

## U.S. Environmental Protection Agency - October 2007 Compliance and Enforcement National Priority Clean Water Act, Wet Weather, Storm Water

## What is the Environmental Problem?

Storm water discharges continues to be a national enforcement and compliance priority. Storm water runoff from urban areas, including discharges from municipal storm sewers, industrial facilities and construction sites can have significant adverse impacts on water quality. These water quality impacts can be defined by two key problems - storm water quality and storm water quantity. EPA's *National Water Quality Inventory: 2000 Report*, prepared under Section 305(b) of the Clean Water Act, states that urban storm water runoff and discharges from storm sewers are a primary cause of impaired water quality in the United States. Runoff from rain and melting snow is responsible for beach closings, swimming and fishing advisories, and habitat degradation.

As storm water flows through urbanized areas, or over construction or industrial sites, it can pick up a variety of pollutants that can harm the environment and public health, including bacteria, sediment, debris, pesticides, petroleum products, chemicals, solvents, asphalts and acids. Without on-site controls, this storm water generally flows untreated directly to the nearest waterway. The large number of municipal separate storm water sewer systems or Municipal Separate Storm Sewer Systems (MS4s) (about 8,000), construction sites (over 240,000 new sites per year), and industrial sites (over 100,000), and the diversity of these activities, make this a large and complex problem.

Changes in land use associated with development and urban sprawl affect the volume and rate of storm water discharged to receiving streams. The volume and rate of storm water runoff will continue to grow as development replaces porous surfaces with impervious blacktop, rooftops, compacted soil, and concrete. In urban areas, it is not uncommon for impervious surfaces to account for 45% or more of the land cover. The increasing volumes and rates of storm water runoff can affect the equilibrium that exists in natural, undisturbed waters, resulting in such impacts as increased stream bank erosion, which in turn causes increased silt in waterways and habitat destruction. With land development and sprawl increasing at a rate faster than population growth, urbanization's negative impact on water quality is a significant problem that may only get worse without more aggressive controls.

## **How and Why OECA is Addressing the Problem?**

EPA will use compliance assistance, compliance monitoring and enforcement tools, as appropriate, towards achieving goals and environmental outcomes of the strategy. During 2008 - 2010, EPA will focus on three main areas of the storm water program:

(1) homebuilding construction; (2) big box store<sup>1</sup> construction; and, (3) ready mix concrete<sup>2</sup> with crushed stone and sand and gravel operations. The size and diversity of these sectors, and the levels of observed noncompliance, reveal the problem to be national in scope. As a result, the Agency can play a unique and significant role in addressing this problem. For example, many construction and industrial companies operate nationwide in multiple states, and EPA has the ability to take enforcement actions that address these companies on a national basis. In addition, EPA is able to provide consistent and widespread compliance assistance to these sectors. Finally, EPA is also exploring whether the following sectors should be considered for additional focus in future years: MS4s, Ports, Road Building, and Federal Facility Construction.

## Highlights from the FY 2005-2007 Planning Cycle

From 2000 - 2006, EPA has conducted over 4,500 storm water inspections and 37 MS4 audits. Compliance and enforcement activities in the construction sector have reduced the amount of sediment that would have been discharged by an estimated 281 million pounds in FY2005 and 195 million pounds in FY2006. EPA has provided compliance assistance to state agencies and the regulated community, and has developed several enforcement and compliance tools to help meet the strategy goals. For example, EPA finalized the Storm Water Post-Inspection Implementation Guide and its associated fact sheet and web site, and a brochure, "Role of Local Governments in Implementing the NPDES Storm Water Program for Construction Sites," which provide information to the regulated community about the storm water program. EPA also provided numerous seminars and workshops to the regulated community and states on the storm water program to increase awareness, improve understanding, improve environmental management practices, and reduce pollution. To measure reductions in pollutants discharged as a result of enforcement activities, EPA developed pollutant reduction calculators for 19 of the 29 non-construction industries included in the Multi-Sector General Permit. EPA also issued revised guidance for Expedited Settlement Offers for the construction sector in response to concerns from the regulated community, and developed a MS4 Audit/Inspection Train-the-Trainer Workshop to improve and enhance state capability to conduct audits and inspections of MS4 permittees.

There is no universal definition of a Big Box Store. As a result the Strategy focused on three factors: average square footage of a company's store (average footprint), the company's total revenues, and the number of new stores a company projects will be constructed over the next 3 years. Taken together these factors can be an indicator of a company's potential impact on the environment.

The Strategy focuses on a group of sectors composed of three "sub-groups": 1) sand and gravel producers (SIC code 144), 2) crushed stone producers (SIC code 142), and 3) ready-mix concrete producers (SIC 3273). These sectors were selected based on EPA inspections which indicated noncompliance and environmental impacts associated with each sub-sector to be significant and approximately equivalent.

<sup>&</sup>lt;sup>1</sup> Big Box Store:

<sup>&</sup>lt;sup>2</sup> Ready Mix Concrete/Crushed Stone/Sand and Gravel: