

# Join the Clean Water Partners Program!

For information on this exciting volunteer business program call or visit our web page!

# Join the EcoWise Program!

EcoWise is a program to help with the waste disposal of small quantity hazardous waste generators. Call the Division of Solid Waste Services at 240-777-6400 for more information.



#### For More Information:

Department of Environmental Protection 250 Hungerford Dr. Suite 120 Rockville, Maryland 20850 Tel. 240.777.7700

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# Commercial Stormwater Facility Maintenance

A GUIDE TO OIL/GRIT SEPARATORS, UNDERGROUND STORAGE STRUCTURES, AND OTHER FACILITIES 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 ponds or dry ponds) where

land area is available. Other structures,

such as sand filters, are used for pre-

treatment of stormwater before dis-

charge to a pond or underground structure.

All of these structures, especially maintenance

You Can Reduce Costs and Liability

**Check Dumpster and Property** Daily for Litter

**Evaluate Outside Practices** That Can Cause "Toxic" Disposal Costs

> Cover and Elevate **Outside Storage of Chemicals**

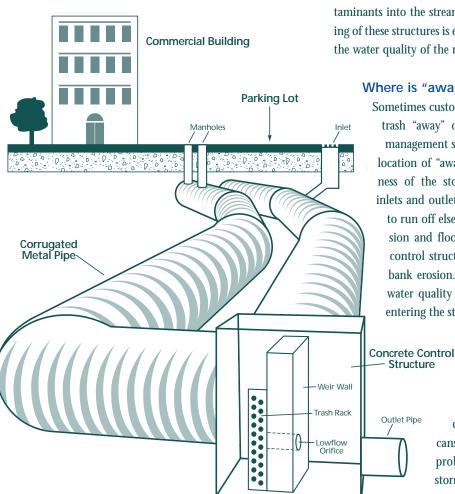
Make Employees Aware of the Stormwater Management Structure and Its Function

intensive oil/grit separators, require regular inspection and at least annual maintenance to ensure they function as originally designed.

## Out of Sight — Out of Mind?

Underground storage structures are facilities designed to prevent post-storm rushes of water from eroding streams and provide marginal removal of contaminants. Many of these structures will need to be cleaned before an inspection is performed. Also, specialized OSHA training and a confined space permit are absolutely necessary before

## Typical Underground Storage Structure



anyone can safely and legally enter the structure.

Some modern sites have sand filters built to pretreat stormwater before flowing to the containment structure. These filters are designed to remove oil, grease and other pollutants and therefore have additional maintenance requirements.

Oil/grit separators also known as water quality inlets, provide some settling of pollutants, but larger storms will scour the inside of the structure and flush the contaminants into the stream. Yearly inspection and cleaning of these structures is essential to lessen the impact on the water quality of the receiving stream.

## Where is "away"?

Sometimes customers and the public will throw trash "away" on your site. The stormwater management structure is usually the ultimate location of "away." Trash lessens the effectiveness of the stormwater facility by blocking inlets and outlets which will cause stormwater to run off elsewhere on the site, causing erosion and flooding, or to divert around the control structure and possibly cause stream bank erosion. Grates or racks over inlets to water quality structures do keep trash from entering the structure, but daily maintenance

must be done so they do not clog and divert stormwater to other erosion prone areas.

Occasionally, trash may blow out of or overflow from trash cans and dumpsters leading to problems if washed into the stormwater management structure.

Proper trash can covers and dumpsters with closed lids will keep trash where it belongs — out of the stormwater management structure. Most of the debris is plastic bottles and aluminum cans, but inspectors with the Department of Environmental Protection (DEP) have found many unusual items in stormwater management structures including shopping carts, engine blocks, and even a basketball which blocked an outlet pipe to a dry pond, causing damage and additional costly repair to the pond.

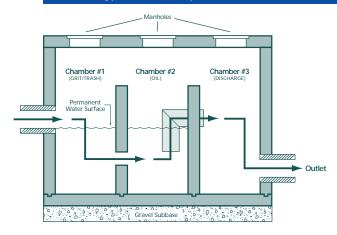
Maintenance of dry and wet ponds includes mowing grass on the front and back of the dam embankment. Mowing should be done at a minimum of once a year, although three times would be optimal. The grass should be between three to six inches in length. Ponds do have other maintenance needs and an inspection by qualified personnel is necessary to determine what corrections if any are necessary.

#### Toxics In —Toxics Out

Maintenance of underground structures and oil/grit separators requires pumping out the water and accumulated sediments, and disposing of them at a licensed facility. Disposal costs can be expensive, ranging from three to ten thousand dollars. Chemicals from outside degreasing operations, or chemicals stored and exposed to the elements, can get washed into the structure which in turn inflates disposal costs. The most effective method to reduce disposal costs is to reduce the amount of chemicals that enter the stormwater facility from the outside.

Covering and elevating outside waste oil or chemical containers, degreasing equipment indoors where the wastewater will discharge to the sanitary sewer, and having a spill preparedness plan are some ways to reduce the amount of toxics in the stormwater. These

#### Typical Oil/Grit Separator



steps will protect streams and also provide significant cost savings. Furthermore, liability will be reduced if pollutants are controlled on site.

## Don't Forget the Paper Work!

County regulations are in place to ensure that structures are inspected and properly maintained. Because of special safety certification and disposal requirements of the waste, DEP reviews qualifications of contractors performing inspection and maintenance of these structures. These structures were installed to protect our streams and overall water quality. Their maintenance is essential to preserve the high quality of many of our waterways, from neighborhood tributaries to the Chesapeake Bay.

Wastes from these facilities are toxic pollutants that require documented disposal. DEP maintains a list of qualified inspectors and contractors that meet federal, state and county regulations regarding inspection and maintenance of stormwater management structures. But we DO NOT recommend inspectors or contractors. We provide the list merely for your convenience. Please be advised that ANYONE can do the work as long as they meet the regulatory requirements.