Chapter 1 - Introduction BACKGROUND

As result of the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999, the New Jersey Department of Environmental Protection (Department) has developed the Municipal Stormwater Regulation Program. This program addresses pollutants entering our waters from certain storm drainage systems owned or operated by local, county, State, interstate, or federal government agencies.



The Municipal Stormwater Regulation Program is part of the Clean and Plentiful Water initiative.

USEPA regulations refer to these systems as "municipal separate storm sewer systems" (MS4s). As a result of USEPA's new Phase II rules, the Department's Municipal Stormwater Regulation Program has issued New Jersey Pollutant Discharge Elimination System (NJPDES) permits to highway agencies, as well as public complexes, and municipalities throughout the state. Public complexes include certain large public colleges, prisons, hospital complexes and military bases. Highway Agencies include county, state, interstate, or federal government agencies that operate highways and other thoroughfares such as each of the 21 counties, the New Jersey Department of Transportation, the Port Authority of N.Y. and N.J., the New Jersey Turnpike Authority, and the South Jersey Transportation Authority. The Department's revised NJPDES stormwater rules were signed on January 5, 2004 by Commissioner Bradley Campbell, and appear in the February 2, 2004 edition of the New Jersey Register at 36 N.J.R. 813(a).

WHY IS THIS HAPPENING?

It is widely understood that stormwater/nonpoint sources are the largest remaining major source of pollutants in our waters. It is estimated that up to 60 percent of our existing water pollution problems are attributable to stormwater/nonpoint pollution. The quality of our surface and ground waters is directly related to the health of our ecosystems and the quality of our lives. Opportunities



"Floatables," like the trash seen here, contribute to stormwater/nonpoint pollution.

to engage in boating, swimming and fishing are diminished if water quality is impaired. Impaired water quality impacts shellfish production, tourism at beaches and coastal communities, and increases drinking water treatment costs.

Stormwater/nonpoint pollution can often be linked to our daily activities and lifestyles. The way we plan communities, build shopping centers, commute, and maintain lawns all impact stormwater quality. Many times people do not know or understand that there are alternatives. For example, homeowners can have a green lawn without massive doses of fertilizers and pesticides, pet owners should deposit pet waste in the trash or in the toilet

and not leave it at the curb. Often there is a lack of public awareness. People are unaware that storm drains often discharge directly to water bodies. When people allow motor oil, trash, and their pet's waste to enter the storm sewer in their street, they don't realize that it may end up in the lake down the block or many miles away. Individually these acts may seem insignificant, but the cumulative impacts of these activities contribute to stormwater/nonpoint source pollution and reduce water quality.

USEPA and the State of New Jersey realize the critical importance of substantially reducing stormwater/nonpoint pollution entering into the waters of the state. The Municipal Stormwater Regulation Program attempts to do just that, through the implementation of Statewide Basic Requirements (SBRs) and Best Management Practices (BMPs) including public education, contained in the NJPDES Stormwater General Permits.

PROGRAM AND PERMIT DEVELOPMENT

The Department developed the Municipal Stormwater Regulation Program with input from members of the regulated community, affected governmental agencies, and the public. The Department established an advisory group that included representatives from the New Jersey Department of Transportation, municipalities and groups such as the New Jersey State League of Municipalities, New Jersey County Planners Association and the Association of New Jersey Environmental Commissions. A Best Management Practice subcommittee was also formed to assist in the development of practical best management practices for the general permits. This subcommittee included representatives of municipal and county public works departments, and the New Jersey Department of Transportation and other Highway Agencies.

PERMITS AND PERMIT REQUIREMENTS

The Department has issued four general permits to implement the Municipal Stormwater Regulation Program: the Highway Agency Stormwater General Permit (Highway Permit); the Public Complex Stormwater General Permit (Public Complex Permit); the Tier A Municipal Stormwater General Permit (Tier A Permit); and the Tier B Municipal Stormwater General Permit (Tier B Permit).

The permits address stormwater quality issues related to new development, redevelopment and existing development by requiring the development of a stormwater program and implementation of specific permit requirements referred to as Statewide Basic Requirements (SBRs). SBRs may also require the permittee to implement related best management practices



Highway Agencies must comply with applicable design and performance standards in N.J.A.C. 7:8 for their own "new development and redevelopment projects".

(BMPs). All SBRs and related BMPs contain minimum standards, measurable goals, and implementation schedules. New development and redevelopment is addressed, in part, by requiring Highway Agencies, municipalities, and Public Complexes to comply with applicable design and performance standards established under N.J.A.C. 7:8 for certain projects. Existing development is addressed through broad topics including Local Public Education, and (for the Tier A, Public

Complex and Highway Permits) Improper Disposal of Waste, Solids and Floatable Controls, Maintenance Yard Operations and Employee Training.

The Highway Permit, Public Complex Permit, Tier A Permit, and Tier B Permit, may require the implementation of Additional Measures (AMs). AMs are measures (non-numeric or numeric effluent limitations) that may modify or be in addition to the SBRs required by the permits, and whose inclusion in a stormwater program may be required by a Water Quality Management Plan (WQM plan). AMs may be required by Total Maximum Daily Loads (TMDLs) approved or established by USEPA, regional stormwater management plans, or other elements of WQM plans. (See Chapter 10 for more details.)

The permits also allow for the inclusion of Optional Measures (in the Tier B Permit they are referred to as "Other Measures"). These are BMPs that are not specifically required by the permit but are recommended as ways to further enhance a stormwater program and improve water quality.



Wildlife management, an Optional Measure, may include geese population control techniques.

PURPOSE OF THIS GUIDANCE DOCUMENT

The purpose of this Guidance Document is to assist the Highway Agency in understanding what is required under the Phase II Municipal Stormwater Regulation Program, and how to comply with the Highway Permit.

The Guidance Document includes various chapters, many of which are solely dedicated to discussing specific permit requirements. These permit requirements are either Statewide Basic Requirements (SBRs) or related Best Management Practices (BMPs). Each specific permit requirement, whether it be a SBR or BMP, is broken down into three section headings: "What is required?," "What does this mean?" and "Want to know more?" These section headings are intended to make understanding and implementing the permit language easier.

"What is required?" is language taken directly from the permit, and follows the same convention as in the permit: minimum standard, measurable goal, and implementation schedule. The minimum standard is one or more minimum actions that must be taken to comply with the requirements of the permit. The measurable goal is the mechanism for reporting to the Department your progress in meeting the minimum standard and is usually accomplished through the submittal of the Annual Report and Certification. The implementation schedule sets the deadlines for permit compliance.

"What does this mean?" explains the SBR or BMP minimum standard in an easier to understand format.

"Want to know more?" covers other information that may be of interest to your Highway Agency, but is not necessary to know in order to comply with the permit. This section discusses why each BMP is important and what environmental benefits may result from their implementation. The Department may also make recommendations in "Want to know more?" that may be beneficial in implementing your program, but are not required by the permit.