

Escondido Best Management Practices (BMP's)

GROUND MAINTENANCE & GOOD HOUSEKEEPING

- Regularly dry sweep paved areas including parking lots, outdoor areas and dumpster areas. Do NOT use a hose. Collect and dispose of debris in waste containers.
- If you must use water for cleaning, use a mop and a bucket. Dispose of wash water into the sanitary sewer.
- Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drain.
- Never pour wash water outside or into a street, gutter or storm drain. Properly dispose of it into the sanitary sewer (sink or toilet).
- Regularly inspect and maintain storm drain inlets.

WASTE MANAGEMENT

- Keep garbage/dumpster areas free from litter, debris and sediments.
- Schedule regular waste pick-up.
- Keep dumpsters and waste bins covered.
- Never wash down dumpsters with a hose. If cleaning is needed, contact the leasing company.
- Check dumpsters regularly for leaks.

EDUCATION

- Train all employees on good housekeeping practices and pollution prevention.

MATERIALS STORAGE

- Store materials indoors or in covered areas. Provide proper spill containment including secondary containment tanks or berms, where required.
- Keep material storage areas free from ponding rainwater or exposure.
- Label all materials and keep updated inventories of material stored on site.
- Provide and implement spill cleanup procedures and supplies for employees.

LANDSCAPING & IRRIGATION

- Avoid over-watering and runoff by checking sprinkler overspray and/or broken sprinkler heads. Use irrigation timers.
- Collect all landscape debris and recycle or dispose of properly.
- Encourage landscaping employees and contractor to reduce/eliminate use of pesticides and fertilizers.

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VEHICLE & EQUIPMENT MAINTENANCE

- Perform all vehicle and equipment maintenance indoors or under covered areas.
- Keep drip pans under leaking vehicles at all times. Repair all leaks.
- Ensure floor drains are plumbed to the sanitary sewer or cover drains.
- Keep absorbent materials/pads/rags readily accessible in work areas and use for spills.
- Segregate and label waste fluids and store in approved containers.
- Recycle oil, antifreeze, and batteries

VEHICLE & EQUIPMENT WASHING

- Take vehicles/equipment to a commercial car wash, when possible. These facilities recycle water and/or drain wash water to the sanitary sewer.
- Wash vehicles/equipment over a pervious surface such as dirt, gravel or grass that allows water to evaporate or percolate. Prevent runoff.
- Protect storm drains or curb inlets. Collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.

LOADING AREAS & OPERATIONS

- Load/unload equipment only in designated areas.
- Regularly dry sweep loading and unloading areas.
- If possible, cover loading areas.
- Divert all storm water away from loading/unloading areas.
- Check shipments and trucks for leaks and spills.
- Clean up spills/leaks immediately and dispose of properly.
- If you must use water for cleaning, use a mop & bucket and dispose of wash water into the sanitary sewer.
- Major cleaning of exterior surfaces must include capturing all wash water and disposing it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drain.

Escondido Facilities Routine Preventative Maintenance Tasks

PARKING/STORAGE AREA MAINTENANCE:

Objectives

- Cover
- Contain
- Reduce/Minimize
- Product Substitution

Targeted Constituents

- Sediment
- Nutrients
- Trash
- Metals
- Bacteria
- Oil & Grease
- Organics
- Oxygen Demanding

Pollution Prevention

- Utilize alternative designs & maintenance strategies for impervious parking lots
- Keep accurate maintenance logs to evaluate BMP's

Protocols

1.0 General:

- Keep parking & storage areas clean & orderly. Remove debris in a timely fashion
- Allow sheet runoff to flow into bioswales, biofilters (vegetated strip) and/ or infiltration devices
- Utilize sand filters or oleophilic collectors for oily waste in low concentrations
- Arrange rooftop drains to prevent drainage directly onto paved surfaces

2.0 Controlling litter:

- Post "no Littering" signs
- Provide an adequate number of receptacles
- Clean out & cover litter receptacles frequently to prevent spillage
- Provide trash receptacles in parking lots to discourage litter
- Routinely sweep, shovel & dispose of litter in trash

3.0 Surface Cleaning:

- Use dry cleaning methods (e.g. sweeping or vacuuming) to prevent discharge of pollutants into the stormwater conveyance system
- Establish frequency of public parking lot sweeping based on usage & field observations of waste accumulation
- Sweep all parking lots at least once before onset of the wet season
- If water is used follow the procedures below:
 - Block the storm drain or contain runoff
 - Wash water should be collected & pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains
 - Dispose of parking lot sweeping debris & dirt at a landfill
- When cleaning heavy oily deposits:
 - Use absorbent materials on oily spots prior to sweeping or washing
 - Dispose of used absorbents appropriately
- **Porous Pavement:**
 - Pavement surface should be vacuumed biannually with a commercial vacuum sweeping cleaning unit. (Note: simple broom sweepers are not recommended for porous pavement maintenance.)
 - All inlet structures within or draining to the infiltration beds should also be cleaned out on a biannual basis
 - Planted areas adjacent to porous pavement should be well maintained to prevent soil washout onto the pavement
 - If any washout does occur it should be cleaned off the pavement immediately to prevent further clogging of the pores
 - Dirt that is ground in repeatedly by tires can lead to clogging. Therefore, trucks or other heavy vehicles should be prevented from tracking or spilling dirt onto the pavement

NOTE: All construction or hazardous materials carriers should be prohibited from entering a porous pavement lot.

- If the pavement surface has become significantly clogged such that routine vacuum sweeping does not restore permeability, then a more intensive level of treatment may be required
 1. Wash porous pavements with clean, low pressure water, followed by immediate vacuuming
 2. A combination of washing and vacuuming are proven techniques for cleaning both organic clogging as well as sandy clogging
 3. “Power head cone nozzle” that “concentrates the water in a narrowly rotating cone” works best. (**Note:** if the pressure of the washing nozzle is too great, contaminants may be driven further into the porous surface.)

4.0 Surface Repair:

- Pre-heat, transfer or load hot bituminous material away from storm drain inlets
- Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff
- Cover and seal nearby storm drain inlets (with waterproof material mesh) and manholes before applying seal coat, slurry seal, etc., where applicable. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal
- Use only as much water as necessary for dust control, to avoid runoff
- Catch drips from paving equipment that is not in use with pans or absorbent materials placed under the machines. Dispose of collected material and absorbents properly
- **Porous Pavement:**
 - For damaged areas of less than 50 square feet, a declivity could be patched by any means suitable with standard pavement, with the loss of porosity of that area being insignificant
 - The declivity can also be filled with porous mix
 - If an area greater than 50 SF is in need of repair, approval of patch type must be sought from either the engineer or owner. **(Under no circumstance is the pavement surface to ever be seal coated. Any required repair of drainage structures should be done promptly to ensure continued proper functioning of the system.)**
 - Inspect for pavement rutting/raveling on an annual basis (some minor ruts may occur in the porous pavement from stationary wheel rotation)

Inspection:

- Have designated personnel conduct inspections of the parking facilities and stormwater conveyance systems associated with them on a regular basis

PARKING LOT INPECTION FORM

Indicate PASS (P) or FAIL (F) for each “criteria” in the appropriate box. Indicate the date and time each location is inspected in the D/T column. Record the reason for any “FAIL” in the “COMMENTS” section and any actions taken in the CORRECTIVE ACTIONS section. An N/A (not applicable) may only be used with approval from the Supervisor, EH&S or designee.

LOCATION	1.0	2.0	3.0	4.0	D/T	PERFORMED BY: INSPECTOR
Lot 1						
Lot 1A						
Lot 2						
Lot 3						

COMMENTS/CORRECTIVE ACTIONS:

REVIEWED BY: _____ DATE _____