

Definitions of Key Terms

Wet Weather Team Project, October 2007

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| Avoidable | A legal term of art meaning that a consequence could have been prevented with the exercise of reasonable engineering judgment in facilities planning and implementation, and/or adequate management, operations, and maintenance practices.* |
| Biochemical Oxygen Demand (BOD) | A measurement of the amount of oxygen used by the decomposition of organic material over a specified time period (usually 5 days) in a wastewater sample. Used as a measurement of the readily decomposable organic content of water.† |
| Best Available Technology Economically Achievable (BAT) | A technology-based standard established by the Clean Water Act as the most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.* |
| Best Conventional Pollutant Control Technology (BCT) | A technology-based standard for discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, oil, and grease. The BCT is established in light of a two-part “cost reasonableness” test.* |
| Best Management Practices (BMPs) | Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practice to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.* |
| Combined Sewer Overflow (CSO) | A discharge of untreated wastewater from a combined sewer system at a point prior to the headworks of a publicly owned treatment works. CSOs generally occur during wet weather (rainfall or snowmelt). During periods of wet weather, these systems become overloaded, bypass the treatment works, and discharge directly to receiving waters.* |
| Combined Sewer System (CSS) | A wastewater collection system that conveys sanitary wastewater and stormwater through a single pipe to a publicly owned treatment works for treatment prior to discharge to surface waters.* |
| Dissolved Oxygen (DO) | A measurement of the amount of oxygen dissolved in water. |
| Fecal Coliform | Rod-shaped bacteria present in the feces of warm-blooded animals.† |

* Adapted from Water Environment Federation, *Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Systems*, Draft – February 2006.

† Adapted from EPA, “National Pollutant Discharge Elimination System Glossary,” http://cfpub.epa.gov/npdes/glossary.cfm?program_id=0.

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| Green Infrastructure | An adaptable term used to describe an array of products, technologies, and practices that use natural systems—or engineered systems that mimic natural processes—to enhance overall environmental quality and provide utility services. As a general principal, green infrastructure techniques use soils and vegetation to infiltrate, evapotranspire, and/or recycle stormwater runoff. Examples of green infrastructure include green roofs, porous pavement, rain gardens, and vegetated swales. |
| Infiltration | Water other than wastewater that enters a wastewater system and building sewers from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include inflow. [‡] |
| Inflow | Water other than wastewater that enters a wastewater system and building sewer from sources such as stormwaters, surface runoff and drainage. Inflow does not include infiltration. [‡] |
| National Pollutant Discharge Elimination System (NPDES) | A national program under the Clean Water Act that regulates discharges of pollutants from point sources to waters of the United States. Discharges are illegal unless authorized by an NPDES permit.* |
| Pathogen | An organism capable of causing disease, including disease-causing bacteria, protozoa, and viruses. [†] |
| Peak Flow | The maximum flow that occurs over a specific length of time (e.g., daily, hourly, instantaneous). [‡] |
| Primary Treatment | The practice of removing some portion of the suspended solids and organic matter in wastewater through sedimentation. Common usage of this term also includes preliminary treatment to remove wastewater constituents that may cause maintenance or operational problems in the system (i.e., grit removal, screening for rags and debris, oil, and grease removal, etc.).* |
| Sanitary Sewer | A pipe or conduit (sewer) intended to carry wastewater or water-borne wastes from homes, businesses, and industries to the publicly owned treatment works.* |
| Sanitary Sewer Overflow (SSO) | Untreated or partially treated sewage overflow from a sanitary sewer collection system.* |
| Secondary Treatment | Technology-based requirements for direct discharging from municipal sewage treatment facilities. The standard is based on a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are expressed as a minimum level of effluent quality in terms of: 5-day BOD, suspended solids, and pH.* |

[‡] Adapted from EPA, *Report to Congress on Implementation and Enforcement of the CSO Control Policy*, http://cfpub.epa.gov/npdes/cso/cpolicy_report.cfm?program_id=5.

Sensitive Areas

Areas of particular environmental significance or sensitivity that could be adversely affected by a combined sewer overflow.‡

Total Suspended Solids (TSS)

A measure of the filterable solids present in a sample.*