocol required by Part 2.3.4.6(d).

3.2.3 - If the discharge is directly into an impaired water, the permittee must also monitor for the pollutants identified as the cause of the impairment provided an analytical method in 40 CFR 136 exists for that pollutant.

3.2.3.1 – If the pollutant identified as the cause of the impairment is present in the discharge, the permittee shall also undertake efforts designed to identify the source(s) of the pollutant(s) and

implement measures to eliminate it. The permittee must document the procedures in the SWMP and annual report.

3.2.4 - If no dry weather flow is observed at the outfall, the permittee shall record the location of the outfall, the condition of the outfall and other relevant information. See Part 2.3.4.6(d) of the permit. If no flow is observed, but evidence of flow exists, the permittee must revisit the outfall during dry weather within one week of the initial observation, if practicable. The permittee must identify in the SWMP and annual report any necessary follow-up provisions to identify the source flow.

3.3 Wet Weather Analytical Monitoring

3.3.1 - The permittee must conduct wet weather analytical monitoring of all outfalls and at interconnections with another MS4. Wet weather monitoring does not require a minimum rainfall event. Monitoring can occur for any storm event of sufficient intensity to produce a discharge.

3.3.2 – The permittee must conduct wet weather analysis on a minimum of 25 percent of the outfalls each year of the permit beginning in the second year of the permit with completion by the end of the permit term. This 25 percent must be the same outfalls that are monitored for dry weather to the extent practicable. If it is not practicable, the permittee shall explain why in the next annual report. The permittee must document the number of outfalls monitored and monitoring results each year in the annual report.

3.3.3 – Wet weather flows shall be monitored for the following parameters: conductivity; *E.Coli* or enterococcus (as appropriate depending on whether a discharge is to fresh water or marine water); chlorine; potassium; ammonia; pH; surfactants (as MBAS); temperature; and turbidity.

3.3.4 - If the discharge is directly into an impaired water, the permittee shall monitor the outfall for the pollutant(s) identified as the cause of impairment provided an analytical method in 40 CFR 136 exists for that pollutant.

3.3.5 - If the pollutant identified as the cause of impairment is present in the discharge, the permittee shall develop procedures for the control measures in Part 2.3 designed to minimize or eliminate the pollutant. The permittee shall also undertake efforts designed to identify the source(s) of the pollutant(s) and implement measures to eliminate it. The permittee must document the procedures in the SWMP and report in the annual report.

3.4 – The permittee must maintain all records associated with the monitoring program consistent with the requirements of Part 5.2.1.

4.0 Additional State Requirements

4.1 Requirements for MS4s in New Hampshire

The permittee must evaluate physical conditions, site design, and best management practices to promote ground water recharge and infiltration where feasible in the implementation of the control measures described in Part 2.3. The permittee must address recharge and infiltration for the control measures, as well as any reasons for electing not to implement recharge and infiltration. Loss of annual recharge to ground water should be minimized through the use of infiltration to the maximum extent practicable. Any subsurface disposal of stormwater must be in accordance with applicable groundwater; source water protection and underground injection control requirement (see Part 1.3.j).

Infiltration through stormwater practices shall be prohibited under certain circumstances, including:

- When stormwater originates from gasoline dispensing areas at locations with state registered underground storage tanks (UST) and above ground storage tanks (AST);
- Within groundwater protection areas (defined under Env-Wq 1502.24) when stormwater originates from land uses considered a “high load area” under Env-Wq 1502.26; and
- Within areas that have contaminants in groundwater above the ambient groundwater quality standards established in Env-Or 603.03 or in soil above site-specific soil standards developed pursuant to Env-Or 600.

The permittee is encouraged to adopt similar requirements or reference these state rule requirements under Env-Wq 1500 within local regulations for projects not subject to Env-Wq 1500.

4.1.1 - MS4s that discharge to coastal waters with public swimming beaches must consider these waters a priority in implementation of the stormwater management program.

4.1.2 – If New Hampshire Department of Environmental Services (NH DES) determines that additional water quality certification requirements are necessary to protect water quality, it may require individual applicants to meet additional conditions to obtain or continue coverage under this permit. Any such conditions shall be supplied to the permittee in writing. Any required pollutant loading analysis and any designs for structural best management practices necessary to protect water quality must be prepared by a civil or sanitary engineer registered in New Hampshire.

4.2 New Hampshire Public Drinking Water Requirements

4.2.1 – MS4s that discharge to public drinking water sources and their source protection areas must consider these sources priority resources when implementing control measures of Part 2.3.

4.2.2 – Discharge to public drinking water supply sources and their protection areas must provide pretreatment and spill control suitable to protect drinking water sources to the extent feasible.

4.2.3 – The permittee shall avoid direct discharges to groundwater and surface water drinking water sources and ensure any discharges near source protection areas of water supply wells or intakes comply with the applicable state requirements. Stormwater systems must meet the minimum discharge setback requirements of Env-Wq 1500 unless exempt under Env-Wq

1508.02(c). The following minimum setbacks apply to certain drinking water supply resources, including:

- Discharge setbacks from water supply wells in accordance with Env-Wq 1508.02(a); and
- Discharge setback of 100 feet within water supply intake protection areas as specified under Env-Wq 1508(b).

In groundwater protection areas and water supply intake protection areas, infiltration and filtration practices must provide additional vertical separation to the seasonal high water table in accordance with Env-Wq 1500 within local regulations for projects not subject to Env-Wq 1500.

The permittee is encouraged to adopt similar requirements or reference these state rule requirements under Env-Wq 1500 within local regulations for projects not subject to Env-Wq 1500.

4.2.4 – Develop and implement a plan to notify public water suppliers in the event of an emergency which has the potential to impact a water supply.

5.0 Program Evaluation, Record Keeping, and Reporting

5.1 Program Evaluation

5.1.1- The permittee must annually evaluate compliance with the terms and conditions of this permit. The permittee must maintain the annual evaluation documentation as part of the SWMP.

5.1.2- The permittee must evaluate the appropriateness of the selected BMPs in achieving the objectives of each control measure and the defined measurable goals. The permittee may change BMPs in accordance with the following provisions:

- Changes in adding (but not subtracting or replacing) components or controls may be made at any time upon written notification to EPA or the state or tribal agency.
- Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be requested in writing to EPA and the state or tribal agency at any time. Unless denied, changes proposed in accordance with the criteria below may be implemented 60 days from submittal of the request. If the request is denied, EPA or the state or tribal agency will send a written explanation of the denial.

5.1.3 – BMP modification requests must include the following information:

- an analysis of why the BMP is ineffective or infeasible
- expectations on the effectiveness of the replacement BMP; and
- an analysis of why the replacement BMP is expected to achieve the defined goals of the BMP to be replaced.

5.1.4 - Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Appendix B – Subparagraph 11.

5.1.5 - EPA or the state or tribal agency may require the permittee to change BMPs or other measures described in the annual reports as needed:

- ☐ to address impacts to receiving water quality caused or contributed to by discharges from the MS4;
- To include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; or
- To include such other conditions deemed necessary to comply with the goals and requirements of the CWA

Any changes requested by EPA or the state or tribal agency will be in writing and will set forth the schedule for the permittee to develop the changes and offer the opportunity to propose alternative program changes to meet the objective of the requested modification.

5.2 Record Keeping

5.2.1 – The permittee shall keep all records required by this permit for a period of at least five years. EPA may extend this period at any time. Records include information used in the development of any written program required by this permit, any monitoring results, copies of reports, and data used in the development of the notice of intent, SWMP, SWPPP, and annual reports.

5.2.2- Records other than those required to be include in the annual report, Part 5.3, must be submitted only when requested by the EPA or the state or tribal agency.

5.2.3 -The permittee must make the records relating to this permit available to the public, including the stormwater management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.

5.3 Reporting

5.3.1 The permittee must submit an annual report. The reporting period will be from July 1 to June 30. The annual report due date is August 1.

5.3.2 - The annual reports must contain the following information:

5.3.2.1 - A self assessment review of compliance with the permit terms and conditions.

5.3.2.2 -An assessment of the appropriateness of the selected BMPs.

5.3.2.3 - An assessment of the progress towards achieving the measurable goals and objectives of each control measure in Part 2.3 including:

- Evaluation of the public education program including a description of the targeted messages for each audience; method of distribution and the dates of distribution; methods used to evaluate the program; and any changes to the program.
- Description of the activities used to promote public participation including documentation of compliance with state or tribal public notice regulations.

- Description of the activities related to implementation of the IDDE program including: status of the map; status and results of the illicit discharge potential ranking and assessment; status of protocols described in Parts 2.3.4.6 (c), (d) and (e); number of illicit discharges located, removed; identification of tracking indicators; and employee training.
- Evaluation of the construction runoff management including number of projects reviewed; number of inspections; and number of enforcement actions.
- Evaluation of stormwater management for new development and redevelopment including status of ordinance review; status of the street design assessment; and information on directly connected impervious area reductions.
- Status of the O&M Programs required by Part 2.3.7.1.
- Status of SWPPP required by Part 2.3.7.2 including inspection results.
- Any additional reporting requirements in Part 4.0.

5.3.2.4 - Outfall monitoring data that has been collected and analyzed. This includes data collected as part of the outfall inventory required in Part 2.3.4 and as part of the outfall monitoring program describe in Part 3.0. The following information shall be submitted for each outfall sampled:

- results of dry weather outfall screening and analytical monitoring;
- results of dry weather outfall analytical monitoring associated with discharges to impaired waters;
- results of wet weather outfall screening and analytical monitoring; and
- results of wet weather outfall analytical monitoring associated with discharges to impaired waters.

5.3.2.5 – For discharges to impaired waters, identification of specific BMPs used to address the pollutant identified as the cause of impairment and the BMPs effectiveness at controlling the pollutant.

5.3.2.6 – Description of activities for the next reporting cycle.

5.3.2.7 – Description of any changes in identified BMPs or measurable goals.

5.3.2.8 – Description of activities undertaken by any entity contracted for achieving any measurable goal or implementing any control measure.

5.3.3 - Reports must be submitted to both EPA and the state agency at the following addresses:

United State Environmental Protection Agency
Industrial Permits Branch - CIP
One Congress Street – Suite 1100
Boston, MA 02114

NH Department of Environmental Services
Wastewater Engineering Bureau
Permits and Compliance Section
P.O. Box 95

Concord, NH 03302-0095

6.0 Requirements for State or Tribal MS4s Non-Traditionals

State or Tribal MS4s are properties owned and operated by a State or a Tribe, respectively. All requirements and conditions of Parts 1 – 5 above apply to these MS4s with the following exceptions:

6.1 – Public education: For the purpose of this permit, the audiences for a state agency include the employees, visitors to the property, and any contractors working at the property. The permittee may use some of the educational topics included in Part 2.3.2.1 (c) as appropriate, or may focus on topics specific to the MS4. The permittee must document the educational topics for each target audience.

6.2 – Ordinances and regulatory mechanisms: State agencies do not typically have authority to enact an ordinance, by-law, or other regulatory mechanisms. These MS4s must ensure that written policies or procedures are in place to address the requirements of Part 2.3.4.6(a), Part 2.3.5.3(a) and Part 2.3.6.3. They may rely on EPA or the State environmental agency for enforcement assistance.

6.3 – Assessment of Regulations: The requirements of Part 2.3.6.5 and Part 2.3.6.6 do not apply. The permittee must instead evaluate opportunities to include green infrastructure practices in new development and redevelopment at the facility. The permittee must evaluate opportunities to reduce the amount of impervious cover due to parking areas and walkways. The permittee must report on these efforts in each annual report.

7.0 Requirements for Transportation Agencies

A transportation agency is the state agency responsible for operation and maintenance of the state owned roadways (New Hampshire Department of Transportation -NHDOT). All requirements and conditions of this permit apply with the following exceptions:

7.1 – Public education: For the purpose of this permit, the audiences for a transportation agency education program include the general public (users of the roadways), employees, and any contractors working at the location. The permittee may use some of the educational topics included in Part 2.3.2.1 (c) as appropriate, or may focus on topics specific to the agency. The permittee must document the educational topics for each target audience.

7.2 – Ordinances and regulatory mechanisms: The transportation agency does not typically have authority to enact an ordinance, by-law or other regulatory mechanisms. The agency must ensure that written agency policies or procedures are in place to address the requirements of Part 2.3.4.6(a), Part 2.3.5.3(a) and Part 2.3.6.3. These agencies may rely on EPA or the State environmental agency for enforcement assistance.

7.3 – Assessment of regulations: The requirements of Part 2.3.6.5 and Part 2.3.6.6 do not apply. The agency must instead evaluate opportunities to include green infrastructure practices in new

development and redevelopment at the facility. The agency must evaluate opportunities to reduce the amount of impervious cover due to parking areas and walkways. The permittee must report on these efforts in each annual report.

