Best Management Practices for Pressure Washing Businesses

SPRINGFIELD OREGON

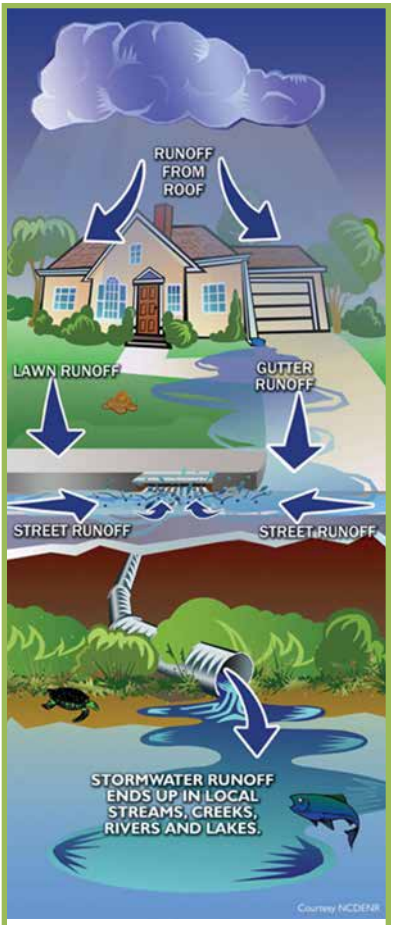
Eugene

Introduction

The purpose of this guidebook is to inform you about current regulations for surface cleaning in the Cities of Eugene and Springfield. You'll find a list of Best Management Practices (BMPs) for accomplishing your washing goals while protecting our local rivers from pollutants. These requirements and BMPs apply to contractors who provide pressure washing cleaning services to others.

How does pressure washing affect rivers and streams?

Although convenient for cleaning surfaces and equipment, pressure washing runoff can release contaminants into the storm system. Grease from food dumpster areas, sediment from driveways and walkways, and auto fluids from parking lots and drive-throughs mix with water and are carried to storm drains where they flow to the McKenzie and Willamette Rivers without being treated. Hot water, soaps, and chemicals follow the same path when used as cleaning agents. Pollutants such as these can be very harmful to aquatic life and ecosystems, creating cloudy, low-oxygen, and sometimes deadly habitats for fish and other wildlife. Even biodegradable or "nontoxic" cleaners can pose a threat to rivers, especially when they mix with oils, greases, metals and auto fluids.



Unlike the sanitary system, pollutants are <u>not</u> removed before entering rivers and streams. Cleaning activities like pressure washing can easily contribute to water pollution if runoff is not managed properly.

Stay fine free! Know your local regulations

Illegal discharges to the stormwater system are addressed through City Code Enforcement in several ways, sometimes including fines. Introducing pollutants to storm drains, ditches or streams when pressure washing could be considered an illegal discharge and a violation of the Clean Water Act. To avoid costly fines, review and follow the BMPs described in this booklet. Read and ask questions; be a part of the solution.

What's the big deal about water quality? The US Environmental Protection Agency (EPA) requires local governments and certain types of businesses to have a stormwater permit. Under this program, the cities of Eugene and Springfield are required to collect stormwater samples, analyze them for specific pollutants, and report them annually. If increased concentrations of pollutants are found, the EPA can require additional regulations and costly clean-up measures.

Where should the wash water go?

Wherever practicable, the Cities of Eugene and Springfield recommend that facilities discharge water from washing activities to the sanitary sewer. Be sure to consult the local sewer authority of planned discharges and to clarify proper disposal procedures. In the Eugene area, please call 541-682-8628. In the Springfield area, please call 541-726-3693.

All mobile cleaning operations that use soaps, detergents, or hot water, steam, or other cleaners must be conducted on a solid surface so that wash water can be collected and discharged to sanitary sewer or a recycling system. Mobile washing operations may discharge to the stormwater system if they obtain a permit or the facility at which they are conducting washing operations has obtained a NPDES 1700-A or WPCF 1700-B permit. Contact the DEQ for information about obtaining these permits.[1]

Commercial mobile washers that use chemicals, detergents, soaps, steam, or heated water should use a portable impervious surface material (such as a plastic liner with sufficient berms to collect the washwater leaving the protected area) when washing on a porous surface such as vegetation or gravel. A portable wash pit, vacuum recovery unit, or comparable device must be used on location to collect water for proper disposal.

The following are proper methods of collection and disposal to prevent contamination of stormwater runoff:

- Wash in an enclosed area with roof-structure and floor drains which are plumbed to the sanitary sewer system.
- In an open area, drain wash water to a sump or grit trap that is then pumped or siphoned to a sanitary sewer, recycling equipment, or treatment equipment.
- Use a catch basin as a sump, provided a positive control valve can close the outlet to the storm system and divert to the sanitary system while washing occurs. The

catch basin should then be vactored or otherwise cleaned to remove collected solids.
- Use an existing catch basin as a sump, provided the outlet pipe is sealed by a plug (plumber's balloon) to prevent wash water from entering the storm drainage system.
- Collect wash water with a portable vacuum recovery unit during power washing activity.

All catch basins, sumps and sanitary connections used must be located on private property; do not attempt to access publicly owned connections.

Washing the following surfaces with discharge to the stormwater system is allowed without obtaining a 1700-A or -B wash water permit[1] from the DEQ, provided any water that is discharged to the storm system is treated by using oil-absorbent material (such as pads or booms) AND filtration media (such as biobags or catch basin inserts[2]), AND chemicals, soaps, detergents, steam, and hot water ARE NOT USED:

- Buildings can be washed as long as paint chips or other debris are collected and disposed of properly. Older homes with lead-based paint must ensure all paint chips and wash water are disposed of as a hazardous material. Excess debris should be dry swept and disposed of properly before washing occurs.
- Roads, parking lots, sidewalks, and other paved surfaces—should be clean from debris (via sweeping) before washing occurs. Vehicle fluids or other spills should also be cleaned prior to washing.
- Washing new or used vehicles awaiting sale, lease or delivery is permitted only on exterior of vehicle (No engines, transmissions, or undercarriages). Rental vehicles and rented equipment are not included in this exemption.
- Businesses that wash seven or fewer vehicles or pieces of equipment per week-may only clean the exterior of vehicles or equipment. When washing large trucks, the tractor and trailer are counted as separate pieces.

All debris created from washing activities must be cleaned up afterwards by sweeping or vacuuming in order to prevent introduction to the storm system.
(Be sure to refer to the Oregon Department of Environmental Quality (DEQ) Recommended Best Management Practices for Washing Activities *document and* Deminimus Activities Allowed by the Wash Water Permit *fact sheet for a complete listing of state pressure washing regulations.)*

[1] As of January, 2011, the DEQ is no longer issuing new 1700-A washwater permits. Businesses with expired permits are required to continue operating under previous permit conditions. Businesses that think they would need a new 1700-A are advised to follow the Best Management Practices outlined in the expired permit. Details for the expired 1700-A may be found at http://www.deq.state.or.us/wq/wqpermit/docs/general/npdes1700a/permit.pdf. The DEQ continues to issue and manage 1700-B permits as usual.

[2] Catch basin inserts may only be used on private property; **they may not be used on any publically owned structure, unless otherwise directed by an NPDES permit.**

Protecting the stormwater drain while pressure washing is a simple way to prevent pollution from reaching our rivers and streams

Before You Turn on the Water: Planning for a Successful Washing Operation

✔ Familiarize yourself and your employees with local and state washing regulations.

✔ Ensure you have and use the proper tools (Best Management Practices) to complete the job and protect stormwater.

✔ At each site, determine the destination for runoff. Know if it is appropriate for water to flow there or if drains must be plugged and the water redirected.

✔ If wash water must be collected or redirected, know where the disposal will be located. Options include private sanitary sewer manholes (City maintained manholes may only be opened by City staff), sanitary cleanouts, utility sinks, or a separate sanitary disposal location offsite.

✔ If water will be directed to a vegetated area, make sure this is communicated with your client and that the area will not become flooded.

✔ Beware of pressure washing hazardous materials (lead-based paint, oils, solvents, antifreeze, etc). Washing surfaces that have these materials present may require proper hazmat disposal and dramatically increase operational complexity and disposal costs.

If you have questions regarding proper pressure washing techniques as they relate to storm water quality, contact the City of Eugene or Springfield's Public Works Department before starting a job. Contact information is listed on the back of this booklet.

Tools to Keep You in Compliance: Best Management Practices

Storm drain mat

Storm drain cover/mat: These devices are placed on top of storm drain grates to prevent water from entering. They create a quick seal, allowing water to pool and be collected with a sump pump or shop vac.

Pumps/vacuums: Vacuum pumps and wet/dry vacs can be used to collect washwater for diversion to the sanitary system. Hoses may be used to send water to an approved sanitary manhole, cleanout or holding tank.

Inflatable pipe plug: These plugs are inserted into a storm drain pipe and inflated for a tight fit. The washwater collected in the storm drain sump may then be pumped to the sanitary system or a holding tank.

Absorbent pads

Berms: For sites with proper grading and relatively smooth surfaces, manufactured berms may be placed around a storm drain, allowing water to pool for later collection/diversion to the sanitary system.

Absorbents: Absorbents, such as kitty litter, work well to absorb liquids and can be easily swept up with a stiff bristled broom prior to pressure washing. Absorbent pads can be applied to spills and simply lifted off once fluids have soaked into the fabric.

Oil-only socks or booms: These should be placed around storm drains where automotive oil residue is expected on a surface (such as a parking lot or drive-through). Socks or booms are also effective at catching debris and preventing their entry into storm drains during washing.

Bio-bags

Bio-bags/Bark-bags: Bags may be placed around storm drains as a protective barrier to collect debris and larger sediment. This method is effective for washing areas with moss, dirt, or debris buildup. They will NOT prevent petroleum-based residues from entering a storm drain as they do not absorb oils.

Berm

Inflatable pipe plugs

Absorbents

Vacuum

Socks

There are a variety of tools that address specific water protection objectives.

Preparing the site properly with the right tool for washing job keeps your business from being subject to fines associated with code violations.

Surface Cleaning Best Management Practices (BMPs)

All mobile cleaning operations that use soaps, detergents, hot water, steam, or other cleaners must be conducted on an impervious surface so that wash water can be collected and discharged to the sanitary sewer or a recycling system. Mobile washing operations may discharge to the stormwater system if they obtain a permit or the facility at which they are conducting operations has obtained a NPDES 1700-A or 1700-B permit. The following chart assumes that no soaps, chemicals, or detergents are used for cleaning:

Types of Surface	Potential Pollutants	Cleaning Method and BMPs Required	Proper Disposal
Horizontal Surfaces— Sidewalks, plazas, walkways	Sediment, moss, debris	Dry cleanup first by sweeping up loose dirt and debris. Use absorbent materials to clean spills/leaks before washing. Place appropriate inlet protection (filter media required, absorbents as needed) around storm drains. After washing, sweep up debris caught by biobag or sock.	Wash water—stormwater system. Debris—regular trash.
Parking lots, driveways, and drive-throughs	Auto fluids (engine oil, hydraulic fluid, antifreeze), sediment, moss, debris	Dry cleanup first first by sweeping up loose dirt and debris. Use absorbent materials to clean spills/leaks before washing. Place appropriate inlet protection (filter media required, absorbents as needed) around storm drains. After washing, sweep up debris caught by biobag or sock.	Wash water—stormwater system.* Debris—regular trash.
Restaurant— Restaurant/food handling dumpster areas, grease storage area	Food grease, food scraps	Block storm drains. Dry cleanup first. Wash with hot water.	Wash water—sanitary sewer, through oil/water separator or grease interceptor. Debris—regular trash.
Restaurant floor mats, exhaust filters	Food grease	Inside—Wash mats in a sink or wash area with a floor drain. Outside—Clean mats in an area with no access to the storm system.	Wash water—sanitary system through oil/water separator or grease interceptor.
Buildings/Vertical Surfaces— Decks (unpainted)	Debris, moss, sediment	Dry cleanup first. Place socks/booms around storm drains. Sweep up debris afterwards.	Debris—regular trash. Wash water—storm system or gravel/vegetated area.

Painted surfaces—washed	Loose paint (latex and/or lead paint chips) not for hydroblasting (paint removal)	Place a drop cloth below painted wall or fence to catch chips. If paint is lead-based, all water and chips must be collected.	Latex paint chips (no lead)—regular trash. Lead-based paint chips and wash water—hazardous waste. Latex paint wash water—collect and divert to sanitary if possible. If no paint residue, may enter storm system.
Graffiti removal	Chemicals and solvents from removal process, paint chips	Block storm drains. If paint removed, follow paint removal best management practices above. Collect wash water.	Dispose of paint chips as appropriate. Wash water—sanitary system.
Vehicles (new or used) for sale, lease, or delivery	Dirt	Use cold water only, no soap. Wash on a pervious surface, if possible. If not possible, place appropriate inlet protection around storm drains.	Wash water—storm system.
Vehicles (standard fleet washing)	Dirt, oil and grease, metals	Wash on a pervious surface, if possible. If not possible, place appropriate inlet protection around storm drains. Companies without a 1700-A or B permit may wash 7 or less vehicles or pieces of equipment each week. Cleaning is restricted to exterior of vehicle, never the undercarriage or engine.	Wash water—storm system.
Equipment (backhoes, tractors, etc.)	Sediment, oil and grease, metals	Wash on a pervious surface, if possible. If not possible, place appropriate inlet protection around storm drains. Companies without a 1700-A or B permit may wash 7 or less vehicles or pieces of equipment each week. Cleaning is restricted to exterior of vehicle, never the undercarriage or engine.	Wash water—storm system.

The chart above is designed to be used as a guideline for what is required during washing operations. If pollutants are being discharged despite utilizing these BMPs, additional measures must be taken to prevent the discharge of contaminants.

*In Eugene, City Code 6.446 requires that wash water from these activities be collected and discharged to a vegetated area or the sanitary sewer. In Springfield, City Code 5.002 requires wash water from these activities to be discharged to a vegetated area wherever feasible. If a vegetated area is not available, wash water may be discharged to the stormwater system provided that all BMPs are followed. If BMPs are not followed and/or pollutants are found entering the storm system, the washing activity must stop, be re-directed to the sanitary system, or be vacuumed.

Specialized tools to block pollutants and help with clean up can be found both locally and on the internet.

Monitoring, Adapting, and Post-Wash Cleaning

Monitoring and Adapting

A carefully laid out BMP plan is a great start for surface cleaning, but many setups will require a bit of fine tuning to ensure effectiveness. Make sure to watch all of your BMPs as you wash and make changes as appropriate. Is the storm drain plug completely sealing the outlet pipe? Is the pump collecting all of the discharge? Are berms and drain mats preventing the passage of all washwater?

These are several questions to ask yourself and your coworkers as the cleaning process progresses. Many times, a simple relocation of equipment or changing out BMP items can make all the difference in collecting, diverting, or pretreating washwater.

Final site clean-up

✔ Sweep or shovel all sediment and debris caught by bio-bags or other BMP devices and dispose of properly. These materials can generally be disposed of as regular trash, unless it is known that hazardous materials are present (such as lead paint chips).

✔ Collect all washwater containing soaps, detergents, hot water or other cleaners and dispose of in a recycling system or the sanitary sewer (with permission). If washwater contains hazardous materials (such as lead-based paint, oils, solvents, antifreeze, etc), the entire batch must be disposed of as hazardous waste. See the end of this booklet for disposal options.

✔ Retain oil-only booms and socks if not saturated with hydrocarbons. If these items are not saturated they may be disposed of in the trash as long as no oils are actively dripping off of them. All petroleum-based fluids must be recycled properly. If hazardous materials were involved with the cleaning process, the booms or socks will require disposal at an appropriate hazmat recovery site.

Vender List

The Cities of Eugene and Springfield are not officially endorsing any of these companies. The list is provided to identify companies that sell BMP products and materials. Venders, please contact 541-726-3626 (City of Springfield) or 541-682-8616 (City of Eugene) if you would like your business added to this list.

Business	Address Phone number	Product
Bussard Erosion Control	415 25th Avenue SW, Albany 800-252-2692	basin bags, drain donuts, dewatering bags/sacks, ability to customize products
Ferguson (Water Works)	3280 W 1st, Eugene 541-484-0836	sediment dams, catch basin inserts, wattles, sediment fence, filter fabric, mesh filter bags, geo synthetic (woven/non woven), gabions, turbidity curtains, grass pave (open paver), geo cell, geo grids, jute mats
Consolidated Supply Co. (Water Works)	110 N. Garfield St, Eugene 541-688-7621	sediment dams, catch basin inserts, wattles, sediment fence, filter fabric, mesh filter bags, geo synthetic
Stormwater Protection Systems	245 Jackson St, Eugene; 541-687-8672	fiber rolls, basin bags, dewatering bags, silt mats, fossil filters, spill kits, CB cleaning (jetting & vactoring), TV- inspection
Norwest Safety	645 Wilson St, Eugene 541-687-8032	booms, absorbent pads, CB inserts, UltraTech products, absorbent (dry granular), socks, haz-mat supplies, safety supplies
Rexius	1275 Bailey Hill Rd, Eugene 541-342-1835 contact: Jason Giles	mulch, compost, EcoBerm, bio-bags, stormwater filtration, inlet protection, check dams, streambank and slope stabilization, geo-textile reinforcement, EcoBlanket, LockDown Netting
H. D. Fowler	4670 Cloudburst Way, Eugene; 541-607-008	sediment dams, basin filters, CB inserts, bio-bags, silt fence, jute mats, sand filters, fabrics
Sanderson Safety Supply	850 Conger St, Eugene 541-683-9333	absorbents, spill control products, sorbents, safety supplies
Northwest HazMat Inc.	36 West Q St, Springfield; 541-988-9823	absorbents, CB inserts, booms, socks, pads, spill response, haz-mat supplies/clean-up, training
Lane Forest Products	800 N 42nd, Springfield 2111 Prairie Rd. Eugene 541-345-9085	mulch, compost, berms, bio-bags
New Pig online	http://www.newpig.com 800-468-4647	Spill control products: booms, socks, absorbents, berms, drain covers, drain plugs, etc.
Seton online	http://www.seton.com/ 855-548-0164	Spill control products: booms, socks, absorbents, berms, drain covers, drain plugs, etc.
Whitecap Construction Supplies	3395 W First Ave, Eugene, 541-505-3396	drain inlet filters, drain guards, boom socks, sediment dams, absorbent pads

Stormwater resources

Contact information

City of Springfield
541-726-3626

City of Eugene
541-682-8616

Metropolitan Wastewater Treatment Plant
(Call to notify the plant of a discharge to the sanitary system)

City of Eugene
541-682-8664

City of Springfield
541-726-3693

Internet Links

City of Eugene, Stormwater
www.happyrivers.org

City of Springfield, Stormwater
www.springfield-or.gov/dpw/brochures.htm

Lane County Special and Hazardous Waste Program
www.lanecounty.org/hazwaste

Power Washers of North America
www.pwna.org