General Design Criteria

The following are general design criteria for proprietary stormwater BMPs, in addition to the design criteria specified by the device manufacturer and any design criteria and/or use limitations upon which the third-party performance certification is based.

- The proprietary BMP should be designed and installed with the same configuration utilized during the performance verification testing.
- Locate proprietary BMPs to be accessible for maintenance and/or emergency removal of oil or chemical spills.
- Designs for hydrodynamic separators may not include grate inlets directly into the unit unless they were specifically tested with this type of inlet.
- Proprietary BMPs subject to vehicular loading should be designed for at least HS-20 traffic loading at the surface.
- All joints and connections should be watertight.
- The manhole cover, or other approved permanent marker, should clearly indicate that the BMP is a pollutant-trapping device.
- Proprietary BMPs should be designed to safely convey overflows to downgradient drainage systems, including overflow structures designed to provide safe, stable discharge of stormwater runoff in the event of an overflow.
- Any connection to downgradient stormwater management facilities should include access points such as inspections ports and manholes for visual inspection and maintenance, as appropriate, to prevent blockage of flow and ensure operation as intended.
- Tailwater effects should be considered based upon the manufacturer’s recommendations.

Maintenance of Proprietary BMPs

Proprietary devices should be inspected and maintained regularly for continued effectiveness as pretreatment or treatment systems. The following minimum maintenance guidelines are recommended for proprietary stormwater BMPs.

- Maintain proprietary BMPs in accordance with the manufacturer’s guidelines.
➢ Perform inspections of proprietary devices a minimum of 2 times per year – in late Spring after snowmelt and in late Fall after leaf fall and before the first snowfall.

➢ During inspections, examined the device for standing water. If standing water is present in the device, and standing water is not a component of the design, take corrective action and revise the maintenance plan to prevent similar failures in the future.

➢ Clean proprietary BMPs when pollutant removal capacity is reduced by 50% or more, or when the pollutant storage capacity is reduced by 50% or more.

➢ Typical maintenance includes removal of accumulated oil and grease, floatables, and sediment using a vacuum truck or other catch basin cleaning equipment.

➢ The Operation and Maintenance (O&M) Plan should indicate the maximum allowable level of oil, sediment, and debris accumulation. These levels should be monitored during inspections to ensure that removal of these materials is performed when necessary.

➢ Dispose of material removed from the device in accordance with CT DEEP guidelines (see Chapter 6 - Source Control Practices and Pollution Prevention) and other state and federal requirements by a properly licensed contractor.

Refer to Chapter 7 - Overview of Structural Stormwater Best Management Practices for additional design considerations to facilitate and reduce maintenance and for general inspection and maintenance requirements. Maintenance provisions for proprietary stormwater BMPs should be included in the required O&M Plan and Stormwater Management Plan (see Chapter 12 – Stormwater Management Plan).