FACT SHEET FOR THE SMALL MS4 DRAFT GENERAL PERMIT

FACT SHEET AND SUPPLEMENTAL INFORMATION

I. INTRODUCTION AND PROGRAM BACKGROUND

The Director of the Office of Ecosystem Protection, EPA-Region 1, is proposing to reissue six National Pollutant Discharge Elimination System (NPDES) general permits for the discharge of

stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) to waters within the States of New Hampshire and Vermont (federal facilities only) and Indian lands within the states of Connecticut and Rhode Island. The draft general permit consists of the following parts:

Part 1: Coverage under this Permit

Part 2: Non-Numeric Effluent Limitations

Part 3: Outfall Monitoring Requirements

Part 4: Additional State Requirements

Part 5: Program Evaluation, Record Keeping and Reporting

Part 6: Requirements for State or Tribal MS4 Non-Traditionals

Part 7: Requirements for Transportation Agencies

Appendices:

A: Definitions and permit specific terms

B: Standard permit conditions applicable to all permits (40 CFR § 122.41)

C: Conditions related to the Endangered Species Act (ESA)

D: Conditions related to the National Historic Preservation Act (NHPA)

E: Information required on the Notice of Intent (NOI)

F: Requirements for NH Small MS4s subject to Approved Total Maximum Daily Loads (TMDLs)

A. Program Background

The conditions in the draft permit are established pursuant to Clean Water Act (CWA) § 402(p)(3)(iii) to ensure that pollutant discharges from small municipal separate storm sewer systems (MS4s) are reduced to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate water quality requirements of the CWA. A small municipal separate storm sewer system means all separate storm sewers that are:

> "(1) 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 , 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 United States.

(2) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR § 122.26(b)(4) or (b)(7) or designated under 40 CFR § 122.26(a)(1)(v).

(3) This term includes systems similar to separate storm sewer systems in municipalities such as 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. For example, an armory located in an urbanized area would not be considered a regulated small MS4." (See 40 CFR § 122.26(b) (16)).

Part 2.3 of the draft permit sets forth the requirements for the MS4 to "reduce pollutants in discharges to the maximum extent practicable, including management practices, control techniques, and system, design and engineering methods…" (See Section 402(p) (3) (B) (iii) of the CWA). MEP is the statutory standard that establishes the level of pollutant reductions that MS4 operators must achieve. EPA believes implementation of best management practices (BMPs) designed to control storm water runoff from the MS4 is generally the most appropriate approach for reducing pollutants to satisfy the technology standard of MEP. Pursuant to 40 CFR § 122.44(k), the draft permit contains BMPs, including development and implementation of a comprehensive stormwater management program (SWMP) as the mechanism to achieved the required pollutant reductions.

Section 402(p) (3) (B) (iii) of the CWA also authorizes EPA to include in an MS4 permit "such other provisions as [EPA] determines appropriate for control of …pollutants." EPA believes that this provision forms a basis for imposing water quality-based effluent limitations (WQBELs), consistent with the authority in Section 301(b) (1) (C) of the CWA. *See Defenders of Wildlife v. Browner.* 191 F.3d 1159 (9th Cir. 1999): *see also* EPA's preamble to the Phase II regulations, 64 Fed. Reg. 68722, 68753, 68788 (Dec 8, 1999). Accordingly, Part 2.1 of the draft permit contains the water quality-based effluent limitations, expressed in terms of BMPs, which EPA has determined are necessary and appropriate under the CWA.

EPA – Region 1 issued a final general permit to address stormwater discharges from small

MS4s on May 1, 2003. The MS4-2003 general permit required small MS4s to develop and implement stormwater management programs (SWMP) designed to control pollutants to the maximum extent practicable (MEP) and protect water quality. This draft general permit builds on the requirements of the previous general permit.

Neither the CWA nor the stormwater regulations provide a precise definition of MEP. The lack of a precise definition is to allow maximum flexibility in MS4 permitting. Small MS4s need flexibility to optimize reductions in stormwater pollutant loads on a location-by-location basis. The process of optimization will include consideration of factors such as receiving waters, specific local concerns, size of the MS4, climate, and other aspects. Pollutant reductions that represent MEP may be different for each small MS4 given the unique hydrologic and geologic concerns or features that may exist.

EPA views the MEP standard in the CWA as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness. EPA believes that compliance with the requirements of this draft permit will meet the MEP standard. The iterative process of MEP consists of a municipality developing a program consistent with specific permit requirements, implementing the program, evaluating the effectiveness of BMPs included as part of the program, then revising those parts of the program that are not effective at controlling pollutants, then implementing the revisions, and evaluating again. This process continues until the goal of meeting water quality requirements is achieved. The changes contained in the draft general permit reflect the iterative process of MEP. Accordingly, the draft general permit contains more specific tasks and details than the 2003 general permit. These specific changes are discussed later in the fact sheet.

B. Consideration of Other Federal Programs

When EPA undertakes an action, such as the reissuance of an NPDES permit, that action must be consistent with other federal laws and regulations. Regulations at 40 C.F.R. §122.49 contain a listing of Federal laws that may apply to the issuance of NPDES permits. This section discusses four federal Acts that apply to the reissuance of these general permits: the Endangered Species

Act (ESA), the National Historic Preservation Act (NHPA), Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat), and the Coastal Zone Management Act. The requirements of these Acts and EPA's obligations with regard to them are discussed in the following paragraphs. Executive Orders and other administrative laws that may apply to the issuance of NPDES are discussed in Part IV of this fact sheet.

Endangered Species

The Endangered Species Act (ESA) of 1973 requires federal agencies, such as EPA to ensure in consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (also known collectively as the Services), that any actions authorized, funded or carried out by the Agency are not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species (see 16 U.S.C 1536(a)(2), 50 CFR 402 and 40 CFR 122.49(c)).

In order to be eligible for this draft general permit, permittees must certify that none of their stormwater discharges, allowable non-stormwater discharges, or discharge related activities are likely to affect a threatened or endangered species. The draft general permit contains five criteria for eligibility certification. These criteria are contained in Appendix C of the draft general permit. The permittee must document its eligibility determination based on one of the criteria and maintain it as part of the stormwater management program. The permittee must also certify eligibility as part of the Notice of Intent requirements.

In order to meet its obligations under the CWA and the ESA, and to promote the goals of those Acts, EPA seeks to ensure the activities regulated by these general permits are not likely to adversely affect endangered and threatened species and critical habitat. Small MS4s applying for permit coverage must assess the impacts of their storm water discharges and discharge-related activities on Federally listed endangered and threatened species ("listed species") and designated critical habitat ("critical habitat") to ensure that the goals of ESA are met. Prior to obtaining general permit coverage, small MS4s must meet the ESA eligibility provisions of this permit.

EPA strongly recommends that small MS4s follow the guidance in Appendix C of the general permit at the earliest possible stage to ensure eligibility requirements for general permit coverage are complete upon NOI submission.

Small MS4s also have an independent ESA obligation to ensure that their activities do not result in any prohibited "takes" of listed species[1]. Many of the measures required in this general permit and in the instructions of Appendix C to protect species may also assist in ensuring that the MS4's activities do not result in a prohibited take of species in violation of section 9 of the ESA. If the permittee has plans or activities in an area where endangered and threatened species are located, it may wish to ensure that they are protected from potential takings liability under ESA section 9 by obtaining an ESA section 10 permit or by requesting formal consultation under ESA section 7. Small MS4s that are unsure whether to pursue a section 10 permit or a section 7 consultation for takings protection should confer with the appropriate United States Fish and Wildlife Service (USFWS)[2] office or the National Marine Fisheries Service (NMFS).

There are four species of concern for small MS4s applying for permit coverage, namely the dwarf wedgemussel, the shortnose sturgeon, the bog turtle, and the northern redbelly cooter. The shortnose sturgeon is listed under the jurisdiction of NMFS and the dwarf wedge mussel, the bog turtle and the northern belly cooter are listed under the jurisdiction of the USFWS.

The Federally-listed endangered dwarf wedgemussel (*Alasmidonta heterodon*) is found in the following areas in New Hampshire:

- Connecticut River from North Cumberland to Dalton, New Hampshire (Coos County
- Connecticut River from Lebanon to North Walpole, New Hampshire (Grafton and Sullivan Counties)

[1] Section 9 of the ESA prohibits any person from "taking" a listed species (e.g. harassing or harming it) unless: (1) the taking is authorized through an "incidental take statement" as part of completion of formal consultation according to ESA section 7; (2) where an incidental take permit is obtained under ESA section 10 (which requires the development of a habitat conversion plan; or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals, businesses, and governments.

[2] Discharges to marine waters may require consultation with the National Marine Fisheries Service instead.

- Ashuelot River from the Surry Mountain Flood Control Project in Surry to Swanzey, New Hampshire (Cheshire County)
- South Branch of the Ashuelot River in East Swanzey, New Hampshire (Cheshire County)
- Mill River from Whately to Hatfield, Massachusetts (Hampshire County)
- Fort River in Amherst, Massachusetts (Hampshire County)
- Mill River south of State Route 10 in Northampton, Massachusetts (Hampshire County)

Any small MS4 seeking coverage under this general permit, which discharges to these rivers, must consult with the Services. EPA is authorized to designate non-Federal representatives for the general permit for the purpose of carrying out informal consultation with NMFS and USFWS (See 50 CFR §402.08 and §402.13). By terms of this permit, EPA has automatically designated small MS4 operators as non-Federal representatives for the purpose of conducting informal consultations. Permit coverage is only available if the small MS4 contacts the Services to determine that discharges and discharge related activities are not likely to adversely affect listed species or critical habitat and informal consultation with the Services has been concluded and results in written concurrence by the Services that the discharge is not likely to adversely affect an endangered or threatened species.

Before submitting a NOI for coverage by this permit, a small MS4 must determine whether they meet the ESA eligibility criteria by following the steps in Section D of Appendix C. Small MS4s that cannot meet any of the eligibility criteria must apply for an individual permit.

The paragraphs below are the ESA eligibility criteria contained in Appendix C of the permit. A MS4 must meet one of the criteria to be eligible for this permit.

The ESA eligibility requirements of this permit may be satisfied by documenting that one or more of the following criteria has been met. Upon notification, EPA may direct an applicant to pursue eligibility under Criterion B.

Criterion A: No endangered or threatened species or critical habitat is in proximity to the storm water discharges or discharge related activities.

Criterion B: In the course of a separate federal action involving the small MS4, formal or informal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service under Section 7 of the ESA has been concluded and that consultation (1) addressed the effects of the storm water discharges and discharge related activities on the listed species and critical habitat; and (2) the consultation resulted in either a no jeopardy opinion or a written concurrence by USFWS and/or NMFS on a finding that the storm water discharges and discharge related activities are not likely to adversely affect listed species or critical habitat.

Criterion C: The activities are authorized under Section 10 of the ESA and that authorization addresses the effects of the storm water discharges and discharge related activities on listed species and critical habitat.

(Eligibility under this criterion is not likely.) This criterion involves a municipality's activities being authorized through the issuance of a permit under section 10 of the ESA and that authorization addresses the effect of the municipality's storm water discharges and discharge related activities on listed species and designated critical habitat. Municipalities must follow USFWS and/or NMFS procedures when applying for an ESA section 10 permit (see 50 CFR §17.22(b) (1) for USFWS and §222.22 for NMFS). Application instructions for section 10 permits can be obtained by assessing the appropriate websites (www.fws.gov and www.nmfs.noaa.gov) or by contacting the appropriate regional office.

Criterion D: Using the best scientific and commercial data available, the effect of the storm water discharge and discharge related activities on listed species and critical habitat have been evaluated. Based on those evaluations a determination is made by the permittee and affirmed by EPA that the storm water discharges and discharge related activities are not likely to adversely affect any federally threatened or endangered listed species or designated critical habitat.

Criterion E: The storm water discharges and discharge related activities were already addressed in another operator's certification of eligibility which includes the small MS4's stormwater discharges and discharge related activities.

Criterion F: Eligibility under this criterion is restricted to a small MS4 which discharges to an area listed aboveA with federally listed species.

Section 7 of the ESA provides for formal and informal consultation with the Services. For NPDES permits issued by EPA, draft permits and fact sheets are routinely submitted to the Services for informal consultation prior to issuance. EPA will initiate an informal consultation with the Services during the public notice period of the general permit.

This general permit authorizes stormwater discharges from municipal separate storm sewer systems which consists of runoff from precipitation events that is collected from streets, parking lots, sidewalks and other impervious areas and discharged to a surface water. Stormwater from small MS4smay contain bacteria, nutrients, and heavy metals. The general permit excludes coverage to small MS4s whose discharges are likely to adversely affect any species that is listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is designated as critical under the ESA. The proposed permit requirements are sufficiently stringent to assure protection of aquatic life. The requirements in this permit are consistent with information previously provided by the Services to EPA during the development of other recently issued general permits.

Small MS4 discharges that are located in areas in which listed endangered or threatened species may be present are not automatically covered under this general permit. Small MS4s discharging into areas where these species are found must ensure and document eligibility. Small MS4s unable to document eligibility must apply for an individual permit. Applicants with discharges to those locations must contact the Services to determine whether additional consultation with the Services is needed.

Coverage under the general permit is available only if the applicant certifies and documents permit eligibility using one of the eligibility criterion listed above and in Appendix C of the general permit.

EPA has requested concurrence from the Services that the draft general permit is protective.

Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA)(16 USC Sections 1801 et seq. (1998)), EPA is required to consult with NMFS if EPA's action or proposed actions that it funds, permits or undertakes, "may adversely impact any essential fish habitat." (16 USC Section 1855(b)). The Amendments broadly define "essential fish habitat" (EFH) as "waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." (16 USC Section 1802(10)). Adverse impact means any impact that reduces the quality and/or quantity of an EFH (50 CFR Section 600.910(a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative or synergistic consequences of actions.

An EFH is only designated for fish species for which federal Fisheries Management Plans exist. 16 USC Section 1855(b) (1) (A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999. In a letter dated October 10, 2000 to EPA, NOAA Fisheries Service agreed that for projects authorized through the NPDES permit process, EPA may use its existing procedures regarding consultation/ environmental review to satisfy the requirements of the MSFCMA. According to the agreement between NOAA/NMFS and EPA, EFH notification for purposes of consultation can be accomplished in the EFH Section of the fact sheet for the draft permit or Federal Register notice.

EPA's EFH assessment must contain the following information: description of the proposed action; an analysis of individual and cumulative effects of the action on EFH, the managed species, and associated species (such as major prey species), including all affected life history

stages; EPA's determination regarding effects on EFH and a discussion of proposed mitigation, if applicable. The following section details EPA's EFH assessment.

Proposed Action: EPA is proposing to reissue the NPDES general permit for the discharge of stormwater from Small Municipal Separate Storm Sewer Systems located in the areas described in Part 1.1 of the draft general permit.

Resources: The draft general permit lists specific discharges excluded from coverage (see Part 1.3 of the permit) including discharges whose directed or indirect impacts do not prevent or minimize adverse effects on any Essential Fish Habitat. EPA's EFH assessment considers all 40 federally managed species with designated EFH in the coastal and inland waters of Massachusetts and New Hampshire.

Analysis of Effects and EPA's Opinion of Potential Impacts: Discharges from small MS4s contain stormwater runoff from urban environments including areas such as rooftops, driveways, sidewalks, and roads. Typical pollutants in urban stormwater runoff include sediments, nutrients, bacteria and oil & grease. EPA expects that EFH will be protected. The following permit conditions are designed to ensure protection of EFH:

- MS4s are required to implement SWMPs designed to reduce pollutants to the maximum extent practicable and protect water quality. Implementation of a program to these standards should ensure the protection of aquatic life and maintenance of the receiving water as an aquatic habitat. Implementation of the SWMP includes, among other things, a public education program, a program to remove non-stormwater from the system, and an operations and maintenance program for municipal operations. Details of the program are in Part 2.3 of the draft permit and discussed in Part II.E of this fact sheet.
- The effluent limitations of the draft permit are sufficiently stringent to assure that state water quality standards will be met and it also prohibits violations of these standards.
- The draft permit excludes coverage of discharges that do not prevent or minimize adverse effects to EFH.

EPA concludes that adherence to the terms and conditions of the permit will prevent or minimize

adverse effects to EFH species, their habitat and forage. EPA will seek written concurrence from the National Marine Fisheries Service on this assessment.

Proposed Mitigation: Mitigation for unavoidable impacts associated with issuance of the draft permit is not warranted at this time because it is EPA's opinion that impacts will be negligible if permit conditions are followed. Authorization to discharge under the general permit can be revoked if any adverse impacts to federally managed or protected species or their habitats do occur either because of noncompliance or from unanticipated effects from this activity. Should new information become available that changes the basis for EPA's assessment, then consultation with NMFS under the appropriate statute(s) will be reinitiated.

Historic Preservation

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings" on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term Federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program of a Federal agency including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties. See 36 CFR 800.16(1).

EPA's reissuance of the Small MS4 General Permit is a Federal undertaking within the meaning of the NHPA regulations. To address any issues relating to historic properties in connection with reissuance of the general permit, EPA has included eligibility criteria, see Appendix D of the draft permit, for permittees to certify that potential impacts of their activities covered by this permit on historic properties have been appropriately considered and addressed. Although individual NOIs for coverage under the general permit do not constitute separate Federal undertakings, the screening criteria and certifications provide an appropriate site-specific means

of addressing historic property issues in connection with EPA's reissuance of the general permit. MS4s seeking coverage under this general permit are thus required to make certain certifications regarding the potential effects of their stormwater discharge, allowable non-stormwater discharge, and discharge-related activities on properties listed or eligible for listing on the National Register of Historic Places.

A permittee must meet one or more of the following four criteria (A-D) to be eligible for coverage under this permit:

Criterion A. Stormwater discharges and allowable non-stormwater discharges do not have the potential to have an effect on historic properties and the permittee is not constructing or installing stormwater control measures that cause less than 1 acre of subsurface disturbance; or

Criterion B. Discharge-related activities (i.e., construction and/or installation of stormwater control measures that involve subsurface disturbance) do not have the potential affect historic properties; or

Criterion C. Stormwater discharges, allowable non-stormwater discharges, and discharge-related activities have the potential to have an effect on historic properties, and the permittee has obtained and is in compliance with a written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other tribal representative that outlines all measures the permittee will carry out to mitigate or prevent any adverse effects on historic properties; or

Criterion D. The permittee has contacted the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other tribal representative and EPA in writing informing them that the permittee has the potential to have an effect on historic properties and the permittee did not receive a response from the SHPO, THPO, or tribal representative within 30 days of receiving the permittee's letter.

Coverage under the general permit is available only if the applicant certifies and documents permit eligibility using one of the eligibility criteria listed above and in Appendix D of the

general permit. Permittees are reminded that they must comply with applicable State, Tribal, and local laws concerning protection of historic properties and include documentation supporting the determination of permit eligibility in the Stormwater Management Program.

Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service - http://www.nps.gov/nr/ and the New Hampshire Historic Commission - www.state.nh.us/nhdhr.

Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), l6 U.S.C. Sections l45l et seq., and its implementing regulations [15 CFR Part 930] require that any federally licensed activity affecting a state's coastal zone be consistent with the enforceable policies of approved state management programs. In the case of general permits, EPA has the responsibility for making the consistency determination and submitting it to the State for concurrence.

The following is a listing of NH Coastal Zone Management Enforceable Policies. EPA has addressed policies identified as applicable by NH CZM to the issuance of this permit. Policies that were not applicable to EPA's action (reissuance of this permit) are noted with "NA".

PROTECTION OF COASTAL RESOURCES

1. Protect and preserve and, where appropriate, restore the water and related land resources of the coastal and estuarine environments. The resources of primary concern are coastal and estuarine waters, tidal and freshwater, wetlands, beaches, sand dunes, and rocky shores.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by prohibiting any discharge that EPA determines will cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standards and by requiring the development and implementation of a SWMP. The draft

permit requires MS4s to meet water quality –based limitations described in Part 2.2 of the draft permit. The SWMP consists of control measures described in Part 2.3 of the draft permit. These requirements when implemented are designed to protect the waters of the coastal and estuarine environments and related land resources.

2. Manage, conserve and where appropriate, undertake measures to maintain, restore, and enhance the fish and wildlife resources of the state.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by prohibiting any discharge that EPA determines will cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standards and by requiring the development and implementation of a SWMP. The draft permit requires MS4s to meet water quality –based effluent limitations described in Part 2.2 of the draft permit. The SWMP consists of non-numeric effluent limitations (control measures) described in Part 2.3 of the draft permit. These requirements when implemented are designed to protect the waters of the coastal and estuarine environments and to maintain and conserve fish and wildlife resources.

3. Regulate the mining of sand and gravel resources in offshore and onshore locations so as to ensure protection of submerged lands, and marine and estuarine life. Ensure adherence to minimum standards for restoring natural resources impacted from onshore sand and gravel operations. - NA

4. Undertake oil spill prevention measures, safe oil handling procedures and when necessary, expedite the clean up of oil spillage that will contaminate public waters. Institute legal action to collect damages from liable parties in accordance with state law.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by requiring the development of a stormwater pollution prevention plan (SWPPP) for permittee-owned facilities. The permit includes a requirement to develop spill

prevention and response practices and implementation of controls, including storage practices, to minimize exposure of materials to stormwater.

5. Encourage investigations of the distribution, habitat needs, and limiting factors or rare and endangered animal species and undertake conservation programs to ensure their continued perpetuation.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by allowing coverage under this permit only if the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge related activities (see Appendix C of the draft permit) are not likely to adversely affect the continued existence of any species that are federally-listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is federally-designated as critical under ESA. MS4s must determine eligibility prior to submission of a Notice of Intent for coverage. The MS4 permit provides criteria for eligibility (see Appendix C of the permit). The MS4 must maintain eligibility for the entire permit term.

6. Identify, designate, and preserve unique and rare plant and animal species and geologic formations which constitute the natural heritage of the state. Encourage measures, including acquisition strategies, to ensure their protection.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by allowing coverage under this permit only if the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge related activities (see Appendix C of the draft permit) are not likely to adversely affect the continued existence of any species that are federally-listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is federally-designated as critical under ESA. MS4s must determine eligibility prior to submission of a Notice of Intent for coverage. The MS4 permit provides criteria for eligibility (see Appendix C of the permit). The MS4 must maintain eligibility for the entire permit term. In addition the permittee must also be

consistent with applicable state regulations including those designed to be protective of state species.

RECREATION AND PUBLIC ACCESS

7. Provide a wide range of outdoor recreational opportunities including public access in the seacoast through the maintenance and improvement of the existing public facilities and the acquisition and development of new recreational areas and public access. - NA

MANAGING COASTAL DEVELOPMENT

8. Preserve the rural character and scenic beauty of the Great Bay estuary by limiting public investment in infrastructure within the coastal zone in order to limit development to a mixture of low and moderate density. - NA

9. Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by requiring the SWMP to include measures designed to encourage the hydrology associated with new development to mirror the pre-development hydrology of a previous undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of stormwater. The small MS4 general permit includes a provision for the permittee to have procedures to ensure that any new development or redevelopment stormwater controls or management practices will prevent or minimize impacts to water quality including flood control.

10. Maintain the air resources in the coastal area by ensuring that the ambient air pollution level, established by the New Hampshire State Implementation Plan pursuant to the Clean Air Act, as amended, is not exceeded. - NA

11. Protect and preserve the chemical, physical, and biological integrity of coastal water resources, both surface and groundwater.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by prohibiting any discharge that EPA determines will cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standards and by requiring a SWMP consisting of control measures described in Part 2.3 of the permit including a requirement to develop of a maintenance plans and SWPPPs for permittee-owned facilities and activities (see Part 2.3.7 of the permit). These requirements are designed to protect the waters of the coastal and estuarine environment. Discharges to groundwater are not a part of the NPDES program. Nothing in the permit authorizes an activity that will result in a negative impact to groundwater.

12. Ensure that the siting of any proposed energy facility in the coast will consider the national interest and will not unduly interfere with the orderly development of the region and will not have an unreasonable adverse impact on aesthetics, historic sites, coastal and estuarine waters, air and water quality, the natural environment and the public health and safety. - NA

COASTAL DEPENDENT USES

13. Allow only water dependent uses and structures on state properties in Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at state port and fish pier facilities and state beaches (except those uses or structures which directly support the public recreation purpose). For new development, allow only water dependent uses and structures over waters and wetlands of the state. Allow repair of existing over-water

structures within guidelines. Encourage the siting of water dependent uses adjacent to public waters. - NA

14. Preserve and protect coastal and tidal waters and fish and wildlife resources from adverse effects of dredging and dredge disposal, while ensuring the availability of navigable waters to coastal-dependent uses. Encourage beach renourishment and wildlife habitat restoration as a means of dredge disposal whenever compatible. - NA

PRESERVATION OF HISTORIC AND CULTURAL RESOURCES

15. Support the preservation, management, and interpretation of historic and culturally significant structures, sites and districts along the Atlantic coast and in the Great Bay area.

The Small MS4 general permit is consistent to the maximum extent practicable with this enforceable policy by requiring that prior to submission of a Notice of Intent, the permittee must certify eligibility with regard to protection of historic properties and places (see Appendix D of the permit).

MARINE AND ESTUARINE RESEARCH AND EDUCATION

16. Promote and support marine and estuarine research and education that will directly benefit coastal resource management. - NA

EPA has requested the New Hampshire Coastal Program to review and to concur with EPA's consistency determination for the proposed general draft permit.

Each State's coastal program office has the responsibility to confirm to EPA that the draft general permit is consistent with its coastal zone management program.

C. General Permit Authority

Section 301(a) of the Act, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants into waters

of the United States, except in compliance with certain sections of the Act including , among others, Section 402 of the Act, 33 U.S.C. § 1342. Section 402 of the Act provides the Administrator of EPA may issue NPDES permits for discharges of any pollutant into waters of the United States according to such specific terms and conditions as the Administrator may require. Although such permits are generally issued to individual discharges, EPA's regulations authorize the issuance of "general permits" to cover one or more categories or subcategories of discharges , including stormwater point source discharges, within a geographic area (see 40 CFR §122.28(a)(1) and (2)(i)). EPA issues general permits under the same CWA authority as individual permits. Violations of a general permit condition constitute a violation of the CWA and may subject the discharger to the enforcement remedies provided in Section 309 of the Act, including injunctive relief and penalties.

D. Notice of Intent (NOI) Requirements

Before a small MS4 can be authorized to discharge stormwater under a general permit, it must submit a written notice of intent (NOI). The specific contents of the NOI are included in Appendix E of the draft general permit.

The regulations at 40 CFR §122.33 require small MS4s who apply for a general permit to submit information on BMPs and measurable goals designed to meet the minimum control measures required by 40 CFR 122.34(d). The NOI requirements of this draft general permit are slightly different than the NOI for the 2003 permit. The initial NOI for the 2003 permit required the small MS4 to submit information on the BMPs for the Storm Water Management (SWMP) it planned to develop over the five-year permit term. The NOI requirements of this draft permit are based on the presumption that the programs outlined in the 2003 NOI are now developed and are being implemented and the NOI requirements build on those of the previous permit.

All NOIs must be submitted to EPA-Region 1 by **90 days from the effective date of the permit.** MS4s in New Hampshire must also submit a NOI to the New Hampshire Department of Environmental Services by **90 days from the effective date of the permit**.

EPA will place all NOIs on public notice for a minimum of 30 days. NOIs will be posted on the Region 1 Stormwater website: http://www.epa.gov/region1/npdes/stormwater/index.html. During that time, EPA will accept comment from the public concerning the content of the NOI. Following the close of the comment period, EPA will either authorize the discharges or require additional information. The draft general permit states that a small MS4 is not authorized to discharge until receipt of written authorization from EPA. The draft permit also states that a small MS4 remains covered under the previous MS4 2003 permit and will remain covered for a period of 180 days or until granted authorization under the new permit whichever comes first. EPA may also deny coverage under the general permit and require an MS4 to obtain coverage under an alternative general permit or an individual permit.

II. BASIS FOR CONDITIONS OF THE DRAFT NPDES GENERAL PERMIT

A. Statutory Requirements

Section 301(a) of the Act, 33 USC 1311(a), makes it unlawful to discharge pollutants to waters of the United States without a permit. Section 402 of the Act, 33 USC 1342, authorizes EPA to issue NPDES permits allowing discharges that will meet certain specified requirements. Section 402(p) (3) (B) (ii) and (iii) of the CWA , and implementing regulations in 40 CFR §§ 122.26 and 122.34, require NPDES permits for stormwater discharges from MS4s to effectively prohibit non-stormwater discharges into the sewer system; and to require controls to reduce pollutant discharges to the maximum extent practicable including BMPs and other provisions as EPA determines to be appropriate for the control of such pollutants. EPA interprets this latter clause to authorize the imposition of water quality based effluent limitations.

B. Coverage Under the Permit

This permit is actually six (6) separate general permits. Each general permit is applicable to either a particular area or particular entities within a geographic area. Many of the permit terms and conditions are identical across all six permits, and therefore are presented just once in Parts 1 through 3, Part 5 and Appendices A through E. Other conditions are specific 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

These draft general permits cover stormwater discharges from small municipal separate storm sewer systems meeting the definition of "small municipal separate storm sewer system" at 40 CFR § 122.26(b) (16) and designated under 40 CFR § 122.32(a) (1) (applicable to small MS4s located in an urbanized area) or designated by EPA as needing a permit pursuant to 40 CFR §122.32(a) (2).

Most small MS4s that will be covered by this permit are located entirely within an urbanized area as defined by the Bureau of the Census. On March 15, 2002, the Census Bureau published final the criteria used to define urbanized areas for the 2000 census. An urban area encompasses a densely settled territory that consists of core census block groups or blocks that have a population of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. Urbanized areas are not divided along political boundaries. Because of this non-political division, a community may be entirely in an urbanized area or partially in an urbanized area. The Phase II regulations require a small MS4 to implement its program in the urbanized area. If a small MS4 is only partially within the urbanized area, the MS4 may decide to implement the SWMP within its entire jurisdiction, or just in the urbanized area. Both approaches are acceptable under EPA's regulations. However, EPA encourages MS4s to implement the SWMP in the entire jurisdiction.

In addition to urbanized areas within the State of New Hampshire, this permit also covers Indian lands in the States of Connecticut and Rhode Island, and federal facilities in the State of Vermont. EPA is aware of one federal facility in Vermont that is located in an urbanized area and owns a separate storm sewer system that could potentially be subject to this permit. In a letter dated March 22, 2004, EPA granted a waiver to this facility based on the regulations at 40 CFR §122.32(c). Thus this permit is being issued to cover federal facilities in Vermont in the event (1) there are other federal facilities in urbanized areas or (2) EPA decides to regulate stormwater discharges from a federal facility not located in an urbanized area to protect or

remedy local water quality impacts.

Data from the Census Bureau indicate that the Indian lands within both Connecticut and Rhode Island are not located in urbanized areas. The Tribes are therefore not automatically required to obtain permit coverage. However, if new information becomes available to EPA that indicates that an MS4 located on Indian land requires a permit to protect or remedy local water quality impacts, this permit would be available to the MS4 provided it meets the eligibility requirements.

As stated previously, the draft permit applies to small MS4s located in urbanized area and those determined by EPA to need a permit. EPA has authority under the CWA to regulate sources other than those that are automatically covered by the stormwater regulations when necessary to protect or remedy localized water quality impacts. These could be small MS4s not in an urbanized area, including MS4s owned by the state, a tribe, or the federal government. If EPA decides to regulate additional sources, EPA will evaluate whether a stormwater discharge results in or has the potential to result in exceedances of water quality standards, including impairments of designated uses, impacts to habitats, or biological impacts. Consistent with guidance found at 40 C.F.R §123.35 (b) (1) (ii), EPA will make a determination concerning water quality impacts from a non-regulated small MS4 using a balanced consideration of the sensitivity of a watershed, the growth potential of an area, the population density, the contiguity to an urbanized area, and the effectiveness of protection of water quality by other programs. If EPA decides to designate additional MS4s, EPA will provide public notice and an opportunity to comment on the designation..

Limitations on Permit Coverage

This draft permit does not authorize the following stormwater discharges:

a. Discharges that are mixed with sources of non-stormwater unless the non-stormwater discharges are in compliance with a separate individual or other general NPDES permit. The draft permit requires illicit (non-stormwater) discharges to be prevented and eliminated except for the categories of non-stormwater discharges listed in 40 CFR

§122.34(b)(3) and identified in Part 1.4 of the draft permit. These categories need not be addressed unless they are determined to be significant contributors of pollutants to the MS4.

b. Discharges that are subject to other permits. This includes industrial stormwater discharges described at 40 CFR § 122.26(b) (14) (i)-(ix) and (xi); stormwater discharges related to construction described in either 40 CFR § 122.26(b) (14) (x) or 40 CFR § 122.26(b) (15); or discharges subject to an individual permit or alternative general permit for stormwater.

c. Discharges, or discharge related activities that are likely to adversely affect any species that are listed as threatened or endangered 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 of the permit to make a determination regarding permit eligibility. A more detailed discussion of the Endangered Species Act and EPA's obligation under that Act are contained in another section of this fact sheet.

d. Discharges whose direct or indirect impacts do not prevent or minimize any adverse effects on any Essential Fish Habitat (EFH). This topic is addressed in another section of this fact sheet.

e. Discharges or implementation of a stormwater management program that would adversely affect properties listed or eligible to be listed on the National Register of Historic Places. The permittee must follow the procedures in Appendix D of the permit to make a determination regarding eligibility. This topic is addressed in another section of the fact sheet.

f. Discharges to territorial seas, the contiguous zone and the oceans.

g. Discharges that are prohibited under 40 CFR § 122.4.

h. Discharges subject to state ground water discharge and Underground Injection (UIC) regulations. Although the permit includes provision related to stormwater 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

i. Discharge Permitting and Registration Program; Indian Lands –CT and RI: EPA Region 1, Drinking Water Program, Underground Injection Control; and Vermont Federal Facilities: Vermont Department of Environmental Conservation, Wastewater Management Division, Underground Injection Program).

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

Non-Stormwater Discharges

The draft permit lists sources of non-stormwater discharges described in 40 CFR § 122.26(b) (3) (iii). The permittee must control or prohibit these sources of non-stormwater as part of its illicit discharge detection and elimination (IDDE) program if the permittee determines that these sources are significant contributors of pollutants to the system. The draft permit does not require any action regarding these discharges if the permittee determines that these sources are not significant contributors of pollutants to the MS4. The permittee must document its determinations in its SWMP and must prohibit any sources identified as a significant contributor. In accordance with 40 CFR § 122.34(b)(3)(iii), 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.

Permit Compliance

Part 1.5 of the draft permit explains that any failure to comply with the conditions of this permit constitutes a violation of the CWA. For provisions specifying a time period to remedy non-compliance, the initial failure constitutes a violation of the permit and the CWA and subsequent failure to remedy such deficiencies within the specified time periods constitutes an independent and additional violation of the CWA.

EPA notes that it retains its authority to take enforcement action for non-compliance with the 2003 Small MS4 permit.

Continuation of the Permit

Part 1.6 of the draft permit describes the procedure that applies if EPA does not reissue the permit by its expiration date. If this permit is not reissued or replaced prior to its expiration date, existing discharges are covered under an administrative continuance, in accordance with the Administrative Procedure Act and 40 CFR §122.6, and the conditions of the permit remain in force and in effect for discharges covered prior to expiration. If coverage is provided to a permittee prior to the expiration of this permit, the permittee is automatically covered by this permit until the earliest of: (1) the authorization for coverage under a reissuance or replacement of this permit, following timely and appropriate submittal of a complete NOI; (2) issuance of denial or an individual permit for the permittee's discharge; or (3) formal permit decision by EPA not to reissue this general permit, at which time the permittee must seek coverage under an alternative general permit or an individual permit.

Obtaining Authorization to Discharge

In order for a small MS4 to obtain authorization to discharge, it must submit a complete and accurate NOI containing the information in Appendix E of the draft permit. The NOI must be signed in accordance with the requirements of Appendix B-Sub-Paragraph 11 of the draft permit. The NOI must be submitted within 90 days of the effective date of the final permit. The effective date of the permit will be specified in the Federal Register publication of the notice of availability of the final permit. Any small MS4 designated by EPA as needing a permit must submit a Notice of Intent for a permit within 180 days from the date of notification, unless otherwise specified. A small MS4 must meet the eligibility requirements of the permit found in Part 1.2 and Part 1.9 prior to submission of the NOI. A small MS4 will be authorized to discharge under this permit upon the effective date of coverage. The effective date of coverage is upon receipt of written notice by EPA following a public notice of the NOI.

The draft permit provides interim coverage for permittees covered by the previous permit and whose coverage was effective upon the expiration of that permit (May 1, 2008). For those discharges covered by the pervious permit, authorization under the previous permit is continued automatically on an interim basis for up to 180 days from the effective date of the final permit. Interim coverage will terminate earlier than the 180 days when a complete and accurate NOI has been submitted by the small MS4 and coverage is either granted or denied. If a permittee was

covered under the previous permit and submitted a complete and accurate NOI in a timely manner, and notification of authorization under the final permit has not occurred within 180 days of the effective date of the final permit, the permittee's authorization under the previous permit can be continued beyond 180 days on an interim basis. Interim coverage will terminate after authorization under this permit, an alternative permit, or denial.

EPA will provide an opportunity for public comment on each NOI that is submitted. Following the public notice, EPA will authorize the discharge, request additional information or require the MS4 to apply for an alternative or individual permit.

Alternative Permits

Any owner or operator of a small MS4 authorized by a general permit may request to be excluded from coverage under a general permit by applying for an individual permit. This request shall be made by submitting a NPDES permit application together with reasons supporting the request. The Director may also require any permittee authorized by a general permit to apply for and obtain an individual permit. Any interested person may petition the Director to take this action. However, individual permits will not be issued for sources covered by the general permit unless it can be clearly demonstrated that inclusion under the general permit is inappropriate. The Director may consider the issuance of individual permits when:

a. The discharger is not in compliance with the terms and conditions of the general permit;
b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
c. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general NPDES permit;
d. A Water Quality Management Plan or Total Maximum Daily Load (TMDL) containing requirements applicable to such point sources is approved;
e. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; and

f. The discharge(s) is a significant contributor of pollutant or in violation of state water quality standards for the receiving water.

In accordance with 40 CFR §122.28(b) (3) (iv), the applicability of the general permit is automatically terminated on the effective date of the individual permit.

C. Stormwater Management Program (SWMP)

The Stormwater Management Program is a written document required by the permit. The SWMP is a mechanism used to document the practices the permittee is implementing to meet terms and conditions of the permit.

The draft permit requires that the SWMP be a written document and signed in accordance with Appendix B-sub-paragraph 11. The SWMP must be available at the office or facility of the person identified on the NOI as the contact person for the SWMP. The SWMP must be immediately available to EPA, representatives from FWS or NMFS; and representatives from the state or tribal agency. The permittee must also make the SWMP available to any member of the public who makes a request in writing. EPA encourages the permittee to post the SWMP on-line or make it available at a public location such as the library or town/city hall.

The SWMP must contain the following:

- The name and title of people responsible for implementation of the SWMP. If a position is currently unfilled, list the title of the position and modify with the name once the position is filled.
- A complete list of all the waters that receive a discharge of stormwater from the small MS4. For each water body listed include its water quality classification, any impairment and the associated pollutant(s) and the number of outfalls.
- Documentation of permit eligibility regarding ESA. This must include information and any documents supporting the criteria used by the permittee to determine eligibility.
- Documentation of permit eligibility regarding NHPA. This must include information and

any documents supporting the criteria used by the municipality to determine eligibility.

- A map of the separate storm sewer system. The map may be a hard copy map or one that is available on a geographic information system. If available on a GIS system, the web address shall be include in the SWMP
- For each permit condition listed in Part 2.1 and Part 2.2 of the draft permit, the permittee must identify a person responsible for ensuring implementation of the condition. The permittee must identify specific BMPs to address the permit condition and the measurable goals associated with the BMP.
- For each control measure listed in Part 2.3 of the draft permit, the permittee must identify a person responsible for ensuring its implementation. The permittee must identify specific actions or BMPs to address each control measure. The permittee must also identify measurable goals associated with the control measure.
- Documentation of compliance with Part 3.0 – outfall monitoring requirements
- Documentation of compliance with Part 4.0 – state or tribal requirements
- An annual evaluation of the SWMP that contains the information required by Part 5.1 of the draft permit

EPA believes that a written program provides a central accessible source for all information relating to the SWMP. The SWMP required by this draft permit builds on the requirements of the previous permit. While updating the SWMP required by this draft permit, the permittee must continue to enforce the SWMP that was required by the previous permit. This permit does not provide additional time for completing the requirements of the previous permit. Permittees covered by the previous permit must update their SWMP within 120 days from the effective date of the permit to address the terms of this permit.

The draft permit requires that the permittee reduce the discharge of pollutants from the MS4 to the maximum extent practicable, protect water quality, and satisfy the requirements of the CWA. The SWMP must document the actions the permittee has taken to demonstrate compliance with the control measures and other conditions of the permit. EPA believes that implementation of the permit conditions required by Part 2.3 of this draft permit will meet the MEP standard of the

CWA. EPA believes that implementation of the permit conditions required by Part 2.1 and Part 2.2 of the draft permit will be protective of water quality.

The draft permit encourages the permittee to maintain adequate funding to implement the SWMP. Adequate funding ensures that monies will be available to the permittee for implementation of the permit conditions. Adequate funding is the availability of a consistent and reliable revenue source.

EPA does not require a specific funding mechanism or funding alternative. There are several options available to permittees. One funding mechanism is the use of a service fee or a stormwater utility. Usually, fees are based on the size of the property and the amount of impervious area associated with that property. Fees are usually one rate for residential homes and are varied for commercial and industrial facilities based on the property. Stormwater utilities exist in many parts of the country. A few utilities are beginning to appear in the Northeast. New Hampshire municipalities have legislative authority to develop utilities. A second funding mechanism is the general fund of the MS4. The revenue in the general fund usually comes from property taxes. This method of funding often means that levels are inconsistent from year to year and may not increase as the cost to implement the SWMP increases. Finally, stormwater projects may be eligible for grants or low interest loans. The State Revolving Fund may be a source of funding for stormwater projects. Additional information on funding can be found at: National Association of Flood and Stormwater Management Agencies, *Guidance for Municipal Stormwater Funding* (http://www.nafsma.org/pdf/Guidance%20Manual%20Version%202X.pdf) and Indiana University-Purdue University Indianapolis, *An Internet Guide to Financing Stormwater Management* (http://stormwaterfinance.urbancenter.iupui.edu).

Qualifying Local Program (QLP)

The Phase II stormwater program is designed to be flexible and build on existing state or local programs. Specifically, 40 CFR § 122.34(c) allows EPA to reference a state program which the municipality is already subject to as meeting the requirements of one or more of the control measures described in the draft permit. Compliance with the state requirement would constitute

compliance with the requirements of the control measures. At this time, EPA has not determined that any state, tribal or local programs meet the QLP requirements.

New Hampshire has new stormwater related guidance. This three volume set covers antidegradation, post construction and construction and contains NH specific recommended design standards. These three documents should be available by the end of 2008 and permittees in New Hampshire are encouraged to use them once available.
The documents are:
New Hampshire Department of Environmental Services, New Hampshire Stormwater Management Manual: Volume 1 Antidegradation and Stormwater. 2008.

New Hampshire Department of Environmental Services, New Hampshire Stormwater Management Manual: Volume 2 Post Construction Best Management Practices. 2008

New Hampshire Department of Environmental Services, New Hampshire Stormwater Management Manual: Volume 3 Construction Phase Erosion and Sediment Controls. 2008.

Requirements for New Permittees

The draft permit provides different deadlines for municipalities not covered by the previous permit. New permittees have until year three of the permit to complete the map required by the permit as part of the illicit discharge detection program. New permittees have until year four to begin the monitoring program required by Part 3.0. EPA believes it is practical to have the map of the system complete prior to beginning outfall monitoring. Consistent with the timeframe in 40 CFR §122.34(a), EPA is providing the permit term for new permittees to develop and implement the ordinances or other regulatory mechanisms required by Parts 2.3.4 (Illicit Discharges); 2.3.5 (Construction Runoff Management) and 2.3.6 (Stormwater Management in New Development). New permittees must meet all other deadlines as specified in the draft permit

D. Water Quality Based Effluent Limitations

Water Quality Standards

This draft permit includes provisions to ensure that discharges do not cause or contribute to exceedances of water quality standards. The provisions in Part 2.1constitute the water quality based effluent limitations of this permit. The purpose of this part is to establish the broad inclusion of water-quality based effluent limitations for those discharges requiring additional controls in order to achieve water quality standards and other water quality-related objectives, consistent with 40 CFR § 122.44(d). The water quality-based effluent limitations supplement the permit's non-numeric effluent limitations. The non-numeric effluent limitation requirements of this permit are expressed in the form of control measures and BMPs (see Part 2.3) and discussed later in this fact sheet.

If an MS4 discharges into waters that are not impaired, the draft permit employs a presumptive approach to ensure that the permittee's MS4 discharges do not cause or contribute to exceedances of water quality standards. For MS4 discharges into waters that are not impaired, EPA presumes that the conditions in the draft permit will meet applicable water quality standards when fully satisfied. EPA considers this approach valid since, despite ongoing discharges form the permittee's MS4 and other potential sources, these waters have not been categorized as impaired and failing to meet water quality standards. During the previous five years, permittees have implemented SWMPs to comply with the conditions of the 2003 general permit. Under the draft permit, the permittees would continue implementation of an augmented SWMP to comply with several additional and strengthened permit conditions. Therefore, EPA presumes that implementation of an augmented SWMP will at least maintain at present levels the contributions of pollutants from MS4s discharging to unimpaired waters, thereby not causing or contributing to an exceedance of water quality standards.

The draft permit requires permittees to identify to EPA and the state or tribal agency any additional or modified BMPs to be implemented to address any discharge from its MS4 in the event the permittee becomes aware that the discharge causes or contributes to an exceedance of applicable water quality standards. The permittee should use any available information, and add or modify BMPs in its SWMP to abate pollutants sufficiently to meet applicable water quality standards in the event that EPA's presumption proves to be incorrect.

Section 401(a)(1) of the CWA states that EPA may not issue a permit until a certification is granted or waived in accordance with that section by the state in which the discharge originates or will originate. The 401 certification affirms that the conditions of the general permit will be protective of the water quality standards and satisfy other appropriate requirements of state law. The 401 certification may also include additional conditions more stringent than those in the draft permit which the state finds necessary to meet the requirements of appropriate laws. Regulations governing state certification are set forth in 40 CFR §§ 124.53 and 124.55. Concurrent with the public notice of this general permit, EPA will request 401water quality certification.

Section 401(a) of the CWA states in part that in any case where a state, interstate agency or tribe has no authority to issue a water quality certification, such certification shall be issued by EPA. At this time, none of the New England Tribes have approved water quality standards or Section 401 authority for the purpose of regulating water resources within the border of Indian lands pursuant to Section 518(e) of the CWA. As provided for under Section 401(a) (1) of the CWA, EPA will provide certification of this permit for tribal lands.

Water Quality Impaired Waters

The draft permit requires permittees to comply with any additional water quality related requirements for impaired waters. The additional requirements depend on whether the discharge is to an impaired water with or without an approved Total Maximum Daily Load (TMDL).

Each state must develop a list of water bodies that are not meeting the water quality standards applicable to the water body. This list, the "303(d) List", refers to the section of the CWA that requires the listing of the water bodies. The 303(d) list is part of an overall assessment of the water quality called the Integrated Report. The Integrated Report includes both the 303(d) list and the 305(b) assessment (305(b) is the section of the CWA which requires the assessment). States must update these lists every two years.

EPA's regulations require that TMDLs be developed for water bodies not meeting applicable standards (see 40 CFR § 130.7 for the regulations associated with TMDLs). A TMDL specifies

the maximum amount of a pollutant that a water body can receive and still meet water quality standards. The TMDL allocates pollutant loadings to the impaired waterbody from all point and non-point pollutant sources. Regulations at 40 CFR §130.2 define the TMDL as "the sum of the individual wasteload allocations (WLA) for point sources and load allocations (LAs) for non-point sources." Mathematically, a TMDL is expressed as:

$$TMDL = \sum WLA + \sum LA + MOS$$

MOS is an additional margin of safety. The MOS takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. WLAs and LAs make up portions of a receiving water's loading capacity. Once implemented, the TMDL is a strategy designed to meet the loading capacity of the water body and ultimately result in achievement of water quality standards.

The TMDL may establish a specific waste load allocation (WLA) for a specific source, or may establish an aggregate WLA that applies to numerous sources. Typically stormwater sources are expressed as an aggregate in a WLA. The permittee must identify in its SWMP how it will achieve any applicable WLA established in the TMDL. This should include specific BMPs and specific measures to meet the WLA, if applicable. The permittee's demonstration of meeting the requirements of the WLA should focus on evidence that shows that the BMPs are implemented properly and adequately maintained. This demonstration may be an iterative process.
Information on approved TMDLs can be found at:
http://www.epa.gov/region1/eco/tmdl/index.html
Information on the 303(d) lists can be found at:
http://www.epa.gov/region1/eco/tmdl/impairedh2o.html

For MS4 discharges into an impaired water for which there is an EPA approved TMDL as of the effective date of the permit, the draft permit includes, pursuant to 40 CFR §122.44(d)(vii)(B), effluent limits that are consistent with the assumptions and requirements of available waste load allocations included in the TMDL for the MS4 discharges. As of the date of issuance of this draft permit, bacteria TMDLs in the State of New Hampshire have been approved for two water bodies that receive discharges from MS4s in the area of coverage under this permit, Hampton Harbor and Little Harbor. Each approved TMDL report contains an individual waterbody

description, problem assessment and recommended BMPs and actions in the form of a TMDL implementation plan to reduce bacteria consistent with established WLAs. While EPA does not approve the implementation plans of these or any TMDLs, it did consider the implementation plans in its development of the conditions included in the draft permit which EPA considers necessary to support the achievement of the relevant WLA. Effluent limitations, expressed in terms of BMPs that support the achievement of the WLA for each of these waterbodies are identified in Appendix F of the draft permit.

Hampton/Seabrook Harbor

Bacteria is the pollutant addressed by the TMDL for Hampton/Seabrook Harbor. The Towns of Hampton and Seabrook are the MS4s specifically addressed in the approved TMDL. The implementation plan of the TMDL calls for the removal of all human sources of bacteria to the estuary. In order for municipalities to address the requirement of the TMDL, the draft permit requires the municipalities to implement: the illicit discharge detection and elimination program required by Part 2.3.4 of the draft permit; increase the frequency of street sweeping in areas which discharge to the harbor; post information about proper management of pet wastes in areas which discharge to the harbor; and provide information to owners of septic systems about proper maintenance.

Little Harbor

The other TMDL, also for bacteria, applies to Little Harbor. The MS4s subject to this TMDL are the Towns of New Castle and Rye and the City of Portsmouth. The stated goal of the implementation plan is to achieve water quality standards within Little Harbor. The draft permit requires MS4s to implement the illicit discharge detection and elimination program required by Part 2.3.4 of the draft permit in all areas of the municipality. The MS4s must also ensure the elimination of all failing septic systems within the urbanized areas.

Certain bacteria such as fecal coliform, *E. Coli*, and enterococcus bacteria are indicators of potential contamination from human sewage or the feces of warm blooded domestic and non-domestic wildlife (birds and mammals). The presence of these bacteria at elevated levels in a waterbody may also indicate the presence of pathogens that may pose a risk to human health.

Bacteria sources in Little Harbor and Hampton Harbor are from wastewater treatment facilities, municipal systems, septic systems, and marinas or other boating operations. Other sources of bacteria include combined sewer overflows (CSO), sanitary sewer overflows (SSO), sewer pipes connected to storm drains, septic systems, certain recreation activities, wildlife including birds along with domestic pets and animals, and direct overland storm water runoff.

In addition to the approved TMDLs for bacteria, there are four draft TMDLs for chloride for the following waters in the State of New Hampshire: North Tributary to Canobie Lake in Windham, Porcupine Brook in Salem and Windham; Dinsmore Brook in Windham; and Beaver Brook in Derry and Londonderry. Specific conditions have been included in the draft permit for MS4 discharges in New Hampshire to chloride impaired waters. If the draft TMDLs are finalized and approved prior to the issuance of the final permit, and the TMDLs include a WLA applicable to a regulated small MS4's discharge, EPA will incorporate additional BMPs necessary to support the achievement of the WLA into the final permit. Prior to approval of the chloride TMDLs, small MS4s discharging to these impaired waters must implement BMPs designed to avoid causing or contributing to the impairment. The permittee must document these BMPs in the SWMP.

Chloride sources are typically the result of deicing activities during the winter, but sources also include food wastes, water softeners, atmospheric deposition and roadway salt pile runoff. The amount of chloride released into the environment in a given year is typically dependent on the severity of the winter. Chloride persists in the environment after application and is found in both surface waters and groundwater. Chloride is toxic to fresh water species. It can cause density stratification in ponds and lakes which results in oxygen depletion and potential fish kills. Chloride in ground water may contribute to health issues such as hypertension. The draft TMDLs focus on reducing the amount of chloride from the various sources (state roads, town roads, parking lots, storage area, etc). In addition to the chloride reduction requirements in the draft permit, EPA anticipates that additional measures will be developed by an existing group called the Salt Reduction Workgroup. The group includes representatives from NH DES, New Hampshire Department of Transportation (NH DOT), EPA, Federal Highway Administration, representatives from each town in the watershed (selectman and public works), regional planning

commissions and others. These additional requirements may be incorporated in the final permit, a permit modification or future permits.

New or Increased Discharges

The conditions of the draft general permit reflect the goal of the CWA and EPA to achieve and maintain water quality standards. The Federal regulations pertaining to the state anti-degradation policies are found in 40 CFR §131.12. The anti-degradation policy is designed to protect existing uses of the water and protect water quality level such that existing uses be maintained and to protect high quality waters and maintain the high quality unless certain specific demonstrations are made by the discharger.

This draft general permit does not apply to any new or increased discharge to receiving waters unless the new or increased discharge is shown to be consistent with the State's anti-degradation policies. This determination shall be made in accordance with the appropriate State anti-degradation implementation procedures. No new discharge is authorized under the general permit until the discharger receives a favorable anti-degradation review and certification from the State.

Wellhead Protection/Source Water Protection

While the draft permit encourages consideration of infiltration and groundwater recharge in design and implementation of a SWMP, permittees should be aware that groundwater discharges may trigger other regulatory requirements designed to protect underground sources of drinking water. These include requirements under EPA and state groundwater and source water protection programs. Stormwater discharges that are infiltrated through structural controls that dispose of stormwater into the ground are subject to the Safe Drinking Water Act (SDWA) and Underground Injection (UIC) requirements. New Hampshire and Vermont implement the UIC program in their respective states. Indian lands in Connecticut and Rhode Island are regulated under EPA authority.

E. Non- Numeric Effluent Limitations

Non-Numeric Effluent Limitations (MEP)

In addition to water quality-based effluent limitations, NPDES permits are required to contain technology-based limitations. (40 CFR 122.44(a) (1)). When EPA has not promulgated effluent limitations for a category of discharges, or if an operator is discharging a pollutant not covered by an effluent guideline, permit limitations may be based on the best professional judgment (BPJ) of the agency or permit writer. For this permit, effluent limits are based on BPJ. The BPJ limits in this permit are in the form of non-numeric control measures, commonly referred to as best management practices (BMPs). Non-numeric limits are employed under limited circumstances, as described in 40 CFR 122.44(k). EPA has interpreted the CWA to allow BMPs to take the place of numeric effluent limitations under certain circumstances. 40 CFR 122.44(k), provides that permits may include BMPs to control or abate the discharge of pollutants when: "(1)[a]uthorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) [a]uthorized under section 402(p) of the CWA for the control of stormwater discharges; (3) [n]umeric effluent limitations are infeasible; or (4) [t]he practices are reasonable to achieve effluent limitations and standards or to carry out the purpose of the CWA." The permit regulates stormwater discharges with BMPs. Due to the variability associated with stormwater, EPA believes the use of BMPs is the most appropriate method to regulate discharges of stormwater from municipal systems in accordance with the above referenced regulation.

Control Measures

The draft permit requires MS4s to continue to control stormwater discharges from the municipal system in a manner designed to reduce pollutants to the maximum extent practicable, and to protect water quality and to satisfy the appropriate water quality requirements of the CWA. The MS4-2003 permit required that "[a]ll elements of the storm water management program must be implemented by the expiration of the permit"[3] This permit does not extend the compliance deadlines set forth in the MS4-2003. Further, permittees authorized under the MS4-2003 must

[3] MS4-2003 Parts IIA.2; IIIA.2; IVA.2; and V.A.2

continue to implement their existing SWMPs while updating their SWMPs pursuant to this new permit.

In order to reduce pollutants to the maximum extent practicable and protect water quality, MS4s must implement a SWMP consisting of the control measures in Part 2.3 of the draft permit. I in determining appropriate conditions for inclusion in the draft permit, EPA evaluated annual reports submitted for the previous permit. Practices which were implemented by a significant number of MS4s assisted EPA in making a determination that a particular BMP was "practicable".

Implementation of the SWMP involves the identification of BMPs and measurable goals for the BMP. The draft permit identifies the objective of each control measure. The permittee must implement the control measures and document actions in the SWMP demonstrating progress towards achievement of the objective of the control measure. The permittee must identify interim goals as steps towards achievement of the objective/long term goal.

Any goals identified as part of the SWMP must be measurable. A measurable goal for the program or control measure is a goal for which progress can be tracked or measured. A well-defined goal will have an outcome associated with it. Goals can be expressed as short term, mid-range or long term. The permittee must evaluate the success of a goal. The permittee can evaluate the goals using a variety of indicators including programmatic; social; physical; hydrological; or environmental. Recognizing that implementation of the SWMP is an on-going and iterative process, subsequent goals will be more difficult to achieve than initial goals.

Measurable goals may be expressed either quantitatively or qualitatively. The method used to assess whether a goal has been met should be measurable, reliable, relevant, and an actual measure of the outcome. There are various methods to measure outcome. This includes confirmation or documentation that a task has been completed; tabulation, tracking an absolute number or value of something; surveying, determining the knowledge or awareness of a group; inspections, actual observations of an event; and monitoring, actual measurement of a pollutant in-stream or in an outfall.

Relying on Another Entity (Part 2.3.1)

In accordance with 40 CFR§122.35, the draft general permit allows an MS4 to rely on another entity for implementation of all or part of a permit condition or control measure. The permittee may rely on the other entity if the other entity is actually implementing the control measure or permit condition. The other entity must agree to implement the measure or condition for the MS4. EPA requires the use of a legal agreement. This agreement must be included as part of the stormwater management program. If the other party fails to implement the measure or permit condition, the permittee is ultimately responsible for its implementation.

Public Education and Outreach (Part 2.3.2)

The MS4 must implement a public education program to distribute educational materials to the community or conduct other outreach activities about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. The education program must be specific to the MS4 and include a focus on the pollutants of concern associated with impaired waters affected by discharges from the small MS4. The overall long-term goal of an effective education program is to change behavior and increase the knowledge of the community.

An education program must have a defined and targeted message for each of the different audiences and must include a measure to evaluate effectiveness of the educational messages. Based on review of annual reports from the previous permit, EPA found that some of the education programs developed by MS4s did not incorporate these expectations. In order to achieve the objective of this measure, the draft permit includes detailed expectations for educating the public.

The draft permit requires the permittee to provide educational materials to residents, commercial entities, institutional facilities, businesses, industrial facilities, and construction and development companies. The draft permit includes topics for consideration for all audiences. The permittee

may use those topics listed or may focus on other topics specific to the small MS4. The permittee must distribute a minimum of two educational messages (a minimum total of eight) to each audience during the permit term. The messages must be spaced at least a year apart. The time in between the distribution of the educational material will allow the municipality to evaluate the effectiveness of the message. The educational messages should reflect the needs and characteristics of the area served by the MS4. This may include distribution of materials in a language other than English as appropriate. Permittees can form partnerships with other organizations to assist in the implementation of its education and outreach programs. These partnerships may include other MS4s in a watershed, environmental groups, watershed associations, or other civic organizations.

During the previous permit term, various groups developed comprehensive public education programs for use by regulated small MS4s. For example, the SuAsCo (Sudbury-Assabet-Concord) Watershed Associated developed a program called "Water Matters." The program provides education tools for small MS4s to distribute in their communities. The program is available to any community, not just those in the Su-As-Co watersheds. Additional information on the program is available at: http://www.stormwatermatters.org/home.html. Similarly the Massachusetts Bays Program has supported the development of a program called Think Blue Massachusetts. Information is available at www.thinkagainthinkblue.org. Another source of information is the UNHSC-NEMO (University of New Hampshire Stormwater Center – Non-Point Source Education for Municipal Officials) – http://www.erg.unh.edu/lid/index.asp.

Public Involvement and Participation (Part 2.3.3)

This control measure is closely related to the public education and outreach control measure. EPA supports the idea that if the public is given an opportunity to understand and participate in a stormwater protection program, the public generally will become supportive of the program. The objective of this measure is to provide and engage the public with opportunities to participate in the review and implementation of the SWMP. The draft permit requires that public participation opportunities, at a minimum, comply with the public notice requirements of the state. However, permittees are encouraged to provide more interactive opportunities for public participation.

Examples include volunteer water quality monitoring, community clean up days, hazardous waste collection days, and adopt a drain/adopt a stream programs.

The draft permit requires that the permittee annually provide an opportunity for the public to participate in the SWMP. Participation efforts should attempt to engage all groups serviced by the MS4. This effort may include creative public information messages such as announcements in neighborhood newsletters, use of television spots on the local cable channel, or announcements or displays at civic meetings. One goal of public participation is to involve a diverse cross-section of people and businesses in the community to assist in development of a program that meets the needs of the permittee.

Illicit discharge detection and elimination (Part 2.3.4)

MS4-2003 required that the "permittee must develop, implement, and enforce a program to detect and eliminate illicit discharges."[4] The MS4-2003 also provides that "[a]ll elements of the stormwater management program must be implemented by the expiration date of the permit."[5] While this draft permit builds upon the requirements set forth in the MS4-2003, it does not extend the deadlines applicable to the illicit discharge detection and elimination minimum measure imposed by the MS4-2003.

This measure requires the MS4 to detect and eliminate illicit discharges from its municipal separate storm sewer system. The regulations at 40 CFR §122.26(b)(2) define an illicit discharge as "…any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities."

Some illicit discharges enter the storm system directly such as incorrectly connected wastewater discharge lines, while others may enter indirectly, such as through infiltration from cracked

[4] MS4-2003 Parts II.B.3; III.B.3; IV.B.3; and V.B.3

sanitary lines or spills collected by drain outlets. Both types of discharges can contribute pollutants to the system that in turn affect water quality. An illicit discharge, typically, is any discharge to a municipal separate storm sewer system that is not stormwater. The draft permit contains a list of sources of non-stormwater that permittees must evaluate to determine whether they are significant contributors of pollutants. If the permittee determines that the source is a significant contributor of pollutants, the permittee must implement measures to control or prohibit that source.

The draft permit describes required components of an illicit discharge detection and elimination program. The draft permit includes the elements that are listed as guidance in 40 CFR §122.34(b)(3) and information and procedures included in Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessment by the Center for Watershed Protection and Dr. Robert Pitt. EPA has found that aggressive, thorough, and systematic illicit discharge investigations and removal have resulted in improvements to water quality. This determination is based on illicit detection work done in the Charles River and Mystic River in Massachusetts.

The previous permit required each MS4 to develop and implement an IDDE program. Since the issuance of the 2003 permit, EPA, the State, and MS4s have gained an improved and more comprehensive understanding of the nature of illicit discharge connections; the extent of the problem; effective technologies and procedures to detect and verify illicit connections; and the best practices to reduce discharges of contaminated stormwater from illicit connections. Collaborative programs such as the Clean Charles Initiative have demonstrated IDDE can be a key contributor to improved water quality. In consideration of this collective enhancement of knowledge and experience, the draft permit requires more specific BMPs than the 2003 permit. For example, the draft permit requires MS4s to develop a written IDDE protocol that includes specific requirements, procedures, and approaches. Examples of these requirements are a detailed map, a written prioritization of areas with a potential of illicits, wet and dry weather outfall monitoring, record keeping, and thorough and complete storm drain network

[5] See footnote 1

investigations that systematically and progressively evaluate manholes in the storm system to narrow the location of a suspected illicit connection or discharge to an isolated pipe segment. These requirements are described in the following paragraphs.

The previous permit required the MS4 to develop a map that at a minimum depicted the locations of the stormwater outfalls and names and locations of all waters that receive discharges from those outfalls. This map must have been completed by May 1, 2008. The draft permit requires that additional detail be added to the existing map. In addition to outfalls and receiving waters, the map must now include the locations of catch basins, manholes, pipes, treatment facilities associated with the stormwater system, and water resource areas such as drinking water sources. The permittee may choose to include additional information that is helpful, but not required. This additional information includes data regarding land use (zoning information) and the amount of impervious area on a parcel or a catchment. The draft permit does not require a specific tool for the mapping, however a map generated using a Geography Information System (GIS) is EPA's preferred method. The draft permit defines an outfall as a point source (as define in 40 CFR § 122.2) at the location where the municipal separate storm sewer system 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 which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S.

The draft permit provides two years for the MS4 to complete the additional mapping elements required by the draft permit. The draft permit does not provide any additional time for the completion of the map of outfalls and receiving waters that was required in the previous permit. The initial system map must have been complete by May 1, 2008. The two year timeframe for mapping in the draft permit is based on the expectation that the permittee has completed the mapping required by the previous permit.

The MS4 must have adequate legal authority to implement the following activities as part of the IDDE program: prohibit illicit discharges; investigate suspected discharges; eliminate illicit discharges and enforce the IDDE program. The previous permit required development of an ordinance or other regulatory mechanism to address these components. The ordinance must have

been in place and effective by May 1, 2008. The MS4 must reference the authority to implement this measure in the IDDE program which is a part of the overall SWMP.

The MS4-2003 required the permittee to "develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, into the system." The MS4-2003 set forth the required elements of the plan.[6] As required by the MS4-2003, this plan must have been developed and implemented by May 1, 2008. The draft permit does not extend this deadline

The draft permit builds on the requirements of the MS4-2003 by detailing three additional required components of an illicit discharge detection and elimination program. The first component is an assessment and ranking of the catchments within the MS4 for their potential to have illicit discharges. The second component is a written protocol that clearly identifies responsibilities with regard to eliminating illicit connections. The final component is a written systematic protocol for locating and removing illicit connections. Each of these components is discussed in the following paragraphs.

The permittee must assess the illicit discharge potential for all areas that discharge to the MS4. The assessment consists of three steps: (1) delineation of catchments or drainage units; (2) evaluation of the data that exists for those delineated catchments or units and (3) ranking each catchment for its potential to have illicit discharges as "low", "medium" or "high" based on EPA and/or permittee defined screening factors. The EPA defined screening factors that the permittee must consider are listed in the draft permit. The permittee must consider all factors, but not all factors are applicable to all permittees and permittees may add other factors that are relevant to the municipality. The permittee must complete the assessment and the ranking by the end of the first year of the permit. The permittee must document the results of the assessment and ranking and maintain them as part of the SWMP. The permittee must also report this information as part of the annual report. (See Part II - Section G of this fact sheet.) The ranking is intended to aid the permittee in the identification of areas with the greatest potential for illicit connections. The draft permit requires the permittee to begin implementation of the systematic illicit detection

[6] MS4-2003 Parts II.B.3(c); III.B.3(c); IV.B.3(c); and V.B.3(c)

protocol in areas identified as "high" or with the highest ranking. The permittee must continue to implement the protocol in all MS4 areas until all areas have been evaluated. The permittee must justify in the SWMP any decisions not to focus efforts in areas identified as "high" by the ranking.

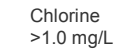
The permittee must have in place a written procedure or protocol that clearly identifies methodologies and responsibilities with regard to eliminating illicit discharges. The protocol/procedure must identify who is responsible to pay for removal of an illicit connection/discharge. The permittee may incur the costs or the owner of the illicit connection may be responsible or a combination of the two depending on circumstances. EPA does not require a specific methodology, only that one exists and that the staff responsible for locating and removing illicit connections is familiar with it. The protocol/procedure must also define appropriate methods for removal of the illicit discharge or connection. Finally, there must be procedures for confirmation of removal of illicit discharges or connections. This protocol/ procedure must be completed by the end of year two of the permit.

The permittee must develop a written procedure that details a systematic approach for locating and removing illicit discharges. This written procedure must also be completed by the end of year two of the permit. The systematic procedure includes three parts. The first part is the outfall inventory; the second part is tracking a discharge to a source; and finally, removal of the source. Each of these parts is discussed in the paragraphs below.

The outfall inventory includes walking all stream miles within the MS4 boundary that receive a discharge from the MS4 and locating all the outfalls. The permittee must complete the inventory during dry weather. The permittee should use the definition of outfall found at 40 CFR § 122.26(b) for purposes of identifying outfalls. When an outfall is located, the permittee must observe the outfall and record specific information. The information that must be recorded includes: the dimensions, shape, material, and spatial location; and the physical condition of the outfall. Each outfall must have a unique identifier. In addition to the physical observations, the permittee must also record any sensory observations. This includes color, odor, floatables, oil sheens or evidence of flow. If flow is observed at an outfall, a sample must be taken and the

source of the dry weather flow determined. The flow must be analyzed for conductivity, turbidity, pH, chlorine, temperature, surfactants (as MBAS), potassium, ammonia and *E. Coli* or enterococcus (as appropriate depending of whether the discharge is to a fresh water or a marine water). The following flow chart can be used by the permittee as a screening tool to help determine the potential source of the discharge.

Flow Chart - Determining Likely Source of Discharge (Adapted from Pitt, 2004)



If the source is not readily determined, a more intensive investigation must be undertaken.

If an outfall has evidence of a flow, but there is not an actual flow during the inventory or dry weather monitoring, there may be an intermittent discharge. Intermittent discharges are difficult to track because they can occur at anytime. There are monitoring techniques a municipality can use to try to address a suspected intermittent discharge. These techniques include: (1) odd hour monitoring; (2) optical brightener monitoring (OBM) traps; (3) caulk dams; (4) pool sampling; and (5) toxicity monitoring.

Odd hour monitoring includes mornings and afternoons, weekday evenings and weekends. OBM traps have an absorbent unbleached cotton pad or fabric swatch and an anchoring devise. Traps are placed in an outfall suspected of an intermittent discharge and then collected after several days of dry weather. When an OMB is placed under fluorescent light, it will indicate exposure to detergents, an indicator for wash waters. The caulk dam is used to create a small dam inside the pipe and then collect a sample of any water that is collected. Pool sampling is when a sample is collected right below the area where an outfall discharges and a sample is also collected upstream in a location not affected by the outfall. The samples are analyzed and compared. Finally, toxicity monitoring involves monitoring for toxicity in the pool below the outfall of a suspected intermittent discharge. Due to the complexities associated with toxicity testing, this method is not recommended unless the municipality has prior experience or an indication of the suspected source.

Tracking a discharge to its source involves investigation that is more intensive. This is accomplished through a storm drain network investigation. A storm drain network investigation involves systematically and progressively opening and inspecting junction manholes in the system to narrow the location of a discharge to an isolated pipe segment between two manholes. The permittee shall inspect each manhole for visual evidence of illicit connections or discharges (e.g. excrement, toilet paper or sanitary products). When flow is observed in the manhole, the permittee shall sample for ammonia and surfactants. Ammonia is a good indicator of sewage. The concentration of ammonia is higher in sewage than in ground water or tap water. Surfactants are the active ingredient in most commercial detergents. Surfactants are typically measured as Methyl Blue Active Substances (MBAS). These are a synthetic replacement for soap. The presence of surfactants is an indicator of sewage and wash waters. There are other indicator parameters the permittee could use such as fluoride. Municipalities typically add fluoride to drinking water supplies and its presence is an indicator of tap water. Potassium is another indicator that has relatively high concentrations in sewage. When the concentration of potassium is evaluated in combination with the concentration of ammonia, the ratio of the two can help distinguish wash waters from sanitary wastes.

In addition to determining what indicators to use to determine if a manhole is "clean" or "dirty", the permittee must also determine where in a particular catchment to begin the investigation of manholes for illicit connections. The permittee must begin investigations in catchments identified as "high" or catchments with known illicit discharges. The permittee must decide whether the systematic investigations will be from the outfall working progressively up into the system (bottom up) or from the upper parts of the catchment working progressively down (top down). Either method or a combination that includes systematic inspection of junction manholes is acceptable. The permittee must document the chosen procedure in the protocol required by Part 2.3.4.6(d). EPA believes that in systems that are complex and service large populations, the top down approach is the most effective for locating illicit discharges.

The permittee must begin its systematic investigation of catchments no later than 27 months from the effective date of the permit. If the permittee completes the protocol for systematic identification prior to year two of the permit, the permittee must begin their systematic investigation no later than three months from the completion of the protocol. The permittee must address any illicit connections found prior to completion of the protocol in accordance with Part 2.3.4.2 of the draft permit. The permittee shall continue the investigations until the permittee has evaluated all areas of the MS4.

In addition to the use of indicators to help identify the source of an illicit connection or discharge, the permittee may use dye testing, video testing, smoke testing or other appropriate methods to aid in locating illicit connections or discharges.

The draft permit requires the permittee to either remove or eliminate the illicit discharge or take appropriate enforcement action within six months of detection. The permittee must also track the progress of the IDDE program implementation. The permittee must identify indicators it will use for tracking the effectiveness of the program. Appropriate tracking indicators are those that demonstrate elimination of a pollutant source and/or water quality improvements. For example, if a permittee has a beach that has closures due to bacteria, an appropriate indicator for tracking progress would be a decrease in the frequency of beach closures.

In addition to detecting and removing illicit discharges, the permittee must also develop and implement mechanisms and procedures for preventing illicit discharges. This includes training to inform public employees, businesses, and the general public of the hazards associated with illegal discharges. The requirement to prevent illicit discharges can be incorporated into the public education and public participation control measures. Examples of mechanisms to prevent illicit discharges include identification of opportunities for pollution prevention or source control; distribution of information concerning car washing or swimming pool draining; routine maintenance activities; and inspections of facilities.

Construction site stormwater runoff control (Part 2.3.5)

The MS4-2003 required that the "permittee must develop, implement and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in land disturbance of greater than or equal to one acre [and] less than one acre if part of a larger common plan."[7] While this draft permit builds upon the requirements set forth by the MS4-2003, it does not extend the deadlines applicable to the construction site stormwater runoff control minimum measure imposed by the MS4-2003.

MS4s are required to continue to review and enforce a program to reduce pollutants in stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre and discharge to the MS4. The overall objective of an effective construction runoff management program is to have a program that minimizes or eliminates erosion and maintains sediment on site.

The construction program required by the draft permit is different from EPA's program that is implemented through the Construction General Permit (CGP) although there is some overlap. EPA's CGP applies to construction projects that have one or more acres of disturbed land and discharge directly to a water body or indirectly through an MS4. The MS4 program must address the discharges from construction projects that discharge directly to its system. Discharges from a

[7] MS4-2003 Parts II.B.4; III.B.4; IV.B.4; and V.B.4

construction project to a combined sewer system and construction projects that do not discharge at all, are not subject to the CGP (see 40 CFR §122.26(a)(7)). A permittee is not required to regulate any construction project that receives a waiver from EPA in accordance with 40 CFR § 122.26(b) (15) (i).

The permittee must have an ordinance or other regulatory mechanism requiring proper sediment and erosion control. The requirement to develop the ordinance was part of the previous permit. The ordinance must have been in place and effective by May 1, 2008. In addition to addressing sediment and erosion control, the ordinance must include controls for other wastes on constructions sites such as demolition debris, litter and sanitary wastes. EPA encourages permittees to include design standards in local regulations for sediment and erosion control BMPs. The draft permit includes a list of controls that could be included as part of the local program. The draft permit also provides an example of a design standard that requires the control the volume of a specific size storm event, but the permit does not require the MS4 to include it as part of the program.

The construction program must have procedures for pre-construction review and approval of site plans. Permittees should make every effort to ensure that qualified personnel review plans. The procedures must ensure that plan reviews include consideration of water quality impacts. Site plan review should include consideration of comments from the public. These review procedures should be written.

The construction program must have procedures for site inspections and enforcement. Qualified personnel should perform inspections. Inspections should occur during construction as well as after construction to ensure that BMPs are installed and operating as described in approved plans. The permittee shall have clearly defined procedures regarding who is responsible for inspections and what aspects of the construction site are to be inspected. The permittee must have authority to impose sanctions if construction projects are found not to be in compliance with the local ordinance. Sanctions can include monetary penalties or stop work orders.

MS4s should review existing procedures in the community that apply to these activities. Often

construction plans are seen by the planning board that may not have the technical expertise of engineering staff to evaluate them. An MS4 should look at the various components of the local government and whenever possible, optimize coordination between municipal offices and other MS4s as appropriate to ensure adequate review of plans and other documents associated with a construction project.

Stormwater Management in New Development and Redevelopment (Part 2.3.6)

The MS4-2003 required that the "permittee must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre and discharge to the municipal system [and] less than one acre if the project is part of a larger common plan of development which disturbs greater than one acre" and set forth required elements of the post construction program.[8] This draft permit builds upon the requirements set forth in the MS4-2003, but does not extend the deadlines applicable to the post construction storm water management in new development and redevelopment minimum measures imposed by the MS4-2003.

This measure was called Post Construction Stormwater Management in New Development and Redevelopment under the previous permit. The name of the measure was changed to more accurately reflect EPA's expectations with regard to implementation of the measure. EPA encourages practices that manage stormwater on site and maintain or improve site hydrology. Practices which support this effort are discussed in the following paragraphs.

This measure applies in areas of new development and redevelopment one acre or more in size. The long-term objective of this measure is to have the hydrology associated with new development closely mirror the pre-development hydrology and to improve the hydrology of redeveloped sites. Studies have indicated that prior planning and design for the minimization of pollutants in post construction stormwater discharges is the most cost-effective approach to stormwater quality management. Post construction stormwater runoff may cause two types of

[8] MS4-2003 Parts II.B.5; III.B.5; IV.B.5; and V.B.5

impacts. One is an increase in the type and the quantity of pollutants. The alteration of the land by development can increase the discharge of pollutants such as oil and grease, heavy metals, and nutrients. Another impact occurs with an increase in the quantity of stormwater that is delivered to water bodies during storm events. Increases in impervious area decrease the amount of precipitation that naturally infiltrates into the ground. The lack of natural infiltration increases the volume of stormwater runoff into water bodies. The increased flows and increase in sediment discharges can cause stream bank scouring, impacts to aquatic habitat, and flooding.

This control measure requires the MS4 to continue to review and enforce a program to address post construction stormwater runoff from areas of new development and redevelopment that disturb one or more acres. The MS4 must implement an ordinance or other regulatory mechanism to manage post construction stormwater runoff. This ordinance was required under the previous permit and must have been effective by May 1, 2008.

The draft permit also requires the permittee to assess current street and parking lot designs that affect the creation of impervious cover. The objective of this assessment is to determine if changes in design standards can be made to accommodate Low Impact Development (LID) options. Some of the street and parking lot design standards and requirements a municipality would want to consider in this assessment include flexibility in road design standards (the width of the road and placement of sidewalks) and flexibility in design of parking lots (shared and multi-level lots, and flexibility in the number of parking spaces). If the assessment indicates that changes in design standards or requirements are practicable, the municipality must develop recommendations and a schedule for implementing the changes.

Management of stormwater on-site can be accomplished in many ways. LID focuses on using practices that imitate the natural water cycle. Rather than directing stormwater to a pipe or conveyance, the stormwater is managed on-site. LID practices can work at the site level as well as the watershed level. The draft permit requires the permittee to evaluate the existing local regulations and make determinations as to whether the existing local regulations allow LID practices and what changes would be necessary for LID practices to occur. Some of the LID practices that the municipality should consider are green roofs; infiltration practices, such as

porous pavement and rain gardens; and water harvesting devices, such as rain barrels and cisterns.

Another method a permittee can use to management stormwater is to adopt a Master Plan based on smart growth principles that directs development towards suitable areas and away from important natural resources. The draft permit does not require the permittee to adopt a Master Plan, but EPA encourages MS4s to consider this method as it is a powerful tool that can be used to help a permittee more effectively manage resources. However, the plan alone may not be enough to be the sole mechanism for addressing post construction stormwater runoff. Implementation of a Master Plan includes the adoption of zoning, subdivision ordinances, or other regulations that implement the smart growth principles in the Master Plan. Through these principles and regulations permittees can encourage compact development and redevelopment, and discourage the development of more pristine areas. This will minimize the amount of new impervious surfaces and the generation of stormwater runoff and protect water quality.
The draft permit contains requirements to reduce stormwater impacts on water quality. Impacts are due to a variety of factors including volume, frequency and quality. Stormwater can contain any pollutant that is on the ground and can be transported with the stormwater as it moves across an area. These pollutants may include bacteria, nutrients, metals and sediments. Large volumes of stormwater can cause erosion along stream banks and result in altered habitats. Studies from the Center for Watershed Protection (CWP) have shown that impairments from stormwater runoff can be observed in watersheds with as little as 10 percent impervious cover. Impervious cover includes roads, sidewalks, driveways, roof tops, and other surfaces that do not allow for infiltration. The requirements in the draft permit focus on critical waters and small streams. The permit requires the permittee to reduce the frequency and volume of stormwater to these critical waters. The draft permit encourages the management of the first one inch of rainfall from a 24 hour storm. Data developed by Tetra-Tech for EPA indicates that 90 percent of the storm events in New Hampshire are one inch or less. If the volume associated with storms of that size is effectively managed, there should be a significant decrease in overall stormwater volume that is discharged from a site.

The draft permit also requires the permittee to estimate the amount of impervious cover within

sub-watersheds of the municipality. EPA will provide permittee with an initial estimate. The permittee shall inventory properties and infrastructure within it jurisdiction that have the potential to be retrofitted with BMPs designed to reduce the frequency and intensity of stormwater discharges. Although not a pollutant, impervious cover can be used as a surrogate pollutant when dealing with stormwater discharges. In the simplest terms, reductions in the amount of impervious cover within a watershed should result in reductions of stormwater quantities. Reductions in stormwater quantities should result in improvements to water quality. The permittee is required to track the number of acres of impervious cover that have been added or removed annually.

Where it is practicable to reduce the amount of existing impervious cover, properties often can be retrofitted with low impact development techniques that remove direct hard connections that drain the property's impervious surface to the MS4. These techniques include swales, rain gardens, bioretention basins, porous pavement, and collection and infiltration systems for roof runoff. Because of the effectiveness in reducing stormwater pollution by decreasing directly connected impervious area (DCIA), the draft permit contains provisions to track the amount of DCIA in each sub-watershed within the jurisdiction of the MS4. The draft permit requires the permittee to report this estimation annually ant to evaluate the feasibility of reducing the DCIA on municipality owned properties. The draft permit encourages the reduction of DCIA through retrofit technologies.

Pollution Prevention/Good Housekeeping (Part 2.3.7)

The MS4-2003 required that the "permittee must develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations" and set forth required elements of the pollution prevention and good housekeeping program.[9] While this draft permit builds upon the requirements set for by the MS4-2003, it does not extend the deadlines applicable to this minimum measure imposed by the MS4-2003.

[9] MS4-2003 Parts II.B.5; III.B.5; IV.B.5 and V.B.5

This measure requires small MS4s to develop and implement an operation and maintenance program that includes a training component. The ultimate goal of this measure is preventing or reducing pollutant runoff from all municipal operations. The draft permit includes more detailed requirements than the previous permit for the implementation of this control measure. Permittees are required to develop an operations and maintenance plan for the following permittee-owned activities or facilities: parks and open spaces; buildings and facilities; vehicles and equipment maintenance; and roadways and storm systems.

The permittee must develop and implement operation and maintenance plans by the end of the first year of the permit. For management of open space and parks, the draft permit requires an evaluation of the use, storage, and disposal of pesticides and fertilizer practices to ensure that they are protective of water quality. The permittee must also ensure that lawn maintenance and landscaping activities are protective. During the evaluation of buildings and facilities, the permittee must consider all buildings it owns. This includes police and fire stations, schools, and other offices. The permittee should evaluate the use and storage of petroleum products, management of dumpsters, and other wastes. As stated in the objective of this measure, the permittee must implement good housekeeping and pollution prevention measures. In areas where permittee-owned vehicles are stored, the permittee must develop procedures to ensure vehicles that are leaking or require maintenance are stored indoors. Municipal fueling areas must be covered unless impracticable. Washwaters from permittee-owned vehicles must not be discharged to the MS4.

The draft permit contains specific frequencies for street sweeping and catch basin cleanings. Based on a review of annual reports, EPA is requiring that permittees must sweep all streets a minimum of twice per year. EPA believes that this frequency is reasonable. Over 80 percent of MS4s reported sweeping both commercial and residential streets at least once per year. One should occur in the spring to collect the sand from the winter and the other in the fall to collect the leaves. Although not required by the permit, the use of a high efficiency vacuum sweeper is preferred. The draft permit contains a requirement to clean all catch basins a minimum of once every other year. Based on the annual reports, 75 percent of municipalities clean catch basins located on commercial streets at least once per year and 60 percent clean catch basins on

residential streets at least once per year. The municipality must track the amount of material removed from each basin and increase the frequency of cleaning if evidence suggests that material is accumulating more quickly than in other basins. Basins in priority areas may also require more frequent cleaning.

The permittee must establish procedures for winter activities. This includes evaluation of salt and sand use. Permittees are encouraged to minimize the amount of salt used and to evaluate opportunities for the most cost effective and environmentally acceptable management practices. The permittee must ensure that snow removal practices do not result in the discharge of snow to a water of the United States.

The permittee must establish and implement maintenance schedules and inspection frequencies for all permittee-owned BMPs.

In addition to the operation and maintenance plans required for permittee-owned operations, the permittee must develop a Stormwater Pollution Prevention Plan (SWPPP) for municipal maintenance garages, public works facilities, transfer stations, or other waste management facilities. If a facility that is already covered by EPA's Multi-Sector General Permit (MSGP), the SWPPP required by that permit will be sufficient. The SWPPP required by the MSGP may be referenced in the MS4s SWMP.

The permittee must develop a SWPPP that consists of the following elements: (1) a pollution prevention team – this team is responsible for the development, implementation and revision of the SWPPP; (2) a description of the facility and identification of potential pollutant sources; (3) identification of any stormwater controls at the facility; and (4) implementation of specific management practices at the facility. The conditions contained in this section are based on the conditions contained in the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP). They consist of pollution prevention activities such as preventing exposure, good housekeeping practices, and preventative maintenance. The draft permit requires procedures for spill prevention and response and management of runoff. All salt piles or piles that contain salt must be covered or enclosed if stormwater runoff from that pile has

the potential to discharge to a Water of the United States.

State specific requirements (Part 4.0)

The draft permit encourages the consideration of infiltration and ground water recharge when implementing the minimum measures, not just post construction. However, stormwater discharges that are infiltrated through injection wells are subject to the Safe Drinking Water Act and EPA's Underground Injection Control (UIC) Program at 40 CFR Part 144. New Hampshire implements the federal UIC program. Indian lands in Connecticut and Rhode Island are covered under EPA authority. More information about UIC requirements, including state program contacts, is available at http://www.epa.gov/region1/eco/drinkwater/pc_groundwater_discharges.html

F. Outfall Monitoring Program (Part 3.0)

On January 8, 2008, EPA hosted a meeting at its Boston office to examine monitoring for small MS4s. Over 100 people participated. EPA presented monitoring options as well as examples of monitoring requirements of other states. Participants were invited to share their experience with monitoring. Additional information on the meeting is available at: www.epa.gov/region1/topics/water/stormwater.html. Many participants were not opposed to monitoring, but most expressed the need for any monitoring to be flexible and meaningful. EPA has included monitoring in this draft general permit. The monitoring in the draft permit is directly related to the implementation of the illicit discharge detection and elimination program.

The draft permit requires dry weather screening of all outfalls. Dry weather screening involves field observations, field screening analytical techniques and analytical monitoring when a dry weather discharge is detected. The permittee must implement dry weather screening as part of the IDDE program. The permittee must screen 25 percent of its outfalls each year beginning the second year of the permit. Screening operations may involve visiting an outfall more than one time. Based on observations collected during fieldwork, the permittee may find evidence of an illicit discharge, but no flow. These outfalls must continue to be evaluated to assess the source of

any potential illicit discharge.

Dry weather discharges must be analyzed for the following pollutants: conductivity, turbidity, pH, chlorine, temperature, surfactants (as MBAS), potassium, ammonia and *E. Coli* or enterococcus (as appropriate depending of whether the discharge is to a fresh water or a marine water). The municipality must determine the source of the dry weather discharge, and if determined to be an illicit discharge, remove it.

Certain pollutants provide an indication of potential illicit sources. For example, ammonia is an indicator of sewage, boron is often found in detergents and soaps, surfactants is an indicator of washwaters, and chlorine may indicate tap water because it is often used as a disinfectant.

The draft permit also requires the municipality to monitor outfalls during wet weather. The outfalls monitored during wet weathers in a particular year should be the same outfalls monitored during dry weather, to the extent practicable. Wet weather flows shall be monitored for: chlorine; potassium; ammonia; pH; surfactants (as MBAS); temperature; turbidity; conductivity and *E.Coli* or enterococcus (as appropriate depending on whether a discharge is to fresh or marine water).

If an outfall discharges directly to a water that is impaired, the permittee must also sample for the pollutant identified as the cause of impairment provided a test method for the pollutant is included in 40 CFR part 136. If the pollutant is present, the permittee must implement procedures for the control measures required by Part 2.3 of the permit to address or eliminate the pollutants.

G. Evaluation, Record Keeping and Reporting

The permittee must periodically evaluate its SWMP for the following: compliance with the terms of the permit, the appropriateness of the identified BMPs and progress towards achieving the objective of the control measure and the permittee's measurable goals. The permittee may need to change its selected BMPs identified in the SWMP based on this evaluation process in order to

ensure compliance with the terms of the permit including water quality-based requirements.

Record Keeping (Part 5.2)

The permittee must keep all records required by this permit for a period of five years. The permittee must submit records only when requested by EPA.

Reporting (Part 5.3)

The permittee must submit an annual report. The reporting year is July 1 through June 30 and annual reports are due August 1. The due date for the annual report in the draft permit is a change from the annual report due date of MS4GP-2003. EPA is proposing this change to more closely conform to the fiscal year of many municipalities. EPA invites comment on this proposed change. The report must include a self-assessment regarding compliance with the terms of the permit, the appropriateness of selected BMPs, and the progress towards achieving the permittee identified measurable goals. The report must also contain a summary of any information that has been collected and analyzed. This includes all types of data. The permittee must also indicate what activities are planned for the next reporting cycle and discuss any changes to either BMPs or measurable goals. The report must indicate if any control measure or measurable goal is the responsibility of another entity.

The draft permit contains more detailed reporting requirements than in the previous permit. Reports must contain sufficient information to enable EPA to assess the permittee's compliance with the permit.

The following is list of some key milestones within the draft permit:

Within 120 days of authorization:

- Update SWMP and BMP goals

Within six (6) months of the effective date of the permit

- Complete inventory of all permittee-owned facilities

End of year one of the permit

- Distribution of at least two (2) educational messages to one or more of the targeted audiences
- Completion of illicit discharge potential assessment and ranking
- Completion of written protocol regarding responsibility for fixing illicit connections and discharges, confirming their removal and tracking program process
- Estimation of impervious cover in each delineated sub-watershed
- Written Operations and Maintenance procedures for municipal operations.
- Written Stormwater Pollution Prevention Plan for maintenance garages and waste handling facilities

End of year two of the permit

- Distribution of at least two (2) educational messages to one or more of the targeted audiences
- Complete map of separate storm sewer system
- Complete written systematic protocol for locating and removing illicit connections
- Complete report which assesses street design guidelines and parking requirements
- Implement monitoring program
- Inventory and Monitor 25 percent of outfalls during both wet and dry weather (this continues annually for the remainder of the permit term)

End of year three of the permit

- Implement systematic program for locating and removing illicit connections

Annual activities

- Provide at least one opportunity for public participation
- Employee training
- Comprehensive site evaluations at the permittee's facilities with a SWPPP

Reports are due annually on August 1 and must be submitted to the address provided in the permit.

H. Standard Permit Conditions

40 CFR §§ 122.41 and 122.42 establish requirements that must be in all NPDES permits. Appendix B of the draft general permit includes these requirements.

I. 401 Water Quality Certification

Section 401 of the CWA provides that no Federal license or permit, including NPDES permits, to conduct any activity that may result in any discharge into navigable waters shall be granted until the State in which the discharge originates certifies that the discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA. The Section 401 certification process is underway. Specific 401 certification requirements are contained in Part 4.0 of the draft permit.

III INFORMATION AND RESOURCES

EPA has developed several tools to assist MS4s in the development of their stormwater management programs. The following is a non-inclusive list of some of the available resources:

1. MS4 Program Evaluation Guidance and the Illicit Discharge Detection and Elimination Guidance Manual is available from EPA's publications website: http://cfpub1.epa.gov/npdes/pubs.cfm?program_id=6
2. Menu of BMPs available at: http://www.epa.gov/npdes/menuofbmps/menu.htm
3. Measurable Goals Guidance available at: http://cfpub1.epa.gov/npdes/stormwater/measurablegoals/index.cfm
4. EPA Stormwater Home page: http://www.epa.gov/npdes/stormwater contains links to stormwater publications including the Illicit Discharge Detection and Elimination guidance manual; model ordinances; and educational materials including EPA stormwater webcast series.
5. Source Water Practices Bulletin. Managing Stormwater Runoff to Prevent Contamination of Drinking Water: http://www.epa.gov/safewater/swp/stormwater.pdf
6. Center for Watershed Protection: http://www.cwp.org
7. Financing Stormwater Management: http://stormwaterfinance.urbancenter.iupui.edu

8. Low Impact Development : http://www.lowimpactdevelopment.org and Low Impact Development Urban design tools: http://www.lid-stormwater.net
9. TMDL information is available at: http://www.epa.gov/region1/eco/tmdl/approved.html
10. Water Quality Standards: http://www.epa.gov/waterscience/standards/wqslibrary/
11. Stormwater Center: www.stormwatercenter.net
12. New England Interstate Water Pollution Control Commission: www.neiwpcc.org
13. Smart Growth: www.smartgrowth.org and http://www.epa.gov/smartgrowth/
14. New Hampshire groundwater discharge and underground injection control regulation requirements.

http://des.nh.gov/organization/divisions/water/dwgb/dwspp/gw_discharge/index.htm

15. New Hampshire drinking water source protection requirements.

http://des.nh.gov/organization/divisions/water/dwgb/dwspp/index.htm

16. Vermont Department of Environmental Conservation, Water Supply Division. http://www.anr.state.vt.us/dec/watersup/wsd.htm

17. Vermont Department of Environmental Conservation, Wastewater Management Division, Underground injection Program http://www.anr.state.vt.us/dec/ww/uic.htm

18. EPA Region I, Drinking Water Program: Drinking Water and Underground Injection Control http://www.epa.gov/region01/eco/drinkwater/epacontacts.html

IV. OTHER LEGAL REQUIREMENTS

A. Environmental Impact Statement Requirements

The draft general permits do not authorize discharges from any new sources as defined under 40 CFR §122.2. Therefore, the National Environmental Policy Act, 33 U.S.C. Sections 4321 et seq., does not apply to the issuance of these general NPDES permits.

B. Section 404 Dredge and Fill Operations

This draft permit does not constitute authorization under 33 USC Section 1344 (Section 404 of the Clean Water Act) of any discharge of dredged or fill material into waters of the United States.

C. Executive Order 12866

EPA has determined that this draft general permit is not a "significant regulatory action" under the terms of Executive Order (EO) 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under the EO.

D. Paperwork Reduction Act

The information collection requirements of this draft permit were previously approved by the Office of Management and Budget(OMB) under the provisions of the Paperwork Reduction Act, 44 USC 3501 *et seq.* and assigned OMB control number 2040-0086 (NPDES permit application) and 2040-0004 (Monitoring Reports).

E. Regulatory Flexibility Act

EPA's current guidance, entitled Federal Guidance for EPA Rule writers: Regulatory Flexibility Act [RFA] as Amended by the Small Business Regulatory Enforcement and Fairness Act, was issued in November 2006 and is available on EPA's website: http://www.epa.gov/sbrefa/documents/rfafinalguidance06.pdf. After considering the guidance, EPA concludes that since this general permit affects less than 100 small entities, it does not have a significant economic impact on a substantial number of small entities.

The RFA defines a "small governmental jurisdiction" as the government of a city, county, town, township, village, school district, or special district with a population of less than 50,000.

F. Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act (UMRA), Public Law 104-4, generally requires Federal agencies to assess the effects of their "regulatory actions" on tribal, state, and local governments and the private sector. The UMRA defines "regulatory actions" to include proposed or final rules with Federal mandates. The draft permit proposed today, however, is not a "rule" and is therefore not subject to the requirements of UMRA.

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