

CITY OF CYPRESS



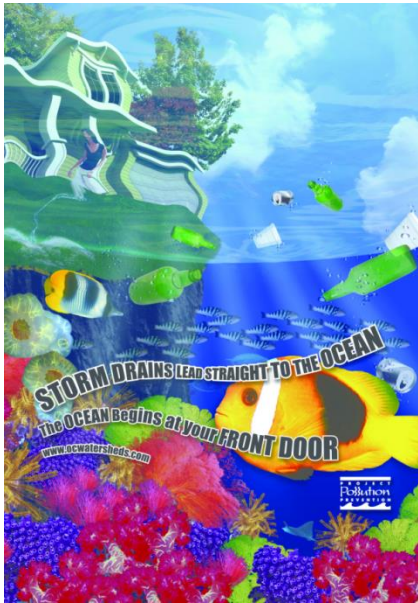
Best Management Practices (BMPs) Handbook for Industrial and Commercial Businesses

Presented by:
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INTRODUCTION

Did you know that most of the pollution found in our waterways is not from a single source, but from a “non-point” source? Meaning the accumulation of pollution comes from businesses throughout the community.

This handbook is presented to commercial, industrial, and mobile business establishments and provides information on Best Management Practices (BMPs) for business activities that may pollute storm water in the community of Cypress, California. Many business activities generate pollutants. Pollutants such as metals, paints, sediments, oil, grease, dirt and toxic chemicals can be blown or washed away from your business into storm drains that eventually flow to the ocean. It is important to understand that unlike water in sanitary sewers that originate from sinks and toilets, water in the storm drains is not treated before entering our waterways.



Water pollution not only impacts our quality of life, it also affects and harms our precious living water resource - the beach, and its marine life. The goal of this handbook is to increase your awareness and to educate business establishment owners and its employees on the impact of storm water pollution in our everyday living.

As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Since its introduction in 1972, the NPDES permit program is responsible for significant improvements to our Nation's water quality.

INSPECTION CHECKLIST

The table below briefly outlines the different BMPs that will be verified when the inspector visits your facility.

BMP Assessment	
Facility Operation	BMP Descriptions
Building Maintenance (IC3)	Outside areas kept neat and clean. Pavement sweeping. Storm drain inlets labeled and maintained. Employees trained on an on-going basis.
Contaminated or Erodible Surface Areas (IC6)	Unpaved areas protected from water and wind erosion. Area designed to prevent run-of stormwater and runoff of spills.
Landscape Maintenance (IC7)	Efficient irrigation. Dirt/debris from landscaped areas contained.
Outdoor Drainage from Indoor Areas (IC9)	Materials prevented from being tracked from inside areas. Materials/wastes stored away from doors/docks.
Outdoor Loading/Unloading of Materials (IC10)	Loading dock areas maintained. Exposure of activities to rain limited. Drip pans available to catch potential leaks.
Outdoor Storage of Raw Materials, Products, and Containers (IC12)	Exposed materials covered. Materials stored off the ground (i.e. palletized). Materials/containers have secondary containment.
Parking and Storage Area Maintenance (IC15)	Parking/storage areas maintained. Excessive oil stains prevented.
Spill Prevention and Cleanup (IC17)	Spill containment and cleanup materials readily available. Absorbent materials removed and properly disposed of in a timely manner. Spill response personnel identified. No dumping signs posted.
Vehicle/Equipment Maintenance, Fueling, Repair, and Washing (IC18-20)	Leaks and drips cleaned in a timely manner. Maintenance, fueling, repair, and washing areas designated and contained.
Waste Handling and Disposal (IC21)	Wash water contained and disposed of. Trash enclosure clean and maintained. Materials/containers have secondary containment.

Frequently Asked Questions

What are point sources of water pollution? What do point sources have to do with a NPDES permit?

“Point sources” are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge, do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. An NPDES Permit allows clean stormwater discharges into rivers, lakes or the ocean.

What is a Stormwater Ordinance? What is the NPDES Stormwater permitting program for industrial and commercial activity?

The City of Cypress adopted ***Water Quality ordinance No. 933 on Jan. 9, 1995*** which gave the City local legal authority to enforce the NPDES Permit. While education is the key to successful stormwater pollution prevention, we still have the means to take corrective actions against serious offenders. Any commercial, industrial, or construction business found discharging wastes or wastewater into the storm drain system may be subject to legal penalties, ***pursuant to Section 13-25 of the municipal code.***

Activities such as material handling and storage, equipment maintenance and cleaning, industrial processing or other operations that occur at industrial facilities are often exposed to stormwater. The runoff from these areas may discharge pollutants directly into nearby waterbodies or indirectly via storm sewer systems, thereby, degrading water quality.

What is a BMP?

A BMP is a technique, measure of structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

What are BMP fact sheets and what type of industrial facilities are required to obtain permit coverage?

Best Management Practices (BMP) fact sheets contain information describing various pollutants which cause stormwater pollution and provide best management practices that are applicable to a specific commercial/industrial facility operation.

The following fact sheets are included as attachments for reference.

- IC1. Airplane Maintenance & Repair
- IC2. Animal Handling Areas
- IC3. Building Maintenance
- IC4. Carpet Cleaning
- IC5. Concrete & Asphalt Production, Application & Cutting
- IC6. Contaminated or Erodible Surface Areas
- IC7. Landscape Maintenance
- IC8. Nurseries & Greenhouses

- IC9. Outdoor Drainage from Indoor Areas
- IC10. Outdoor Loading/Unloading of Materials
- IC11. Outdoor Process Equipment Operations & Maintenance
- IC12. Outdoor Storage of Raw Materials, Products & Containers
- IC13. Over Water Activities
- IC14. Painting, Finishing, & Coatings of Vehicles, Boats, Buildings
- IC15. Parking & Storage Area Maintenance
- IC16. Pool and Fountain Cleaning
- IC17. Spill Prevention & Cleanup
- IC18. Vehicle & Equipment Fueling
- IC19. Vehicle & Equipment Maintenance & Repair
- IC20. Vehicle & Equipment Washing & Steam Cleaning
- IC21. Waste Handling & Disposal
- IC22. Eating & Drinking Establishments
- IC23. Fire Sprinkler Testing/Maintenance
- IC24. Wastewater Disposal Guidelines

Preventing water pollution begins with your business establishment. Our Public Education Outreach Program will increase your knowledge and awareness on preventing water pollution that could affect your business and operational activities. Please take a moment to read this handbook and share it with your fellow employees. This handbook contains effective Best Management Practices (BMPs) and fact sheets that are suited for your business establishment.

For more information, please visit the City's Pollution Prevention web pages:
www.cypressca.org/government/departments/public-works/pollution-prevention.

You may also visit www.ocwatersheds.com.

If you have any questions or concerns, please contact the City's Stormwater Program Manager at (714) 229-6752.

Thank you for your cooperation and for your continued support. Your participation in our Public Education Program will help keep our beaches pollution free.



View of the Huntington Beach Pier. Preventing stormwater pollution provides for beaches that can be enjoyed by southern Californians as well as visitors from outside the area.

IC 1: Airplane Maintenance & Repair

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants



Only conduct maintenance or repair work in designated areas.



Utilize dry cleanup methods (i.e. sweeping), try to avoid washing down work areas.

Use drip pans and/or containers where needed.



Inspect airplanes for leaks.



Dispose of all waste products properly and recycle whenever possible.

Clean storm drain inlet on a regular basis and after a large storm.



Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down storm drains.

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 2: Animal Handling Areas

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Use dry cleaning methods to clean animal handling areas regularly.



Properly collect and dispose of water when water is used for cleaning.



Prevent animals from moving away from controlled areas where BMPs are in use (e.g. fencing, leashing, etc).



Keep animals in paved and covered areas, if feasible.



If keeping animals in covered areas is not feasible, cover the ground with vegetation or some other type of ground cover such as mulch.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 3: Building Maintenance

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.



Properly prepare work area before conducting building maintenance.



Properly clean and dispose of equipment and wastes used and generated during building maintenance.



Store toxic material under cover when not in use and during precipitation events

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 4: Carpet Cleaning

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Discharge wash water to sink, toilet, or other drain connected to sanitary sewer system.

Never discharge wash water to a street, gutter, parking lot, or storm drain.



Either:

Empty the spent cleaning fluid tank into a utility sink door or other indoor sewer connection at the service provider's home base

OR

Arrange with the customer to discharge into a toilet or utility sink on their premises.



Refer to fact sheet **IC24 Wastewater Disposal** for guidance on appropriate methods for disposal of wash water to the sanitary sewer.



These guidelines apply even to cleaning products labeled "nontoxic" and "biodegradable."

Targeted Pollutants

Sediment	x
Nutrients	
Floatable Materials	
Metals	
Bacteria	
Oil & Grease	
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 5: Concrete and Asphalt Production

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants



Properly collect and dispose of process water.

Protect production, pouring, and cutting areas from stormwater runoff and runoff.



Sweep the production, pouring, and cutting areas regularly to collect loose materials.



Pre-heat, transfer or load hot bituminous material away from storm drain inlets.

Use drip pans or absorbent material to catch drip from paving equipment, including equipment that is not in use.

Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manhole before applying seal coat, slurry seal, etc.



To avoid runoff, use only as much water as necessary for dust control.

Do not allow concrete and concrete pumping vehicles to discharge concrete, slurry, or rinse water into gutters, storm drains, or drainage ditches.

Sediment	x
Nutrients	
Floatable Materials	
Metals	
Bacteria	
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 6: Contaminate or Erodible Surface Areas

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Protect contaminated or erodible surface areas from rainfall and wind dispersal through one or more of the following:

Preserve natural vegetation.



Re-plant or landscaping bare ground surfaces.

Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.

Remove contaminated soils.



Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene or hypalon. Keep covers in place at all times when work is not occurring. If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.



Protect materials from stormwater runoff & runoff.



Minimize pooling of water

Conduct routine maintenance

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 7: Landscape Maintenance

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Properly store and dispose of gardening wastes.



Use mulch or other erosion control measures on exposed soils.



Properly manage irrigation and runoff.

Properly store and dispose of chemicals.

Properly manage pesticide and herbicide use.



Properly manage fertilizer use.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, and train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 8: Nurseries and Green Houses

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Properly manage irrigation and runoff.

Properly store and dispose of gardening wastes.



Properly store and dispose of chemicals.

Properly manage pesticide and herbicide use.



Properly manage fertilizer use.

Properly manage pesticide and herbicide use.



Incorporate the following integrated pest management techniques where appropriate.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Train employees on the proper techniques used during liquid transfers to avoid leaks and spills.
- Train forklift operators on the proper loading and unloading procedures
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 9: Outdoor Drainage from Indoor Areas

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants



Design operating areas to minimize stormwater exposure.



Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags.



Use secondary containment or protective barriers for indoor liquid storage.



Install a fire sprinkler containment system for hazardous material storage.

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Educate and train employees on the use of pesticides and pesticide application techniques.
- Train and encourage maintenance crews to use integrated pest management techniques.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 10: Outdoor Loading and Unloading of Materials

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants



Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.



Properly design loading/unloading areas to prevent stormwater runoff, run off spills, etc.



Clean loading/unloading areas regularly to remove potential sources of pollutants.



Reduce exposure of materials to rain.

Install a fire sprinkler containment system for hazardous material storage.



Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Train employees on the proper techniques used during liquid transfers to avoid leaks and spills.
- Train forklift operators on the proper loading and unloading procedures
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

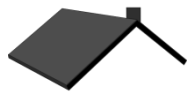
IC 11: Outdoor Process Equipment Operations and Maintenance

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Alter activities to prevent exposure of pollutants to stormwater.



Cover process equipment/area with a permanent roof.



Design process area to prevent stormwater runoff.

Design process area to contain spills.



Inspect equipment regularly.

If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material.

Recycle wastes whenever possible.

Targeted Pollutants

Sediment	x
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 12: Outdoor Storage of Raw Materials, Products, and Containers

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Store materials indoors, if feasible. And keep outdoor storage containers in good condition.

Protect materials stored outside from rainfall and wind dispersal and stormwater runoff.



Store materials on paved or impervious surfaces.

Properly store and handle chemical materials.



Conduct regular inspections of storage areas.



If drums are stored in an area where unauthorized persons may gain access secure them in such a manner as to prevent accidental spillage, pilferage, or any unauthorized use.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Train forklift operators on the proper loading and unloading procedures.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 13: Over Water Activities

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Move maintenance and repair activities on-shore, if feasible.



Use ground cloths and/or secondary containment when painting boats on land.

Shelter any blasting and spray painting activities.



Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.



Keep boat motors well-tuned to prevent fuel and lubricant leaks.

Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.



Maintain a clean working environment.

Properly dispose of bilge water, ballast water, and wastewater.

Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	x

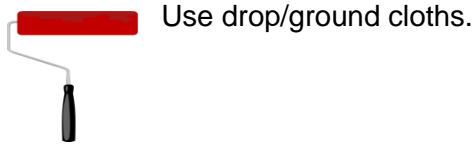
Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

IC 14: Painting, Finishing, and Coatings of Vehicles, Boats, Buildings, and Equipment

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Use drop/ground cloths.



Shelter any blasting and spray painting activities.



Maintain a clean working environment.



Cover and seal nearby storm drain inlets.

Properly clean, store, and dispose of painting, finishing, and coating materials.

Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 15: Parking and Storage Area Maintenance

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Conduct regular cleaning. Keep the parking and storage areas clean and orderly



Properly collect and dispose of wash water.



Use absorbent materials and properly dispose of them when cleaning heavy oily deposits.



When conducting surface repair work cover materials and clean paintbrushes and tools appropriately.



Arrange rooftop drains to prevent drainage directly onto paved surfaces.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 16: Pool and Fountain Cleaning

BMPs Fact Sheet

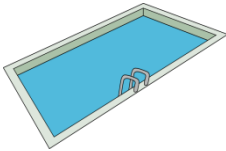
Pollution Prevention & Good Housekeeping



Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.



Manage pH and water hardness to minimize corrosion of copper pipes.



Discharge pool and fountain water properly. Consider hiring a professional pool-draining service to collect all pool water for off-site disposal.



Properly clean and/or dispose of filters.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Train maintenance personnel on the proper techniques for testing chlorine levels and applying neutralizing chemicals.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 17: Spill Prevention and Cleanup

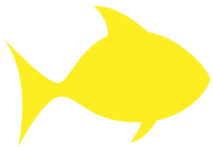
BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants



Develop procedures to prevent/mitigate spills to storm drain systems.



Post “No Dumping” signs with a phone number for reporting illegal dumping and disposal.



Conduct routine cleaning, inspections, and maintenance. Report and track spills.

Properly store and handle chemical materials. Clean up leaks and spills immediately.



Protect materials stored outside from stormwater runoff.

Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.



Identify key spill response personnel.

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP’s, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Train employees responsible for above ground storage tanks and liquid transfers on the Spill Prevention Control and Countermeasure Plan.
- Provide on-going employee training in pollution prevention.

IC 18: Vehicle & Equipment Fueling

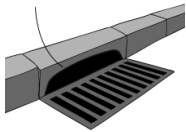
BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Use properly maintained off-site fueling stations whenever possible.

Design fueling areas to minimize stormwater exposure and maintain clean fuel-dispensing areas.



Minimize pooling of water.

If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas. Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer



Utilize fueling safeguards and equip USTs with spill and overfill protection.

Conduct regular inspections of fueling equipment.

Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.



Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location. Install required AQMD equipment and post a notice.

Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper fueling and clean up procedures.

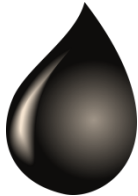
IC 19: Vehicle & Equipment Maintenance and Repair

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Utilize dry cleanup methods such as sweeping and try to avoid washing down work areas.



Use drip pans and/or containers where needed.

Inspect vehicles and equipment for leaks.

Keep equipment clean and free of excess oil and grease. Remove all fluids from retired, wrecked, or salvaged vehicles.



Dispose of solvents per instructions on the container

Dispose of all waste products properly and recycle whenever possible.



Clean storm drain inlet(s) on a regular schedule and after large storms.

Store idle equipment under cover.

Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

IC 20: Vehicle & Equipment Washing and Steam Cleaning

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	
Pesticides	
Oxygen Demanding	x



Consider using off-site commercial washing and/or steam cleaning businesses. Use businesses capable of properly disposing of wastewater (Refer to **IC24 Wastewater Disposal** for guidance on appropriate methods for disposal of wash water).



If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.



Provide trash containers in wash area and empty on a regular basis.

Use hoses with nozzles that automatically turn off when left unattended.



Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.

Clearly mark the vehicle and equipment washing/steam cleaning area.

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

IC 21: Waste Handling and Disposal

BMPs Fact Sheet

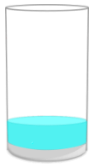
Pollution Prevention & Good Housekeeping



Prevent waste materials from coming in direct contact with wind or rain.



Regularly inspect, repair, and/or replace waste containers.



Use all of a product before disposing of the container.



Keep waste collection areas clean and secure solid waste containers when not in use.



Label and store hazardous wastes according to hazardous waste regulations.

Targeted Pollutants

Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

IC 22: Eating & Drinking Establishments

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Conduct regular sweeping or vacuuming of outdoor areas: Dry sweep pavement areas including “drive-thru” areas, parking lots, sidewalks, outdoor eating areas and dumpster storage areas frequently.



Recycle and/or properly dispose of grease and oil. Do not pour down the drain.



Block storm drain(s) when cleaning (hosing or steam/pressure washing) outside dumpster areas, sidewalks, and common areas with hot water, soap, or other cleaning agent.



Collect water/waste and discharge to the sanitary sewer (with approval of the local sanitation district).

Targeted Pollutants

Sediment	
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.

IC 23: Fire Sprinkler Testing/Maintenance

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

Contain flows onsite and/or direct the water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion.



Divert sprinkler system flows to the sewer, when practicable and with the permission of the local sewer agency. Refer to fact sheet *IC24 Wastewater Disposal* for guidance on appropriate methods for disposal of wash water to the sanitary sewer.



Properly train employees on BMPs and requirements, see below on specific training.

Employee BMP Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- Use a training log or similar method to document training.
- Provide on-going employee training in pollution prevention.

IC 24: Disposal of Waste Water Generated by Mobile Businesses & Outdoor Activities

BMPs Fact Sheet

Pollution Prevention & Good Housekeeping



Evaluate the chemicals and compounds used for cleaning and reduce or eliminate the use of those that contain solvents, heavy metals, high levels of phosphates, or very high/low pH exceeding local sewerage agency requirements.

Targeted Pollutants

Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	
Pesticides	
Oxygen Demanding	



Block/seal off identified drains or catch basins using sand bags, plugs, rubber mats, or temporary berms.



Walk through the area where the cleaning will occur prior to the start of the job and identify all area drains, yard drains, and catch basins where wastewater could potentially enter the storm drain system.



Sweep all surface areas prior to cleaning to minimize the amount of suspended solids, soil, and grit in wastewater.

Employee BMP Training

- Train employees on these BMP's, stormwater discharge prohibitions, and wastewater discharge requirements.
- Train employees on proper spill containment and clean up.

BMPS IN ACTION



Dumpster lids should remain closed.



Grates should be kept clear and clean.



Loading, docking, and parking areas should be clean.



Keep storage areas clean and dry and regularly sweep pavement.



Self-containment methods should be used to prevent spills.

TREATMENT CONTROL BMPS

Treatment Control Best Management Practices (BMPs) are structures, procedures, and practices that help to prevent pollutants from entering our storm drains and impacting waterways. As land is developed, vegetation is replaced with paved surfaces and rooftops which results in a higher potential for storm water pollution to runoff into waterways.

What are some examples of treatment control BMPS?

Treatment control BMPs fall into one of two categories - non-structural or structural. Non-structural BMPs are preventative actions that involve policies, ordinances, requirements, practices, and standards that help prevent storm water pollution. Examples include directing urban growth to already developed areas, protecting, maintaining, and/or increasing open spaces, minimizing impervious surfaces, and encouraging public education programs to reduce water quality impacts. Structural BMPs are designed to provide treatment of storm water either through storage, filtration, or infiltration. The most common types of treatment control BMPs found in Cypress include:

- Dry Extended Detention Basin (TC-22)
- Infiltration Trench (TC-10)
- Infiltration Basin (TC-11)
- Vegetated Swale (TC-30)
- Bioretention (TC-32)
- Drain Inserts (MP-52)
- Media filters (TC-40 and MP-40)
- Vortex Separators (MP-51)
- Wet Vaults (MP-50)

Who is responsible for maintaining treatment control BMPS?

Maintenance of treatment control BMPs is a shared responsibility between the City and the community. Treatment control BMPs and other storm drain structures on public streets, property, and some easements are monitored and maintained by the City. Private property owners are responsible for maintaining treatment control BMPs on their properties including keeping their portion of the storm drain system free of trash, sediments, excessive vegetation, and other materials that may contribute to storm water pollution.

The City has provided you with a “Treatment Control BMP Inspection and Maintenance Information Sheet” below for your reference.

Treatment Control

BMP INSPECTION AND MAINTENANCE INFORMATION SHEET

Drainage Inserts and Downspout Filters (MP-52*):

Devices installed in catch basins, curb inlets, and roof downspouts that collect sediment, trash, and debris. Typically include an oil absorbent pouch.

Minimum Required Inspection/Maintenance:

Inspect before and after the rainy season (October-May) and after each storm event. Clean/repair/replace as needed to ensure proper function. Replace oil absorbent pouch as needed (when the filter media turns grey or black).



Drainage Insert (Curb Inlet)



Downspout Filter



Drainage Insert (Curb Inlet)



Drainage Insert (Area Inlet)

Grass/Vegetated Swales or Strips (TC-30*):

Drainage channels lined with grass or vegetation, usually with a storm drain inlet at the end.

Minimum Required Inspection/Maintenance:

Check for excessive trash, debris, and sediment during normal landscape maintenance and after each storm event. Inspect for vegetation health and erosion issues. Ensure that no standing water remains in swale more than 48 hours after every rain event. Mow grass and adjust irrigation schedule to ensure adequate vegetative cover while preventing irrigation runoff to the storm drain. Re-seed or remove sediment if needed.



Vegetated Swale

Hydrodynamic Separation Systems (Including CDS Units, Sand/Oil Interceptors, and Baffle Boxes) (MP-51*, MP-50*):

These underground devices need to be professionally maintained & require a vactor truck.

Minimum Required Inspection / Maintenance:

See manufacturer's recommendations. Typically, check for obstructions to the inlet before the rainy season and after large storm events. Measure depth of floatables (oil and trash) and sediment. Maintain if inlet is obstructed, the floatable depth is greater than 12 inches, or the sump is in within the maintenance range (each unit has a unique storage volume).



CDS Unit



Baffle Box

Extended/ Dry Detention Basins (TC-22*):

Basins whose outlets have been designed to detain stormwater for an extended period of time to allow pollutants to settle.

Minimum Required Inspection/ Maintenance:

Twice a year and after rain events inspect for bank erosion, damage to vegetation (if any), excessive trash and debris, standing water, damage or obstructions to inlet and outlet. Clean/repair as needed.

Other Treatment Control BMPs:

- Bioretention (TC-32*)
- Filtration Systems (TC-40*)
- Infiltration Basin (TC-10*)
- Infiltration Trench (TC-11*)
- Wet Pond (TC-20*)
- Constructed Wetland (TC-21*)

* Number refers to California Stormwater Quality Association (CASQA) handbook fact sheet number. Visit

www.cabmphandbooks.com/Documents/Development/Sect



Units typically accessed through 2 or more adjacent manholes



Filterra Bioretention System



City of Cypress
Stormwater Program
5275 Orange Avenue
Cypress, CA 90630

References:

All materials can be downloaded by visiting: www.ocwatersheds.com

California Stormwater Best Management Practice Handbook. Industrial and Commercial. 2003.

www.cabmphandbooks.com

King County Stormwater Pollution Control Manual.
Best Management Practices for Businesses. King County Surface Water Management.
July 1995.

On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>.

Stormwater Management Manual for Western Washington. Volume IV Source Control
BMPs.

Prepared by Washington State Dept. Ecology of Water Quality Program. Publication No.
99-14.

August 2001.

For additional information, contact:

County of Orange/OC Watersheds

Main: (714) 955-0600

24 Hour Water Pollution Hotline: 1-877-89-SPILL

Or visit our website at www.ocwatersheds.com