

POWER WASHING WITHOUT POLLUTION

Best Management Practices and Pollution Prevention

The Capital Regional District (CRD) Environmental Services department has developed environmental programs and regulations to reduce the amount of pollutants in storm drains and sanitary sewers. Power washing can cause pollution in a number of ways. This information sheet outlines best management practices that prevent pollution and protect water quality and our environment.

What are Best Management Practices?

Best management practices are proactive techniques that reduce pollution at the source before they end up in our environment. They are practical, based on common sense and can be implemented easily. Some examples of techniques are:

- use dry clean-up methods
- use the least amount of wash water possible
- choose the least toxic cleaning products

Why Should Power Washing Operations Use Best Management Practices?

As the operator of a power washing business you play a vital role in protecting public health and the environment. Wash water from outside power washing activities may flow into storm drains and end up untreated in local streams and the ocean. Power washing can dislodge pollutants like paint chips or oily sediments. Chemical cleaning residues and soaps that flow in the storm drain system have the potential to harm aquatic life and habitats. Roof cleaning can release fine aggregate or even toxic materials that may end up in our environment. All of these chemicals can destroy sensitive ecosystems and pollute recreational sites and our water supplies.

By implementing best management practices, you will:

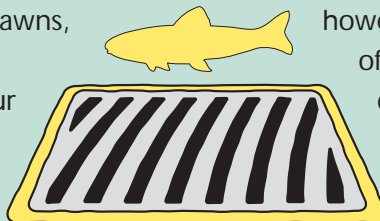
- protect and improve water quality
- save money on disposal costs
- be better able to comply with existing regulations
- reduce potential liabilities and avoid penalties
- offer environmentally friendly services to your customers

Storm Drains vs. Sanitary Sewers

Storm drains and sanitary sewers are separate systems with different functions:

Storm drains are typically found in streets and parking lots to collect stormwater. Stormwater is surface water that includes water from rain, snowmelt and irrigation. The water runs across rooftops, lawns, pavement and other surfaces into storm drains or seeps directly into the ground. Along its journey the water picks up contaminants like litter, oil and antifreeze leaks from cars, pesticides used on lawns, and spilled paints or solvents. Most stormwater ends up untreated in our lakes, streams and the ocean.

Sanitary sewers collect wastewater from indoor plumbing such as toilets, sinks, washing machines and floor drains. They are called "sanitary" because they keep sewage contained in underground pipes. The sewage flows to a screening facility or treatment plant before it is discharged into the ocean. Sewage consists mainly of water and organic matter; however, it can also contain a variety of chemicals, oil, grease and other materials that are flushed down the drain.



Power Washing Activities

Preparation

- Plan ahead. Consider whether there is an alternative method to do the job that will reduce the amount of wash water to dispose of.
- Use dry methods for pre-cleaning before wet washing. Use absorbents on small oil spots and sweep up trash or dirt first before washing.
- Decide what cleaning compounds to use. Use the least toxic products. Some chemicals are hazardous and make the wash water difficult or expensive to treat and dispose of. Acidic and caustic cleaners may also damage paved or coated surfaces.
- Determine what wash water collection method to use before you start power washing. Methods include vacuums, pumps or containment pools.
- Always identify the locations of all storm drains and sanitary sewers before commencing work. Protect storm drains with berms or booms.
- Minimize the amount of water used during power washing.
- Find out if your used wash water requires special management or permits.

Cleaning Method

Power washing can help protect our environment. Clean surfaces will release fewer contaminants into our waterways as long as the waste and wash water is collected and disposed of appropriately. You can be part of the solution by using the following approach:

- Always do a dry clean-up before washing down.
- Wash without soaps and solvents, if possible.
- Keep contaminated wash water out of storm drains.
- Dispose of dry wastes and used wash water properly.



Proper Disposal

- Materials from regular dry clean-up methods involving sweeping, scraping or wire brushing can usually be put into the garbage.
- Absorbent materials used to soak up liquids from paints, thinners, solvents, glues and cleaning fluids and heavily oiled wipes have to be disposed of at a hazardous waste facility.
- Plain wash water (containing no soap, cleaning products or chemicals) that is used on surfaces free of paints, garbage, oil and other hazardous materials may be directed to a landscaped area or may be filtered and discharged to the storm drain.
- Wash water containing soap and non-hazardous cleaning products used on surfaces free of paints, garbage, oil and other hazardous materials has to be collected and disposed of in the sanitary sewer.
- Wash water with caustic cleaning chemicals has to be neutralized before being discharged to the sanitary sewer.
- All wash water and solid residuals from surfaces with lead-based paints must be contained and tested to see if it may be classified as hazardous waste. If it is, it must be disposed of at a licensed treatment facility.
- All wash water containing oil must be collected and taken off-site for treatment.
- Contact the CRD Hotline at 360-3030 or hotline@crd.bc.ca for waste and wastewater management options.

BEST MANAGEMENT PRACTICES FOR POWER WASHING OPERATIONS

Type of Surface	Cleaning Options	Proper Disposal
Unpainted Building Surfaces	• Plain water	• Direct wash water to landscaped area.
	• Water with non-hazardous cleaning solution	• Collect and discharge the wash water to the sanitary sewer.
	• Acid wash (to remove mineral deposits)	• Rinse acid wash with alkaline soap before discharging it to the sanitary sewer.
Painted Building Surfaces (non-lead based paint)	• Plain water	• Direct wash water to landscaped area.
	• Water with non-hazardous cleaning solution	• Collect and discharge the wash water to the sanitary sewer.
Painted Building Surfaces (lead-based paint)	• Any wash water method	• Collect the wash water and solid residuals to test if they may be classified as hazardous waste (see Proper Disposal).
Uncontaminated Outside Ground Surfaces (sidewalks, parking lots, storage areas, outdoor eating areas)	• Dry clean-up	• Dry materials can be put into the garbage. Absorbent materials usually have to be disposed of at a hazardous waste facility (see Proper Disposal).
	• Plain water	• Filter the wash water. Dispose of solid materials in the garbage. Filtered wash water can be directed to a landscaped area or storm drain.
	• Water with non-hazardous cleaning solution	• Collect the wash water and discharge it to the sanitary sewer.
Outside Ground Surfaces with Oil Leaks (gas stations, machinery storage areas)	• Any wash water method	• Collect the wash water and dispose of it at a licensed facility.
Graffiti Removal	• High pressure washing	• Follow above instructions for painted building surfaces.
	• Wet sandblasting	• Collect the wash water and filter it to remove sand and solids. Discharge filtered water to the sanitary sewer. Dispose of solids in the garbage.
	• Chemical removal	• Wipe off excess chemical cleaner before washing. Neutralize the wash water, filter and discharge it to the sanitary sewer. Test filtered solid residuals to see if they may be classified as hazardous waste (see Proper Disposal).
Roofing (cedar, asphalt, untreated wood shingles)	• Plain water	• Disconnect downspout. Direct wash water to a landscaped area.
	• Water with non-hazardous cleaning solution	• Collect the wash water and discharge it to the sanitary sewer.
Roofing (treated wood shingles)	• Dry clean-up only	• Treated wood shingles contain a toxic material to reduce moss growth. <u>Never</u> wash treated shingles. Use dry clean-up methods and dispose of loose materials in the garbage.
Heavy Equipment and Machinery	• Any wash water method	• Wipe off as much oil as possible. Heavily oiled wipes may be considered hazardous waste (see Proper Disposal). • Collect all wash water and dispose of it at a licensed facility.
Grocery Carts	• Plain water	• Direct to a landscaped area.
	• Water with non-hazardous cleaning solution	• Collect wash water and discharge it to the sanitary sewer.

Storage, Spill Prevention and Response

Storage

- Store all chemicals and cleaning products in spill containment equipment like drip trays or buckets.
- Cap all floor drains located in chemical storage areas so that spills cannot discharge into sanitary sewers or storm drains. Put berms in front of doorways.

Spill Prevention

- Develop a spill response plan. Take into account the layout of the site and the maximum volumes of chemical and cleaning products to be used.
- Educate employees about best management practices and spill response procedures.
- Stock up on spill clean-up supplies. Replenish as needed.
- Frequently check chemical containers and equipment such as hoses, hose couplings and valves for leaks and excessive wear. Replace as necessary.
- Keep records of inspection dates and maintenance procedures.

Spill Response

- Whenever possible, use dry methods to clean up spills. Dry methods include sweeping, vacuuming, mopping or using absorbents. Do not use water solvents and emulsifiers.
- Use the appropriate disposal method for used absorbent materials. They may be considered hazardous waste (see Proper Disposal).
- Report spill incidents immediately to the Provincial Emergency Program (PEP) at 1-800-663-3456.

What is a spill?

A spill is defined as a discharge into the environment that is abnormal in quantity or quality, considering all circumstances.

For More Information

CRD Hotline

(250) 360-3030

hotline@crd.bc.ca

To find out about waste management

CRD Web site

www.crd.bc.ca/es

To find out about CRD Environmental Services programs and regulations

Integrated Stormwater, Harbours and Watersheds Program

(250) 360-3256

stormwater@crd.bc.ca

Regional Source Control Program

(250) 360-3256

RSCP@crd.bc.ca

Provincial Emergency Program (PEP)

1-800-663-3456

To report hazardous waste spills



Environmental Services

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This info sheet was developed in partnership with



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