**ENVIRONMENTAL PROTECTION AGENCY**

**[FRL- ]**

**DRAFT NPDES GENERAL PERMIT FOR SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS IN THE STATES OF MASSACHUSETTS AND NEW HAMPSHIRE; INDIAN COUNTRY LANDS IN THE STATES OF CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND; AND FEDERAL FACILITIES IN THE STATE OF VERMONT**

**AGENCY:** ENVIRONMENTAL PROTECTION AGENCY (EPA)

**ACTION:** NOTICE OF DRAFT NPDES GENERAL PERMITS -- MAR040000 AND NHR040000; CTR04OOOI; MAR04000I; RIR04000I; VTR04000F

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**SUMMARY:** The Director of the Office of Ecosystem Protection, Environmental Protection Agency-Region 1 (EPA), is issuing Notice of a Draft National Pollutant Discharge Elimination System (NPDES) general permit for discharges from small municipal separate storm sewer systems (MS4) to certain waters of the States of Massachusetts, New Hampshire and Vermont, and to certain waters on Indian Country lands in the states of Connecticut, Massachusetts, and Rhode Island. This draft NPDES general permit establishes Notice of Intent (NOI) requirements, standards, prohibitions and management practices for discharges of storm water from municipal separate storm sewer systems.

Owners and/or operators of small MS4s that discharge storm water will be required to submit a NOI to EPA-NE to be covered by the general permit and will receive a written notification from EPA-NE of permit coverage and authorization to discharge under the general permit. The eligibility requirements are discussed in the draft permit . The municipality must be meet the eligibility requirements of the permit prior to submission of the NOI. This general permit does not cover new sources as defined under 40 CFR Section 122.2.

**DATES**: The public comment period is from the (date of publication) to November8, 2002 : interested persons may submit comments on the draft general permit as part of the administrative record to the EPA, at the address given below, no later than midnight November 8, 2002. The general permit shall be effective on the date specified in the final general permit published in the Federal Register and will expire five years from the date that the final permit is published in the Federal Register.

**PUBLIC MEETING INFORMATION:** EPA - Region 1 will hold four public meetings to provide information about the general permit and its requirements. The public meetings will include a presentation on the draft permit and a question and answer session. Written, but not oral, comments for the official permit record will be accepted at the public meetings. The meetings will be at the following locations:

| WEDNESDAY - October 16, 2002 | THURSDAY -October 24, 2002 |
|---|---|
| Worcester Public Library - Main Branch | Town of Springfield/Municipal Office Bldg. |

Saxe Room
Library Lane/Salem Square
Worcester, MA 01608
9:30 am - 12:30 pm

2nd Floor Conference Room
26 Central Street
West Springfield, MA 01089
1:00 pm - 4:00 pm

TUESDAY - October 22, 2002
Town of Middleborough
Town Hall
10 Nickerson Avenue
Middleborough, MA
1:00 pm - 4:00 pm

THURSDAY - October 31, 2002
Portsmouth City Council Chambers
Portsmouth City Hall
One Junkins Avenue
Portsmouth, NH 03801
9:00 am - 12:00 pm

**PUBLIC HEARING INFORMATION:** A public hearing will be conducted in accordance with 40 CFR 124.12 and will provided interested parties with the opportunity to provide written and/or oral comments for the official record. Only questions regarding hearing procedures will be addresses at the hearing. The hearing may close prior to 12:00 p.m. if all parties wishing to present comments have done so.

WEDNESDAY - October 30, 2002
United States Environmental Protection Agency
Regional Laboratory
11 Technology Drive
North Chelmsford, MA 01863
Kennebec Conference Rooms A & B
9:00 am - 12:00 pm
The hearing is being held in a government facility. Visitors will be asked to sign in and present photo identification. People planning on attending the public hearing may register prior to the hearing date. To register, contact Olga Vergara at 617/918-1519 or via email at vergara.olga@epa.gov, include "Public hearing registration" in the subject line.

**ADDRESS:** The draft permit is based on an administrative record available for public review at EPA-Region 1, Office of Ecosystem Protection (CMU), 1 Congress Street, Suite 1100, Boston, Massachusetts 02114-2023. The following FACT SHEET AND SUPPLEMENTARY INFORMATION section sets forth principal facts and the significant factual, legal and policy questions considered in the development of the draft permit. A reasonable fee may be charged for copying requests.

**FOR FURTHER INFORMATION CONTACT:** Additional information concerning the draft permit may be

obtained between the hours of 9:00 a.m. and 5:00 p.m. Monday through Friday excluding holidays from: Thelma Murphy, Office of  Ecosystem Protection, Environmental Protection Agency, 1 Congress Street, Suite 1100, Boston, MA 02114-2023; telephone: 617-918-1615; email: murphy.thelma@epa.gov

**DRAFT GENERAL PERMIT**

Part I - Area of coverage, eligibility, and NOI submission requirements

Part II - Storm Water Management Program Requirements - Massachusetts

Part III - Storm Water Management Program Requirements - New Hampshire, and Indian County lands in Connecticut, Massachusetts, and Rhode Island

Part IV - Storm Water Management Program Requirements - County, State and Federally owned Non-Traditional Municipal Separate Storm Sewer Systems in all areas of permit coverage

Part V - Storm Water Management Program Requirements - Transportation (i.e. Massachusetts Highway Department and New Hampshire Department of Transportation) in all areas of permit coverage.

Part VI - General Conditions - Common elements for all municipalities

Part VII - Definitions

Part VIII - Reopener

Part IX - 401 Water Quality Certifications

**FACT SHEET AND SUPPLEMENTAL INFORMATION**

**I. Introduction and Program Background**

The Director of the Office of Ecosystem Protection, EPA-Region 1, is proposing a general permit for the discharge of storm water from municipal separate storm sewer systems to waters of the States of Massachusetts , New Hampshire and Vermont; Indian country lands in the States of Connecticut, Massachusetts, and Rhode Island. EPA is the NPDES permitting authority for Federal facilities in the State of Vermont. This document contains the draft general permit which consists of nine parts (see listing above) and the fact sheet.

In 1987, Congress amended the Clean Water Act and added Section 402(p). This section requires a comprehensive program for addressing storm water discharges. Section 402(p)(1) requires EPA to issue permits to the following types of storm water discharges:

a. Discharge subject to an NPDES permit before February 4, 1987;
b. Discharge associated with industrial activity
c. Discharge from a municipal separate storm sewer system serving a population of 250,000 or more
d. Discharge from a municipal separate storm sewer system serving a population of 100,000 or more, and
e. A discharge that an NPDES permitting authority determines to be contributing to a violation of a water quality standard or a significant contributor of pollutants the waters of the United States.

The Act also requires that industrial storm water discharges meet technology based requirements and any more stringent requirements necessary to meet water quality standards. Municipal storm water discharges have different standards. The Act states that these discharges (1) may be issued on a system or jurisdiction-wide basis, (2) MS4s must effectively prohibit non-storm water discharges into the sewer system, and (3) must require controls to reduce pollutant discharges to the maximum extent practicable including best management practices (BMPs), and other provisions as the Administrator determines to be appropriate for the control of such pollutants. Currently, EPA believes that water quality based controls, implemented with BMPs through an iterative process are appropriate for the control of pollutants for discharges from municipalities. This concept is described in greater detail later in this fact sheet.

Section 402(p)(5) required that EPA conduct studies and submit a report to Congress. The purpose of this report was to identify unregulated sources of storm water discharges, determine the nature and extent of pollutants in the discharges, and establish procedures and methods to mitigate the impacts of the discharges on water quality. This report was published on December 8, 1999. The report (EPA 800-R-94-001) proposed the following:

a. Establish a phased compliance with the water quality standards approach for discharges from municipal separate storm sewer systems with priority on controlling discharges from municipal growth and development areas;
b. Clarify that the maximum extent practicable standard should be applied in a site-specific, flexible manner, taking into account cost considerations as well as water quality effects,
c. Provide an exemption from the NPDES program for storm water discharges from industrial facilities with no activities of significant material exposed to storm water,
d. Provide extensions to the statutory deadline to complete implementation of the NPDES program for the storm water program,
e. Target urbanized areas for the requirements in the NPDES program for storm water, and
f. Provide control of discharges from inactive and abandoned mines located on Federal lands.

Section 402(p)(6) required that EPA provide a comprehensive program that designates and controls additional sources of storm water discharges to protect water quality. The additional sources regulated by the second phase of the storm water program are municipal storm water discharges from urbanized areas and discharges from construction activities with land disturbances greater than or equal to one acre and less than five. The regulations promulgated under the authority of section 402(p)(6) are commonly referred to as the Phase 2 storm water regulations. The final regulations were published on December 8, 1999. This general permit implements the requirements of the Phase 2 program for small municipal separate storm sewer systems in urbanized areas.

**II. Coverage of General Permits**

Section 301(a) of the Clean Water Act (the Act) provides that the discharge of pollutants is unlawful except in accordance with a National Pollutant Discharge Elimination System (NPDES) permit unless such a discharge is otherwise authorized by the Act. Although such permits are generally issued to individual discharges, EPA's regulations authorize the issuance of "general permits" to categories of discharges (see 40 CFR Section 122.28 ). EPA may issue a single, general permit to a category of point sources located within the same geographic area whose discharges warrant similar pollution control measures.

The Director of an NPDES permit program is authorized to issue a general permit if there are a number of point sources operating in a geographic area that:

a. Involve the same or substantially similar types of operations;
b. Discharge the same types of wastes;
c. Require the same effluent limitations or operating conditions;
d. Require the same or similar monitoring requirements; and
e. In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

Authorization under the general permit shall require prior submittal of certain facility information. Upon receipt of all required information, the permit issuing authority may allow or disallow coverage under the general permit.

Violations of a condition of a general permit constitute a violation of the Clean Water Act and subjects the discharger to the penalties in Section 309 of the Act.

**III. Limitations on Permit Coverage**

This permit does not authorize the following discharges:

a. Discharges that are mixed with sources of non-storm water unless the non-storm water discharges are in compliance with a separate NPDES permit. This includes individual NPDES permits or other general permits. The other exceptions are the allowable non-storm water discharges listed in Part I.F of the permit. However, if an allowable non-storm water discharge significantly contribute pollutants to the storm sewer system, it must be regulated.
b. Discharges of storm water which are subject to other permits. This includes industrial storm water discharges described at 40 CFR 122.26(b)(14)(i)-(ix) and (xi); storm water 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 for storm water.

c. Storm water discharges, or discharge related activities that are likely to jeopardized the continued existence of any species listed as threatened or endangered under the Endangered Species Act (ESA). A more detailed discussion of the Endangered Species Act and EPA's obligation under that Act are discussed later in this fact sheet.

d. Storm water discharges whose direct or indirect impact would jeopardize any Essential Fish Habitat (EFH). This topic is also discussed later in this fact sheet.

e. Discharges, or implementation of a storm water management program, which will adversely affect historic properties.

f. Discharges to territorial seas, the contiguous zone and the oceans, unless such discharges comply with 40 CFR 125, subpart M - Ocean Discharge Criteria.

g. Discharges which are prohibited under 40 CFR 122.4. These are discharges which have potential to cause substantial harm to water quality. (An example of such a discharge is high level radioactive waste).

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

i. Discharges which are not consistent with an approved Total Maximum Daily Load (TMDL). A detailed discussion of TMDLs in detailed later in this fact sheet.

j. Discharges which are not consistent with a state's antidegradation policy for water quality standards.

EPA has determined that this general permit will not be available to "New Source" dischargers as defined in 40 CFR Section 122.2 due to the site specific nature of the environmental review required by the National Environmental Policy Act of 1969 (NEPA), 33 USC 4321 et seq. for those facilities. "New Sources" must comply with New Source Performance Standards (NSPS) and are subject to the NEPA process in 40 CFR Section 6.600. Consequently, EPA has determined that it would be more appropriate to address "New Sources" through the individual permit process. ("New Sources" should not be confused with "New Dischargers", which are eligible for general permit coverage. Definitions may be found at 40 CFR Section 122.2).

Any owner or operator authorized by a general permit may request to be excluded from coverage under a general permit by applying for an individual permit. This request may be made by submitting a NPDES permit application together with reasons supporting the request. The Director may also require any person 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;

f. The discharge(s) is a significant contributor of pollution or in violation of State Water Quality Standards for the receiving water.

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

**IV. Permit Basis and Other Conditions of the General NPDES Permit**

A. Types of Discharge- This general permit covers storm water 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) or 40 CFR 122.32(a)(2) . Designation under 40 CFR 122.32(a)(1) applies to small MS4s located in an urbanized area. Designation under 40 CFR 122.32(a)(2) applies to small MS4s determined to need a permit by the Director. A small MS4 is a conveyance or system of conveyances - including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains. This system must be owned or operated by a municipality. A municipality includes the following entities: *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, storm water, 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...This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual building.* For example, an armory located in an urbanized area would not be considered a small regulated MS4

An urbanized area is designated by the Census Bureau. 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 which 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. Part of a community may be in an urbanized area and another community may be fully in the urbanized area. The Phase 2 program applies within the urbanized area. A municipality may decide to implement their program in the entire community, or just in the urbanized area. EPA chose to regulate municipalities within the urbanized areas because urban runoff is a major source of water quality impacts

B. Statutory Requirements:

Section 301(a) of the Clean Water Act (CWA or 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 requirements, including CWA Sections 301, 304, and 401 (33 USC 1331, 1314, and 1341). Those statutory provisions state that NPDES permits must include effluent limitations requiring authorized discharges to: (1) meet standards reflecting specified levels of technology-based treatment requirements; (2) comply with State Water Quality Standards; and (3) comply with other state requirements adopted under authority retained by states under CWA Section 510, 33 USC 1370.

EPA is required to consider technology and water quality requirements when developing permit limits. 40 CFR Part 125 Subpart A sets the criteria and standards that EPA must use to determine which technology-based requirements, requirements under Section 301(b) of the Act and/or requirements established on a case-by-case basis under Section 402(a)(1) of the Act, should be included in the permit.

The Clean Water Act requires that all discharges, at a minimum, must meet effluent limitations based on the technology-based treatment requirements for dischargers to control pollutants in their discharge. Section 301(b)(1)(A) of the Act requires the application of Best Practicable Control Technology Currently Available (BPT) with the statutory deadline for compliance by July 1, 1977, unless otherwise authorized by the Act. Section 301(b)(2) of the Act requires the application of Best Conventional Control Technology (BCT) for conventional pollutants, and Best Available Technology Economically Achievable (BAT) for non-conventional and toxic pollutants. The compliance deadline for BCT and BAT is as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated and in no case later than March 31, 1989.

Section 402(p) of the Clean Water Act specifics the level of control required for storm water permits. Discharges from industrial activities must meet all technology and water quality based requirements. This applicability was discussed in the proceeding paragraphs. Discharges from municipal separate storm sewer systems are held to a different standard. Permits for these discharges “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provision as the Administrator or the State determines appropriate for the control of such pollutants.” (CWA §402(p)(3)(B)(iii)). Municipal discharges are subject to a “standard” of Maximum Extent Practicable (MEP) as opposed to a technology based standard. There currently is no statutory definition associated with MEP, however EPA believes MEP to consist of implementation of Best Management Practices (BMPs) designed to control storm water runoff from the municipality.

C. 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 permit, municipalities must certify that none of their discharges, allowable non-storm water discharges, or discharge related activities are likely to impact a threatened or endangered species. The draft permit contains five criteria for eligibility certification. The permittee must document its eligibility determination and maintain it as part of the storm water management program.

The Region has requested concurrence from the services that the draft general permit is protective. The services in a recent consultation on the Region's construction dewatering general permit requested review on proposed discharges which may impact the dwarf wedge mussel (*Alsmidonta heterodon*) or the shortnose sturgeon (*Acienser brevirostum*) The dwarf wedge mussel is in the following areas: in Massachusetts- the Fore River, Amherst (Hampshire County); the Mill River, Easthampton (Hampshire County) and the Mill River, Wheately (Franklin County); and in New Hampshire - Ashuelot River, Surry to Swanzey (Cheshire County) and South Branch of the Ashuelot River, Swanzey. The shortnose sturgeon is in certain sections of the Merrimack and Connecticut Rivers in Massachusetts. MS4s discharging to these waters must ensure protection of these species.

D. Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 USC Sections 1801 et seq. (1998)), EPA is required to consult with National Marine Fisheries Service (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 which reduces the quality and/or quantity of 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. Essential Fish Habitat 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 addressed to EPA-NE and dated October 10, 2000, NMFS confirmed that for projects authorized through the NPDES permit process, notification for purposes of EFH consultation can be accomplished in the EFH Section of the permit fact sheet or Federal Register notice.

Resources: The general permit is not available to any new or increased discharge into territorial seas, however, it does not specifically exclude facilities that discharge into other tidal waters. Therefore, our EFH assessment considers all 39 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 municipalities contain storm water runoff from urban activities and other areas such as roof tops, driveways, sidewalks and roads. Typical pollutants in urban runoff may include sediments, oil & grease, and pathogens. The general permit prohibits the addition of materials or chemicals in amounts that would be toxic to aquatic life. The proposed requirements for this general permit are sufficiently stringent to assure that state water quality standards will be met and that the receiving waters are protective of aquatic life and maintenance of an aquatic habitat. The Region finds that issuance of the proposed general permit will not adversely affect any fish or shellfish currently listed with a Fisheries Management Plan or its habitat. 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 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 as a result 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.

E. Historic Preservation

The National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of federal undertakings, including 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 existing NHPA regulations to include any project, activity , or program under the direct or indirect jurisdiction of a federal agency that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects for that project, activity or program. (See 36 CFR 802(o)). Federal undertakings include EPA's issuance of general permits. In order to be eligible for coverage under this permit, municipalities must certify that their storm water discharges, allowable non-storm water discharges, and discharge related activities do not affect a historic property. Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service - www.nr.nps.gov/nrishome.htm; the Massachusetts Historical Commission - www.state.ma.us/sece/mhc; and the New Hampshire Historic Commission - www.state.nh.us/nhdhr.

F. Antidegradation Provisions

The conditions of the permit reflect the goal of the CWA and EPA to achieve and maintain water quality standards. The environmental regulations pertaining to the State Antidegradation Policies which protect the State's surface waters from degradation of water quality are found in the following provisions: Massachusetts Water Quality Standards 314 CMR 4.04 Antidegradation Provisions ; and New Hampshire RSA 485-A:8, VI Part Env-Ws 1708.

This general permit does not apply to any new or increased discharge to receiving waters unless the discharge is shown to be consistent with the State's anti-degradation policies. This determination shall be made in accordance with the appropriate State antidegradation implementation procedures for this general permit. EPA will not authorize discharges under the general permit until it receives a favorable antidegradation review and certification from the States. (Concurrent with the publication of this draft general permit in the Federal Register, EPA has formally requested each State to make an antidegradation certification determination).

G. Water Quality Standards

Under Section 301(b)(1)(C) of the Act, discharges are subject to effluent limitations based on water quality standards. Receiving stream requirements are established according to numerical and narrative standards adopted under state and/or federal law for each stream use classification. Section 401 of the CWA requires that EPA obtain State certification which ensures that all water quality standards and other appropriate requirements of state law will be satisfied. Regulations governing State certification are set forth in 40 CFR Sections 124.53 and 124.55.

The States of Massachusetts and New Hampshire have narrative criteria in their water quality regulations (See Massachusetts 314 CMR 4.05(5)(e) and New Hampshire Part Env-Ws 1703.21) that prohibit toxic discharges in toxic amounts. The permit does not allow for the addition of materials or chemicals which would produce a toxic effect to any aquatic life.

Each state must develop a list of water bodies which are not meeting the classification of the water body. This list is called the "303(d) List" which refers to the section of the Clean Water Act that requires states to do this. In order to be eligible for coverage under this permit, the municipality must determine if any of its discharges go to a water which is on the 303(d) list. If the municipality discharges to a water on the list, the municipality must determine if their discharge contributes the pollutant(s) which have been listed as the cause of the impairment. States are required to develop Total Maximum Daily Load (TMDLs) for the waters listed on the 303(d) list. In very simple terms, a TMDL describes what levels of the pollutant can or cannot be put into the water in order for the water to meet standards.

If the impaired water does not have an approved TMDL, the permittee must address in the storm water management program how they will control the discharge of the pollutants identified. The storm water management program must address what measures and BMPs will be used to control pollutants. Additionally, the storm water management program must address how the chosen BMPs will control pollutants. The overall goal is to ensure that the discharge will not cause or contribute to instream exceedances of water quality standards.

If the discharge is to a water body with an approved TMDL, the discharge must be consistent with the conditions of the TMDL. A TMDL may establish a specific waste load allocation (WLA) for a specific source, or may be a gross allotment for the impaired water. The permittee must identify in their storm water management program how they

will meet the conditions of the TMDL. This should include specific BMPs and specific measures to meet the WLA. The permittee's demonstration of meeting the requirements of the WLA should focus on evidence which shows that the BMPs are implemented properly and adequately maintained. This demonstration may be an iterative process.

*Wellhead Protection/Source Water Protection*

The Safe Drinking Act [Section 1428(h)] requires that agencies of the federal government having jurisdiction over any potential source of contaminants identified by a State program as a potential anthropogenic source of contaminants to a wellhead protection area are subject to and must comply with all requirements of the State Wellhead Protection Program. Storm water runoff is identified as a potential source of contamination to drinking water sources. The Safe Drinking Water Act (Section 1453) also requires states to complete a source waster quality assessment for all public water sources. Storm water discharges have been identified as potential sources of contamination to public drinking water sources in the assessments. MS4s must ensure that their storm water management program is protective of drinking water sources.

H. Notice of Intent Requirements

The regulations at 40 CFR122.33 require small MS4s who apply for a general permit to submit information on the BMPs and measurable goals required by 40 CFR 122.34(d). Measurable goals and BMPs are discussed in Section H of the fact sheet. In addition to information on BMPs and goals, MS4s must also submit information regarding the receiving waters, the known number of outfalls, eligibility with regard to ESA and NHPA. The NOI must be signed in accordance with the signatory requirements of Part VI.G. of the permit.

All NOIs must be submitted to EPA-Region 1 by March 10, 2003. MS4s in Massachusetts must also submit an NOI to the Massachusetts Department of Environmental Protection along with the appropriate fee. MS4s in New Hampshire must also submit a NOI to the New Hampshire Department of Environmental Services. MS4s will receive a confirmation of receipt and a letter of completeness from EPA. Permit coverage begins on the date of signature of the NOI unless information to the contrary is received.

I. Storm Water Management Program (40 CFR 122.34(a))

The Storm Water Management Program (SWMP) requirements of the permit are divided into four parts. These parts detail the requirements of the program for the various types of municipalities covered by this permit. Part II is for municipalities in Massachusetts. Part III is for municipalities in New Hampshire and Indian Country lands in Connecticut, Massachusetts, and Rhode Island. Part IV is for "non-traditional" municipalities such as colleges, miliary bases, and other similar facilities owned or operated by a municipality, but not a city or town. Part V is for state and federal transportation agencies (i.e., the agencies which own/operate the roads and highways of the state. The permit is divided in this manner to allow for slightly different implementation schemes and allow for state specific conditions to be incorporated.

*Qualifying Local Program (QLP)*

The Phase 2 storm water program is designed to be flexible and to try to build on existing state or local programs. Specifically, 40 CFR 122.34(c) allows the permitting authority, EPA, to reference a state or local program which the municipality is subject to as meeting the requirements of one or more of the six minimum measures. Compliance with the local requirement would constitute compliance with the requirements of the minimum measures. In this permit, EPA is referencing the Massachusetts Storm Water Policy, which is part of the Wetlands Protection Act ,for specific parts of the minimum control measures. Discussions of the minimum control measures and which parts of the storm water policy may be used to meet the permit requirements are provided in the section "Six Minimum Measures" below.

The Massachusetts Storm Water Policy currently applies in areas under jurisdiction of the Wetlands Protection Act. Communities may consider expanding the requirements to be community wide.

EPA has not determined that any other state or local programs to meet the QLP requirements.

*Six Minimum Control Measures*

The permit requires MS4s to develop, implement and enforce a storm water management program designed to reduce pollutants to the maximum extent practicable, and to protect water quality. In order to achieve pollutant reduction and water quality protection, MS4s must develop a program consisting of the six minimum measures described below. Implementation of the program involves the identification of BMPs and measurable goals for the BMP. MS4s will have the full permit term, not to exceed five years from the effective date of this permit, to develop and implement their program. Complete implementation of the program will be an ongoing process.

*Public Education and outreach (122.34(b)(1))*

The MS4 must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps the public can take to reduce pollutants in storm water runoff. Public education is important because an educated public tends to be more supportive of a program as well as more compliant with the program.

Before beginning an education program, the MS4 should decide what they want to accomplish (a measurable goal) and how they want to do it (a BMP). The measurable goals and BMPs should reflect the needs and characteristics of the area served by the MS4. Communities can look to form partnerships with other organizations. These partnerships may include other municipalities in a watershed, environmental groups or other civic organizations. Some of these organizations may have educational material which can be shared. Communities may choose to target a specific audience with their educational material such as businesses or children. Educational material can be in any

form which is appropriate for the community. Some examples include brochures, storm drain stenciling, storm water hotlines, or informational meetings.

Examples:
Monterey, California developed a storm drain stenciling kit to be used by volunteers . Volunteers, in addition to stenciling the drains, also marked the location of drains which were not on city map.
Monterey and Santa Cruz, California developed a 3-dimensional plastic model of a miniature city. This model demonstrated pollution of water ways caused by various sources of urban runoff. The model was used at schools and city events.

*Public involvement and Participation (122.34(b)(2))*

This control measure ties in with the previous control measure. As with the education program, if the public is given an opportunity to participate, they generally will become more supportive of the program. The permit requires that public participation efforts comply with the public notice requirements of the state. Although the minimum requirement for this measure is just compliance with state public noticing regulations, communities are encouraged to provide more opportunities for public participation than just a notice in the local paper. Participation efforts should attempt to engage all groups serviced by the system. This attempt may include more creative advertising such as announcements in neighborhood newsletters, television spots on the local cable channel, or announcements at civic meetings. The goal is to involve a diverse cross-section of people and businesses in the community.

Some examples of public participation opportunities include volunteer water quality monitoring, community clean up days, and adopt a drain/adopt a stream programs.

*Illicit discharge detection and elimination (122.34(b)(3))*

An illicit discharge, typically, is any discharge to a municipal separate storm sewer system that is not storm water. However, there are some exceptions, such as fire fighting activities and permitted non-storm water discharges. The permit also lists other types of non-storm water which can be discharged provided they are not significant contributors of pollutants to the system. Illicit discharges are those discharges which enter the system directly such as incorrectly connected wastewater discharges, or indirectly, such as infiltration from cracked sanitary lines or spills collected by drain outlets. These types of discharges can contribute pollutants which affect the water quality. This minimum measure requires the MS4 to detect and eliminate illicit discharges from their system. There are four components of this measure. The MS4 must:

1. develop a map of the storm sewer system which shows the outfalls and names of the receiving water. If a map already exists, then this requirement is met. Mapping done with a GIS system is probably the most useful, however specific mapping methodology is not described or required by the permit. The mapping does not need to be complete when the NOI is submitted. Mapping must be complete by the end of the first

permit term. A MS4 may choose to map portions of the community each year of the permit, or focus on an area of high recreational or environmental value. Each MS4 must evaluate their community to make these decisions.

2. through the use of an ordinance, or other regulatory mechanism, prohibit non-storm water discharges to the storm sewer system, and provide for enforcement procedures and actions. EPA recognizes that municipalities subject to Parts IV and V of this permit do not have authority to pass an ordinance. They must evaluate existing policies and procedures and use those in the development of a regulatory mechanism.

3. develop and implement a plan to detect and address non-storm water discharges. The ability to implement the plan is dependent on several factors including resources, staff size, and characteristics of the system. The following four steps can be used as a guideline for implementation of this part. First, locate the problem areas in the community. This may include areas of known problems, visual screening results, or areas with public complaints. Second, determine the source of the problem. This may take additional effort. Some methods include the use of dye testing or smoke testing, or video inspection. Third, if the source is identified, it must be removed. Communities will need to develop a plan for who and how these illicit sources are removed from the system. And finally, document the actions that were taken. This documentation illustrates the MS4's progress towards elimination of the connections.

4. inform public employees, businesses, and the general public of the hazards associated with illegal discharges. This requirement ties in the first minimum control measure regarding public education. It also can tie into the second minimum measure with regard to establishment of a program to allow citizens to report illicit discharges.

*Construction site storm water runoff control (122.34(b)(4))*

MS4s are required to develop, implement and enforce a program to reduce pollutants in storm water runoff from construction activities that result in a land disturbance of greater than or equal to one acre. The following are the elements of this control measure:

- Have an ordinance or other regulatory mechanism requiring proper sediment and erosion control, and controls for other wastes on constructions sites.
-have procedures for site plan review of construction plans
- have procedures for site inspections and enforcement
-have procedures for receipt and consideration of comments submitted by the public.

MS4s should review what existing procedures are in place for these activities. Often plans are seen by the planning board, and not the public works staff. A MS4 should look at the various components of the local government and whenever possible, optimize coordination between municipal offices.

Municipalities in Massachusetts may use the standard 8 in the state's storm water policy to implement part of this minimum measure. Standard 8: Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities. This meets the requirement of the construction minimum control

measure regarding construction site operators to implement a sediment and erosion control program. See Part II.B.4.c. of the permit.

*Post Construction Storm Water Management (122.34(b)(5))*

This measure applies in areas of new development and redevelopment. Studies have indicated that prior planning and design for the minimization of pollutants in post construction storm water discharges is the most cost-effective approach to storm water quality management. Post construction runoff causes two types of 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. The second impact occurs with an increase in the quantity of water that is delivered to water bodies during storm events. Increases in impervious area decrease the amount of water which naturally infiltrates into the ground. This increased flow can cause stream bank scouring and flooding.

This minimum measure requires the MS4 to develop, implement and enforce a program to reduce pollutants in post construction runoff from areas of new development and redevelopment. This measure applies to projects which are greater than or equal to one acre. In order to implement this measure, the MS4 must:

-develop and implement strategies which include a combination of structural and/or non-structural BMPs. Examples of non-structural controls include planning, zoning, or other local requirements such as buffer zones. Examples of structural controls include the use of storage, infiltration basins, or vegetative practices such as rain gardens or artificial wetlands.

-use an ordinance or other regulatory mechanism to address post construction.

-ensure adequate long-term operation and maintenance of BMPs.

Municipalities in Massachusetts may use the state's storm water policy to implement this minimum measures. Specifically, standards 2, 3, 4 and 7 of the storm water policy, may be used.

Standard 2: Storm water management systems must be designed so that post construction peak discharge rates do not exceed pre-development discharge rates.

Standard 3: Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge rate from the pre-development or existing site conditions, based on soil types.

Standard 4: For new development, storm water management systems must be designed to remove 80% of the average annual load (post development conditions) of Total Suspended Solids (TSS). It is presumed that this standard is met when:

- Suitable non-structural practices for source control and pollution prevention are implemented;
- Storm water management best management practices are sized to capture the prescribed runoff volume; and
- Storm water management BMPs are maintained as designed.

Standard 7: Redevelopment of previously developed sites must meet the Storm Water Management Standards to the maximum extent practicable. However, if it is not practicable to meet all the standards, new (retrofitted or expanded)

storm water management systems must be designed to improve existing conditions. These four standards meet the requirements of Part II.B.5.

*Pollution Prevention/Good Housekeeping (122.34(b)(6))*

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 municipal operations. The program must include training to prevent or reduce pollutants from activities such as, park and open space maintenance, fleet maintenance and building maintenance, new construction and land disturbance, and storm water system maintenance. In order to implement this measure, MS4s should evaluate maintenance activities, maintenance schedules, and long term inspection procedures for controls to reduce floatables and other pollutants. Evaluate controls for reducing or eliminating discharges from roads, municipal parking lots, maintenance and storage yards, waste transfer stations, salt/sand storage locations, and snow disposal areas. Develop procedures for disposal of waste material.

The permit encourages the consideration of infiltration and ground water recharge when implementing the minimum measures. However, storm water discharges which are infiltrated may be subject to the Safe Drinking Water Act at 40 CFR part 144. The SDWA established the basic frame work for protecting drinking waters of the United States. This Act requires the Environmental Protection Agency (EPA) to regulate underground injection of waste fluids through subsurface wastewater disposal systems that discharge wastes into, or above, underground sources of drinking water. These regulations, often referred to as the Underground Injection Control (UIC) regulations, are designed to protect the country's drinking water supply. EPA has delegated authority to each New England state to implement state subsurface wastewater disposal programs. Indian lands in Massachusetts are covered under an agreement between tribes and the state; Indian lands in Connecticut and Rhode Island are covered under EPA authority.

The permit does not specify specific BMPs, such as street sweeping or catch basin cleaning. Nor does it specify a frequency for those BMPs. Proper implementation of this program will require each MS4 to determine what are appropriate BMPs for their community. A one size fits all approach will not necessarily work. EPA has developed several tools to assist MS4s in the development of their storm water management programs. Listed below are some of the resources available:

1. Storm Water Phase II Compliance Assistance Guide (EPA/833-R-00-002- March 2002)
2. Menu of BMPs available at: http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm
3. Measurable Goals Guidance available at: http://www.epa.gov/npdes/menuofbmps/menu.htm
4. EPA Storm Water Home page: http://cfpub1.epa.gov/npdes/home.cfm?program_id=6. This site contains links to storm water publications, model ordinances, and educational materials.
5. Source Water Practices Bulletin. Managing Storm Water Runoff to Prevent Contamination of Drinking

Water: http://www.epa.gov/safewater/swp/stormwater.pdf

6. EPA Region 1 will be mailing to all municipalities in the urbanized areas subject to this permit a map which depicts the boundaries of the urbanized area within the boundaries of the community . As mentioned previously in the fact sheet, development and implementation of the SWMP is for the urbanized area, however for some communities, it may be more beneficial to implement the plan community wide.

*Program Evaluation (122.34(g)(1))*

The permittee must evaluate their program for the following, compliance with the terms of the permit, the appropriateness of the identified BMPs and progress towards achieving the measurable goals. The permittee may need to change their storm water management program based on this evaluation process. The permittee may also need to change their storm water management program based on the need to address water quality impacts, to include more stringent requirements to comply with Federal law, or to include conditions necessary to comply with the goals of the Clean Water Act.

*Record Keeping (122. 34(g)(2))*

All records required by this permit must be kept for a period of three years. Records need to be submitted only when requested by the permitting authority. The permittee's storm water management program must be available to the public. The permittee may charge reasonable fees for copies.

*Reporting (122.34(g)(3))*

The permittee must submit an annual report. 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 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. Discuss any changes to either BMPs or measurable goals. The report must indicate if any minimum control measure or measurable goal is the responsibility of another entity.

All reports must be submitted to the address provided in the permit. Small MS4s located in Massachusetts and New Hampshire must also submit reports to the state agencies.

All discharges to coastal waters, especially those which are beaches, should consider these waters a priority in the implementation of their storm water management program.

*Relying on Another Entity (122.35)*

The permit allows for an MS4 to rely on another entity for implementation of all or part of a minimum control measure. The permittee may rely on the other entity if they in fact are implementing the measure. The measure that the other entity is implementing must be at least as stringent as the requirement in the permit. The other entity must agree to implement the measure for the MS4. EPA recommends the use of a legal agreement. This agreement should be included as part of the storm water management program. If the other party fails to implement the measure, the permittee is responsible for its implementation.

J. Standard Permit Conditions

40 CFR Sections 122.41 and 122.42 establish requirements which must be in all NPDES permits. Part VI of the general permit includes these requirements.

K. State (401) 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 in both States. In addition, EPA and the Commonwealth of Massachusetts will jointly issue the final permit. Specific 401 certification requirements are contained in Part IX of the permit.

L. The 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. EPA has requested the Executive Office of Environmental Affairs, MA CZM, 251 Causeway Street, 9th Floor, Boston, MA 02114; and the Office of State Planning, New Hampshire Coastal Program, 2½ Beacon Street, Concord, NH 03301, to review EPA's consistency determination for the proposed general permit. Each State's coastal program office has the responsibility to confirm to EPA that the general permit is consistent with its coastal zone management program.

M. Environmental Impact Statement Requirements

The general permits do not authorize discharges from any new sources as defined under 40 CFR Section 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.

N. Section 404 Dredge and Fill Operations

This permit does not constitute authorization under 33 USC Section 1344 (Section 404 of the Clean Water Act) of any stream dredging or filling operations.

**V. Other Legal Requirements**

A. Executive Order 12866

EPA has determined that this general permit is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

B. Paperwork Reduction Act

The information collection requirements of this permit were previously approved by the Office of Management and Budget 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 ( Discharge Monitoring Reports).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 USC 601 et seq., requires that EPA prepare a regulatory flexibility analysis for rules subject to the requirements of 5 USC 553(b) that have a significant impact on a substantial number of small entities. The permit issued today, however, is not a "rule" subject to the requirements of 5 USC 553(b) and is therefore not subject to the Regulatory Flexibility Act.

D. 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" (defined to be the same as "rules" subject to the RFA) on tribal, state and local governments and the private sector. The permit issued today, however, is not a "rule" subject to the RFA and is therefore not subject to the requirements of UMRA.

_____ _____

Date

Robert W. Varney
Regional Administrator