

Stormwater Pollution Prevention

Office/Retail

Trash/Trash Bins/Dumpsters Connections/Illegal Discharge

Post "No Littering" signs and enforce anti-litter laws. Provide a sufficient number of litter receptacles for the facility. Clean out and cover litter receptacles frequently to prevent spillage.

Keep dumpster areas clean. Recycle materials whenever possible. Use all of a product before disposing of the container. Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc., may not be disposed of in solid waste containers. Take special care when loading or unloading wastes to minimize losses.

Inspect dumpsters and trash bins weekly for leaks and to ensure that lids are on tightly. Replace any that are leaking, corroded, or otherwise deteriorating. Sweep and clean the storage area regularly and clean up spills immediately.



If the dumpster area is paved, do not hose it down to a storm drain. Instead, collect the wash water and discharge it to the sewer if allowed by the local sewer authority. Use dry methods when possible (e.g., sweeping, use of absorbents). Prevent stormwater run-on from entering the dumpster area by enclosing it or building a berm around the area. Prevent waste materials from directly contacting rain. Cover dumpsters to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster.

Building Maintenance

Properly collect and dispose of water if pressure washing buildings, rooftops, and other large objects. If pressure washing where the surrounding area is paved, use a water collection device that enables collection of wash water and associated solids. Use a sump pump, wet vacuum or similarly effective device to collect the runoff and loose materials. Dispose of the collected runoff and solids properly. If pressure washing on a landscaped area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the landscaping and not drain to pavement.

Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain. Store toxic material under cover when not in use and during precipitation events. Switch to non-toxic chemicals for maintenance when possible. If cleaning agents are used, select biodegradable products whenever feasible. Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds). Use chemicals that can be recycled. Buy recycled products to the maximum extent practicable

Use water-based paints whenever possible. They are less toxic than oil-based paints and easier to clean up. Look for products labeled "latex" or "cleans with water." Develop paint handling procedures for proper use, storage, and disposal of paints. Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle. Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint containers. Mix paint indoors before using so that any spill will not be exposed to rain. Do so even during dry weather because cleanup of a spill will never be 100% effective.



Transfer and load paint away from storm drain inlets. When there is significant risk of a spill reaching storm drains or if sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting painting and remove covers when job is complete. Use a ground cloth to collect the chips if painting requires scraping or sand blasting of the existing surface. Dispose the residue properly.

Cover or enclose painting operations properly to avoid drift. Clean the application equipment in a sink that is connected to the sanitary sewer if using water based paints. Capture all cleanup-water and dispose of properly. Store leftover paints if they are to be kept for the next job properly, or dispose properly.

Regularly train employees on appropriate Best Management Practices implementation, storm water discharge prohibitions, and wastewater discharge requirements. Train employees on proper spill containment and cleanup.

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Landscaping

Where feasible, retain and/or plant native vegetation since it usually requires less maintenance than new vegetation. When planting or replanting consider using flowers, trees, shrubs, and groundcovers that have low water use. Consider alternative landscaping techniques such as naturescaping and xeriscaping. Use mulch or other erosion control measures on exposed soils.

Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage at a permitted landfill or by composting. Do not dispose of gardening wastes in streets, waterways, or storm drainage systems. Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm and/or cover.

Irrigate slowly or pulse irrigate so the infiltration rate of the soil is not exceeded. Inspect irrigation system regularly for leaks and to ensure that excessive runoff is not occurring. If re-claimed water is used for irrigation, ensure that there is no runoff from the landscaped area(s). Use automatic timers to minimize runoff. Use popup sprinkler heads in areas with a lot of activity or where pipes may be broken. Consider the use of mechanisms that reduce water flow to broken sprinkler heads.

Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers. Follow manufacturers' recommendations and label directions. Employ techniques to minimize off-target application (e.g. spray drift) of fertilizer, including consideration of alternative application techniques. Calibrate fertilizer distributors to avoid excessive application. Periodically test soils for determining proper fertilizer use. Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface. Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water. Use slow release fertilizers whenever possible to minimize leaching.

Whenever possible, use mechanical methods of vegetation removal such as hand weeding rather than applying herbicides. When conducting mechanical or manual weed control, avoid loosening the soil, which could lead to erosion.

If using pesticides, follow all federal, state, and local laws and regulations governing their use, storage, and disposal. Follow manufacturers' recommendations and label directions. When applicable, use less toxic pesticides that will do the job and avoid use of copper-based pesticides if possible. Do not apply pesticides if rain is expected or if wind speeds are above 5 mph. Do not mix or prepare pesticides for application near storm drains. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the targeted pest. Do not apply any chemicals directly to surface waters and do not spray pesticides within 100 feet of open waters. Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques. Purchase only the amount of pesticide that you can reasonably use in a given time period. Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce weeds and watering. Check irrigation schedules so pesticides will not be washed away and to minimize non-stormwater discharge.

Integrate pest management techniques where appropriate. Mulch can be used to prevent weeds where turf is absent. Remove insects by hand and place in soapy water or vegetable oil. Alternatively, remove insects with water or vacuum them off the plants. Use species-specific traps (e.g. pheromone-based traps or colored sticky cards). Sprinkle the ground surface with abrasive diatomaceous earth to prevent infestations by soft-bodied insects and slugs. Slugs also can be trapped in small cups filled with beer that are set in the ground so that slugs can get in easily. In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism). Small mammals and birds can be excluded using fences, netting, and tree trunk guards. Promote beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species.

Patio, Walkway, Driveway

- Use dry clean-up methods, such as a broom, mop or absorbent material for surface cleaning whenever possible. Do not sweep or blow trash or debris into the street or gutter. Avoid graffiti abatement activities during rain events and use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal). Avoid using cleaning products that contain hazardous substances that can create hazardous waste.
- If water must be used for surface cleaning, use it sparingly. Never discharge washwater into the street, a ditch, or storm drain. Determine how you are going to capture the water and where you are going to discharge it before starting the wash job. Capture and collect the washwater and properly dispose of it (i.e., landscaped areas, private sewer system, sanitary sewer system).
- Provide regular training to employees and/or contractors regarding surface cleaning.



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Parking Area

Clean parking lots on a regular basis to prevent accumulated wastes and pollutants from being discharged into storm drain systems during rainy conditions. When cleaning heavy oily deposits, use absorbent materials on oily spots prior to sweeping or washing. Dispose of used absorbents appropriately.

Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices. Utilize sand filters or oleophilic collectors for oily waste in low concentrations. Clean out oil/water/sand separators regularly, especially after heavy storms.

Have designated personnel conduct inspections of the parking facilities and storm drain systems associated with them on a regular basis. Inspect cleaning equipment/sweepers for leaks on a regular basis.

Have spill cleanup materials readily available and in a known location. Cleanup spills immediately and use dry methods if possible. Properly dispose of spill cleanup material.

