Chapter 6 – Source Control Practices and Pollution Prevention

Introduction

Controlling the sources of pollution and preventing pollutant exposure to stormwater is an important aspect of an effective stormwater management strategy. Source control practices and pollution prevention are operational practices that limit the generation of stormwater pollutants at their source. Most are typically non-structural, require minimal or no land area, and can be implemented with moderate cost and effort as compared to structural measures.

Source control practices and pollution prevention should be incorporated, to the maximum extent practicable, into the site design and operational aspects of all land development projects, including but not limited to new development and redevelopment activities associated with:

- Commercial and industrial sites
- Institutional facilities
- Residential development
- Municipal facilities and operations

Over the past several decades, a large amount of information on stormwater source control and pollution prevention practices has been developed and refined as part of the CT DEEP stormwater general permit programs, including the MS4 General Permit (Good Housekeeping and Pollution Prevention for Municipal Operations), Industrial Stormwater General Permit, and Commercial Stormwater General Permit. Many other Connecticut-specific and regional information sources are available on these topics through organizations such as the CT Nonpoint Education for Municipal Officials (NEMO) Program, UConn Center for Land Use Education and Research (CLEAR), and watershed groups throughout the state.

This chapter has been revised and abbreviated to provide basic guidance on the use of source control practices and pollution prevention for common land development activities and land use settings in the State of Connecticut. Website links are provided to other available sources of more detailed information on each topic, rather than duplicating the information in this
document, which may become outdated over time. CT DEEP may periodically update the website links and add or remove information sources.

**Recommended Practices**

This section provides guidance on the use of the following source control and pollution prevention practices for development-related activities in commercial, industrial, institutional, residential, and municipal settings. This list of practices is not exhaustive; the use of other source control and pollution prevention practices is also encouraged.

**Street and Parking Lot Sweeping.** Street and parking lot sweeping helps remove sediment and debris from paved surfaces, reducing exposure of these materials to stormwater runoff and transport to waterbodies.

**Winter Road Materials Management.** Salts, sand, and other materials are applied to roadways for improved safety during adverse winter weather conditions. Ant-icing and deicing materials can have adverse effects on surface waters, groundwater, drinking water supplies and public health, vegetation, soils, and aquatic life. Proper application and storage of anti-icing/deicing materials is important to avoid or minimize environmental and public health impacts.

**Snow Storage and Disposal.** Snow accumulated from plowing activities can be a source of contaminants and sediment to surface waters if not properly located and maintained.

**Catch Basin Cleaning and Storm Drainage System Maintenance.** Regular inspection and cleaning of catch basins and other storm drain system components preserves the stormwater management functions of the drainage system and helps reduce the discharge of pollutants from the drainage system. Inspection and maintenance of structural stormwater BMPs is addressed in other sections of this Manual.

**Subsurface Sewage Disposal System Management.** Approximately 40 percent of Connecticut’s population relies on subsurface sewage disposal systems (also called septic systems). Failing or older, sub-standard systems can be major sources of pollution to surface waters and groundwater.

**Illicit Discharge Detection and Elimination.** Illicit discharges are unpermitted discharges to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater, except certain allowable non-stormwater discharges. Wastewater connections to the storm drain system and illegal dumping are among the types of illicit discharges that can occur. Depending on the source, an illicit discharge may contain a variety of pollutants that can impact both human health and the aquatic environment. Identifying and eliminating these discharges is an important means of pollution source control in a stormwater drainage system.