

### **You can reduce costs and liability by:**

- Checking dumpsters and property daily for litter,
- Evaluating outside practices that can cause “toxic” disposal costs,
- Covering and elevating outside storage of chemicals, and
- Making employees aware of storm-water management structures and their function.

### **References:**

Schueler, T.R. 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Washington Council of Governments, Washington, DC.

Environmental Protection Agency. Waste, Chemical, and Cleanup Enforcement. May 12, 2014.

<http://www2.epa.gov/enforcement/waste-chemical-and-cleanup-enforcement> (accessed July 21, 2014).



## **Commercial Stormwater Maintenance and Management**

Polluted runoff is the nation’s greatest threat to clean water. In 1990, the Environmental Protection Agency promulgated regulations to improve the quality of storm water. Enclosed is information as to how you can assist with compliance with these regulations.

### *Planning Department*

315 Saint Joseph Street, Suite 118  
Rapid City, SD 57701  
Phone: 605-394-2186  
Fax: 605-394-6016  
E-mail: [plz@pennco.org](mailto:plz@pennco.org)

***A guide for business owners and commercial property operators.***

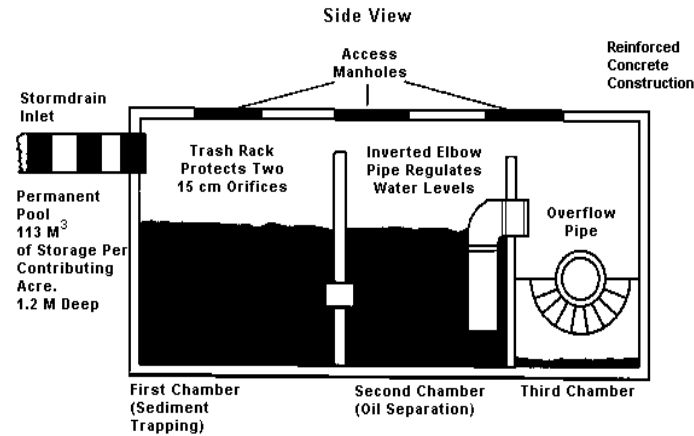
## What is Stormwater?

Stormwater is water from precipitation (such as rain or snowmelt), over-irrigation from sprinklers, wash water from hoses or hydrants, any other water that flows over the ground surface and enters a drainage way.

## Stormwater Management Structures

Owners and operators of gasoline stations, auto repair shops, office parks, and other commercial properties should be aware of the maintenance requirements of stormwater management structures located on their site. These stormwater facilities usually store stormwater runoff under parking lots in large corrugated metal pipes or concrete vaults. Some properties have surface structures (wet or dry ponds) where land area is available. Other structures, such as sand filters, are used for pretreatment of stormwater before discharge to a pond or underground structure. All of these structures, such as maintenance intensive oil/grit separators, require regular inspection and at least annual maintenance to ensure they function as designed.

### Schematic of an oil/grit separator



(Schueler, 1987)

## Underground—Out of Site, Out of Mind

Storage structures located underground are designed to prevent post storm flushing of stormwater from sites and provide a minimal amount of pollutant removal. Some more modern structures have sand filters to pretreat stormwater. These filters can remove oil, grease, and other pollutants.

Oil/grit separators provide some settling of pollutants, but in most cases during large storm events, the inside of the structure is scoured and flush out the contaminants into the storm sewer and eventually into the creek. Cleaning and maintenance of these structures is essential to prevent impacts to the creek.

## Chemical Storage

Chemicals from degreasing operations, or chemicals stored outside can get washed into stormwater structures. Covering and elevating outside waste wastes oil or chemical containers, storing degreasing equipment indoors and having a spill preparedness plan will help to reduce potential stormwater contamination from on site chemicals. In addition, it will help protect creeks and streams in the area and reduce liability by controlling pollutants on site.



Hazardous waste drums stored improperly at an industrial waste facility. Drums must have proper labeling, sufficient aisle space, and be stored no more than two tiers high.

(Environmental Protection Agency 2014)