



# MUNICIPAL OPERATIONS STORM WATER POLLUTION PREVENTION

City of Lexington

Volume 1, Issue 1

January 1, 2008

Welcome to the inaugural issue of the *Storm Water Pollution Prevention Bulletin*. This bulletin is published by the Storm Water Management Program to support the City of Lexington staff in their efforts to achieve and maintain compliance with storm water pollution prevention regulatory requirements. Topics will include technical information regarding practices and solutions, Storm Water Management Program activities and findings, sources of additional information, and examples of effective practices encountered during inspections.



## *Dilution Is No longer The Solution!*

The primary storm water regulatory requirements of concern are related to the National Pollutant Discharge Elimination System (NPDES). The NPDES, a program under the Federal Clean Water Act, regulates storm water runoff from storm water drainage systems, construction sites and industrial activities. City of Lexington maintenance activity is subject to NPDES regulations because city right of way and maintenance facilities are served by municipal storm drainage systems. In performing normal daily activities, the maintenance staff has the potential to introduce numerous pollutants to the municipal storm drainage systems that ultimately discharge to streams, lakes and the ocean.

**Trash and Debris:** Paper, Styrofoam, plastic, aluminum cans, etc., transported by wind and storm water, can impact water quality and clog storm drainage systems.

**Metals:** Dissolved metals and metal particulates attached to sediment, such as lead, can be transported to receiving waters by storm runoff. Heavy metals can impair development or kill sensitive aquatic species, and can accumulate in other species, to be passed up the food chain to our tables.

**pH:** Acid from lead batteries, concrete rinse water, and saw cut slurry can alter the pH (acidity or alkalinity) in receiving waters.

**Nutrients:** Nitrogen and phosphorus from fertilizers, decaying vegetation and other sources, contribute to algal "blooms" (excessive algae growth) that deplete oxygen for fish and other aquatic life.

**Organic Compounds:** In addition to the petroleum products already mentioned, solvents (paint thinners, degreasers and parts cleaning fluids), certain paints, deicing chemicals, and crack and joint repair products can pollute storm water runoff.

**Other Pollutants:** Other common maintenance facility-related pollutants include pesticides, synthetic detergents (used for cleaning vehicles and equipment), and epoxy resins in bonding and adhesive materials—any of which can contaminate storm water.

For additional information on the City of Lexington Storm Water Program, or if you have questions contact:

Bill Brecks

Building Dept.

308-324-2341

## What? Me Pollute?

Some municipal operations-related pollutants are obvious—pesticides, metals and chemicals, to name a few. Other pollutants are not so obvious, yet are potentially as detrimental to the environment if unchecked. The most common sources of pollution that may be associated with City of Lexington field operations are:

**Petroleum Products:** Gasoline, diesel fuel, motor oil, lubricants, and asphalt material can be toxic to human and aquatic life. A single quart of motor oil improperly disposed of, could pollute 25,000 gallons of drinking water.

**Sediments:** Excessive sedimentation causes water quality problems and degrades the habitat of aquatic organisms and fish. Sedimentation can fill in gravel beds that are used by trout, salmon and steelhead for breeding.

