



PACE
PARTNERS FOR A
CLEAN ENVIRONMENT

Golf Course Maintenance *Stormwater Protection*

Spring 2009

What is Stormwater?

Stormwater is rainwater and snowmelt. When stormwater flows across our parking lots and streets, it can pick up pollutants that are discharged directly into our rivers and streams through the storm drains located on streets and in parking lots. Any pollutants entering these drains flows untreated to the water bodies we use for drinking water, swimming, and fishing.

What is Stormwater Protection?

The objective in stormwater protection is that only rainwater and snow melt go down the storm drain. Best Management Practices (BMPs) are specific steps taken to prevent stormwater pollution as a result of day-to-day activities of street maintenance operations. All employees shall review this information sheet as a training tool, and make every effort to keep pollutants from going down the storm drain by putting the following BMPs into practice.

BEST MANAGEMENT PRACTICES (BMPs)

General

- Do not dump any liquids or other materials outside.

Fueling

- Post signage prohibiting “topping off” and describing spill response procedures.
- Keep a spill response kit at or near each fueling area.
- Require that the person doing the fueling or liquid transfer remain present during entire fueling operation. (“Don’t walk away!”)
- When fueling in the field from small containers, use a funnel or containers with spouts to prevent spills.
- During bulk liquid (i.e. oil, gas or fertilizer) transfer, cover or berm around all down-gradient storm drain inlets within 25 feet. Keep all drain valves in liquid bulk containers and secondary containments locked in the closed position.

Landscaping, Lawn & Vegetation Maintenance

- Mulch-mow grass.
- Sweep up grass clippings that fall on paved surfaces.
- Use Integrated Pest Management techniques.¹
- Avoid broadcast spraying of pesticides. Choose an appropriate method of application such that application does not exceed the problem area. (Fertilizer may be broadcast sprayed.)
- Avoid spraying pesticides or fertilizers within 50 feet of any surface water or storm drainage structure (unless stricter limits apply).
- Designate “no spray zones” and/or buffer areas around water features.
- Follow all manufacturers’ recommendations for mixing, applying, cleaning-up, storage and handling of pesticides and fertilizers.

- Apply wastewater from rinsing pesticide containers on target pests or use it to dilute the next batch.

Material Storage, Loading & Unloading

- Do not store any liquids or other materials that could impact surface water outside unless adequate secondary containment and cover are provided or the container is specifically designed for outdoor storage.
- Do not load or unload materials near a storm drain inlet or drainage ditch or over unpaved surfaces.
- If loading/unloading over paved areas, cover any down gradient storm drains.

Spill Response

- Use spill prevention methods to ensure no hazardous materials reach the floor or ground.
- Keep spill cleanup equipment in or near all work areas and use only “dry” cleanup methods to manage spills.
- Develop a formal Spill Response Plan. Post the plan near spill cleanup materials.

Stormwater Runoff Prevention

- Maintain a map of the property, identifying directions of stormwater flow and storm drains.
- Stencil or decal storm drains on or near the facility.

Vehicle/Equipment Repair & Storage

- All maintenance and repair work must be performed inside shop. (Only emergency repairs and maintenance activities that do not involve fluids may be performed outdoors.)
- Do not store leaking vehicles or equipment outdoors. Contain the leak, repair immediately, or move indoors and repair.

Vehicle & Equipment Washing

- All vehicles and mowers must be washed in a designated washing area that drains to the sanitary sewer or an approved holding tank. If these are not available, mowers (only) may be washed to an area that discharges to a grassy or vegetated buffer or infiltration area.
- Vehicles and mowers may also be washed at a commercial or other designated car washing facility.

Integrated Pest Management is defined as: *“the balanced use of cultural, biological, and chemical procedures that are environmentally compatible and economically feasible to control pests or noxious weeds.”* Biological and physical methods are preferred such as manual removal of weeds, the use of natural predators or parasites of a pest or the use of ladybugs to control aphids. Chemical control should be used as a last resort and then the least toxic product should be used.

Helpful Resources

See the PACE website for a list of helpful resource sheets

www.pacepartners.com

Keep It Clean Partnership

KICP is a collaborative approach in creating cost-effective solutions to implement a regional stormwater management program, not only to comply with Phase II regulations, but also to address broader water quality and watershed issues.

www.keepitcleanpartnership.org



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