Best Practices Guidance Document

Source Control and Mobile Businesses

Prepared for King County and Washington State Department of Ecology

Prepared by Herrera Environmental Consultants, Inc.



Note:

Some pages in this document have been purposely skipped or blank pages inserted so that this document will print correctly when duplexed.

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Acronyms

Aspect	Aspect Consulting, LLC
BIG	Business Inspection Group
BMP	Best Management Practice
Ecology	Washington State Department of Ecology
FOG	Fats Oils and Grease
Herrera	Herrera Environmental Consultants
IDDE	Illicit Discharge Detection and Elimination
IPMP	Integrated Pest Management Plan
NPDES	National Pollutant Discharge Elimination System
PPA	Ecology Pollution Prevention Assistance
PPE	Personal Protective Equipment
SAM	Stormwater Action Monitoring
SCIP	Source Control Inspection Program
SDS	Safety Data Sheet
Source ID	Source Identification
STORM	Stormwater Outreach for Regional Municipalities
Study	This SAM study
TAC	Technical Advisory Committee
WSC	Washington Stormwater Center



1. INTRODUCTION

This guidance document provides a summary of task work for a Stormwater Action Monitoring (SAM) study on stormwater source control and mobile businesses. The SAM studies are administered by the Washington State Department of Ecology (Ecology) and support municipal permittees with implementing National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit requirements in Washington State. Funding for the Study was provided by the permittees themselves via the SAM program.

1.1. Mobile Businesses and Source Control SAM Study

As part of the Source Identification (Source ID) subset of SAM studies, this SAM study (Study) is focused on how permittees are implementing or plan to implement stormwater source control activities with mobile businesses. As a subset of commercial enterprises, some mobile businesses have unique challenges related to stormwater and pollution prevention due to their mobile nature and working at dispersed sites in multiple jurisdictions.

The overall goal of the Study is to provide insight and tools to help permittees identify, inspect, and coordinate mobile business engagement for municipal stormwater source control activities. The Study also directly addresses two priority topics (numbers 17 and 23) identified by permittees and other stakeholders during the proposal and planning stages of this round of SAM studies.¹

A working definition of mobile businesses in the context of stormwater source control was developed in the Study survey (Aspect 2022a). The definition was refined in discussion with the Study technical advisory committee (TAC). The current working definition includes the following:

Mobile businesses are defined by travel to provide services at customer sites, which typically include sites outside of the businesses' home jurisdiction. Like any commercial enterprise, mobile businesses are of interest to stormwater management if there is potential to cause illicit discharges through the generation, storage, transfer, treatment, and/or discharge of hazardous material or waste that could enter the municipal storm drainage system or natural water bodies. Examples include mobile equipment repair services, mobile vehicle repair and detailing, landscaping services, onsite carpet cleaning and pet grooming, and mobile exhaust hood cleaning, among others.

¹ Priority topic 17. What additional regional or statewide regulatory systems or approaches would likely support local government oversight of mobile businesses that discharge waste to the MS4?

^{17.1.} How can the business licensure process and requirements support proper waste handling?

^{17.2.} What are barriers to proper handling of waste?

Priority topic 23. Evaluate the IDDE data reported by permittees and gather additional information needed to identify mobile and other multijurisdictional business' violations, to support coordinated and effective multi-jurisdiction enforcement.

1.2. Task 5: Best Practices Guidance Document

Task 5 of the Study includes developing a guidance document on best practices and resources available for municipal source control efforts with mobile businesses. The resources include outreach materials and best management practices (BMPs) collected from a variety of sources, including from current editions of local stormwater manuals. In addition to existing outreach materials, three new outreach brochures (see Appendix B) were developed for the Study on topics for which gaps were identified following a literature review of existing materials (see Appendix A). Additionally, best practices guidance is provided to support the efforts of source control inspectors engaging with mobile businesses, some of which is carried forward from outcomes of the other Study tasks, including the survey (Task 2), the business listing effort (Task 3), and the Pilot Program (Task 6).



2. RESOURCES AND BEST PRACTICES FOR MOBILE BUSINESSES

This section describes outreach and education resources and BMPs available for mobile businesses, which include existing resources and new materials developed in this Study. This information can be used by permittees and other entities to help educate owners of mobile businesses about their source control needs and at sites where mobile businesses operate.

2.1. Source Control and Pollution Prevention Resources

Resources for source control by mobile businesses are gathered here and provided in appendices to this guidance document. The intent is to provide a comprehensive source of stormwater pollution prevention outreach materials and BMPs related to common mobile business types and activities that are of interest to stormwater management. The materials gathered include pollution prevention outreach brochures, cards, and flyers (Appendix A) and BMPs (Appendix B) targeted to common activities performed by many mobile businesses that can affect stormwater.

2.1.1. Existing Outreach Materials

The selection of outreach materials and BMPs in this guidance document reflects what is available locally in Washington state and from web searches of other cities in the United States (see Table 1). Much of the educational material from different jurisdictions was repetitive and addresses similar topics, especially various cleaning activities performed by mobile businesses. In addition, many existing outreach items are customized for a local jurisdiction or area, which may be a hurdle for other jurisdictions to use the materials. Thus, a selection of some of the best materials (in the study team's judgement) is collected here with a focus on brevity, a range of mobile business types and activities, and usability by Washington state jurisdictions. Materials include:

- One- or two-page brochures, flyers, and factsheets, mostly in English and some in Spanish
- Materials with infographics, pictures, and short text explanations
- Materials with space to add labels with local jurisdiction contact information

In addition to online publications from some non-Washington cities, the outreach and education materials collected here are from several local sources, including:

- Source Control (Business/Site) Inspection Program Guidance Manual (Herrera 2022)
- STORM (Stormwater Outreach for Regional Municipalities) online Resource Reservoir



- Business Inspection Program Report (BIG 2020)
- Ecology Pollution Prevention Assistance (PPA) Program

The outreach materials reviewed for this Study are listed in Table 1 and grouped by topic with a crosswalk of mobile business types and activities the materials address. The topics covered include:

- General/multipurpose mobile business activities
- Mobile cleaning:
 - Animals/Pets
 - Buildings/Grounds
 - Carpet/Furniture
 - Equipment and Vehicles
 - Exhaust Hood/ Fats Oils Grease (FOG)
 - Pools/Spas
- Construction
- Landscaping

The mobile business types and activities covered in the outreach materials include:

- Mobile Auto Washing/Detail
- Mobile Builders, Painters, and Contractors
- Mobile Carpet/Furniture/Drapery Cleaning
- Mobile Equipment Repair and Maintenance
- Mobile Exhaust Hood Cleaning
- Mobile FOG Vendors
- Mobile Food Trucks
- Pesticide Applicators (also includes herbicides, insecticides, and rodenticides)
- Mobile Pet Grooming
- Paving and Grading Contractors
- Mobile Power/Pressure Washing
- Exterior Window and Building Washing
- Swimming Pool and Spa Cleaning



Table 1. Outreach Materials for Mobile Businesses.															
OUTREACH MATERIALS BY TOPIC	Author/Location	File #	Mobile Auto Washing & Detail	Mobile Builders, Painters, and Contractors	Mobile Carpet, Furniture, & Drapery Cleaning	Mobile Equipment Repair and Maintenance	Mobile Exhaust Hood Cleaning	Mobile Fats Oils Grease (FOG) Vendors	Mobile Food Trucks	Landscapers Pesticide, Herbicide, & Rodenticide Applicators	Mobile Pet Grooming	Paving and Grading	Mobile Power/ Pressure Washing	Building, Ground, & Window Washing	Pool and Spa Cleaning
General/Multipurpose Mobile Businesses Activities															
Preventing Water Pollution, Tips for Mobile Businesses	Bellingham, WA	01	Х	Х	Х										
Mobile Businesses Prevent Pollution	Kirkland, WA	02													
Stormwater System Guide for Businesses	Kitsap County, WA	03				Х			Х						
Water Pollution and the Mobile Business Industry	Orange County, CA	04	Х		Х						Х		Х		
Compliance Best Management Practices for Mobile Businesses	Orange County, CA	05	Х		Х							Х	Х		
Stormwater Pollution Prevention: Mobile Businesses	Partners for Clean Water	06	Х		Х	Х					Х		Х		
Wash Water Disposal Practices for Mobile Cleaners & Businesses	Contra Costa, CA	07	Х						Х		Х		Х	Х	
The Mobile Cleaner's Guide to Best Management Practices	Buellton-Solvang, CA	08	Х					Х					Х	Х	Х
Animal/Pet Grooming															
Tips for Pet Care Providers	Alameda County, CA	09									Х				
Mobile Pet Groomer and Stylist Guide: Best Management Practices	Buellton-Solvang, CA	10									Х				
Best Management Practices for Mobile Pet Services	Laguna Niguel, CA	11									Х				
Buildings and Grounds															
Wash Water Disposal Practices for Mobile Surface Cleaners	Contra Costa, CA	12		Х										Х	
Carpet and Furniture Cleaning															
Good Business Practices for Carpet Cleaning & Wastewater Disposal	Dept of Ecology WA	13			Х										
Tips for Carpet Cleaners	Alameda County, CA	14			Х										
Wash Water Disposal Practices for Carpet Cleaners	Contra Costa, CA	15			Х										
Construction, Building, Painting					·	-									
Painting Without Polluting	Sacramento, CA	16		Х											
Tips on How to Properly Deal with Wastewater When Painting	Dumpsmart.org	17		X											
Equipment and Vehicles		1		-	-	L		1					1	L	1
Preventing Water Pollution. Tips for Vehicle Washing and Detailing	Bellingham, WA	18	Х												
Tips for Mobile Businesses	Alameda County, CA	19	X												
Exhaust Hoods and FOG	,					<u> </u>	I	I						I	I
Best Practices for Cleaning Hood Filters, Ducts, and Fans	Herrera & WA Stormwater Center	20					х	х							
Implementing Effective Best Management Practices In Your Kitchen	Kent, WA	21					Х	Х	Х						
Mobile Food Service: How to Manage and Dispose of Materials and Wastes	PPA Program, Dept of Ecology	22						Х	х						
Mobile Food Vendor Environmental Guidelines	Spokane County, WA	23						Х	Х						
Landscaping															
The Landscaper's Guide to Best Management Practices	Buellton-Salvang, CA	24								Х			Х		
Best Management Practices for Landscaping Professionals	Contra Costa, CA	25								Х			Х		
Pool and Spa Cleaning						·									
Hot Tub & Pool Water Disposal: Prevent Pollution	Kirkland, WA	26													Х
Proper Disposal of Wastewater	Alameda County, CA	27													Х



	Table 2	. New Out	treach Ma	terials.									
NEW OUTREACH MATERIALS		Mobile Builders, Painters, and Contractors	Mobile Carpet, Furniture, & Drapery Cleaning	Mobile Equipment Repair and Maintenance	Mobile Exhaust Hood Cleaning	Mobile Fats Oils Grease (FOG) Vendors	Mobile Food Trucks	Landscapers Pesticide, Herbicide, & Rodenticide Applicators	Mobile Pet Grooming	Paving and Grading	Mobile Power/ Pressure Washing	Building, Ground, & Window Washing	Pool and Spa Cleaning
Automobile Repair													
Stormwater Pollution Prevention for Mobile Auto Repair Businesses	Х			Х									
Landscaping													
Stormwater Pollution Prevention for Commercial Landscaping								Х					
Pressure Washing													
Stormwater Pollution Prevention for Pressure Washing					Х						Х	Х	

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2.1.2. New Outreach Materials Developed for this Study

Three new outreach items for mobile businesses were created as part of this Study. Several potential topics were considered, and the following three topics were chosen for which trifold brochures were developed.

- 1. Mobile Automobile Repair
- 2. Commercial Landscaping
- 3. Power/Pressure Washing

These three new outreach brochures are listed in Table 2 and provided in Appendix B and can be used as is or customized with a label of the jurisdiction's name, logo, and contact information. Spanish language versions of these new brochures were also created and are included in Appendix B. To use the brochures, users have access to the portable document format (PDF) versions of the files and also the source files (Adobe InDesign), both of which are provided on the Ecology webpage for the Study (LINK).

Potential topics for the new outreach materials were discussed with the Study TAC and Pilot Program (Task 6) participants. The three topics developed into brochures were chosen from a list of potential topics that were identified from a variety of materials. Priority topics were identified that are: underrepresented in existing outreach materials to mobile businesses; have a need for non-jurisdiction specific information; or represent topics not addressed in existing materials. Besides the three topics that were selected for outreach brochure development, the other topics considered included the following.

- Building Exterior Painting
- Contractors at Small Construction Sites
- Cross-Jurisdiction Coordination on Mobile Businesses
- Mobile Food Trucks
- General Outdoor Cleaning Practices
- Mobile Exhaust/Vent Hood Cleaners
- Mobile Fueling
- Mobile Carpet Cleaning
- Mobile Pesticide/Herbicide/Rodenticide Applicators
- Mobile Pet Grooming
- Paving, Grinding, and Black Top Maintenance
- Solid Waste Hauling



2.1.3. Best Management Practices

A selection of BMPs is also collected in this document for common activities by mobile businesses that could impact stormwater. The BMPs collected here are from three main sources that are well-developed local stormwater manuals:

- King County Stormwater Pollution Prevention Manual (King County 2021)
- Stormwater Management Manual (Tacoma 2021)
- Stormwater Management Manual for Western Washington (SWMMWW; Ecology 2019)

The relevant BMPs are listed in Table 3, with reference sheets provided in Appendix C, and represent the following mobile business activities.

- Building Cleaning
- Cleaning and Washing Activities
- Mobile Fueling
- Landscaping and Pesticide/Herbicide/Insecticide/Rodenticide Applicators
- Maintenance and Repair Activities
- Spill Prevention and Cleanup
- Storage of Hazardous Materials/Liquids
- Waste Collection and Disposal

The BMPs selected from the source manuals were chosen to be complementary with each other and avoid redundancy. Thus, while most mobile business activities in the list above are addressed by BMPs in all three source manuals, preference was given to the versions with the clearest layout, simplest language, and most relevant information.



NoticeNotice Builders CommerNotice Builders Autio MaintenanceNotice Builders Commer	Table 3. Stormwater Best Management Practices for Mobile Business Activities.														
Storage and Portable Containers 30.0.4.3 X <th< th=""><th>BEST MANAGEMENT PRACTICES (BMPs)</th><th>Volume-Chapter, BMP No.</th><th>Mobile Auto Washing & Detail</th><th>Mobile Builders, Painters, and Contractors</th><th>Mobile Carpet, Furniture, & Drapery Cleaning</th><th>Mobile Equipment Repair and Maintenance</th><th>Mobile Exhaust Hood Cleaning</th><th>Mobile Fats Oils Grease (FOG) Vendors</th><th>Mobile Food Trucks</th><th>Landscapers Pesticide, Herbicide, & Rodenticide Applicators</th><th>Mobile Pet Grooming</th><th>Paving and Grading</th><th>Mobile Power/ Pressure Washing</th><th>Building, Ground, & Window Washing</th><th>Pool and Spa Cleaning</th></th<>	BEST MANAGEMENT PRACTICES (BMPs)	Volume-Chapter, BMP No.	Mobile Auto Washing & Detail	Mobile Builders, Painters, and Contractors	Mobile Carpet, Furniture, & Drapery Cleaning	Mobile Equipment Repair and Maintenance	Mobile Exhaust Hood Cleaning	Mobile Fats Oils Grease (FOG) Vendors	Mobile Food Trucks	Landscapers Pesticide, Herbicide, & Rodenticide Applicators	Mobile Pet Grooming	Paving and Grading	Mobile Power/ Pressure Washing	Building, Ground, & Window Washing	Pool and Spa Cleaning
Shorage of Liquid Materials in Portable Containers 30, A-3 X	King County Stormwater Pollution Prevention Manual (King County 2021)														
Storage and Use of Pesticides and Ferliners 3.0. A-5 M M X	Storage of Liquid Materials in Portable Containers	3.0, A-3	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х
Cleaning of Washing of Tools and Equipment 30, A-11 X	Storage and Use of Pesticides and Fertilizers	3.0, A-5								Х					
Clearing and Washing of Food Service Areas and Equipment 30, A-12 X <t< td=""><td>Cleaning or Washing of Tools and Equipment</td><td>3.0, A-11</td><td>Х</td><td>Х</td><td></td><td>Х</td><td>Х</td><td></td><td>Х</td><td>Х</td><td></td><td>Х</td><td></td><td></td><td></td></t<>	Cleaning or Washing of Tools and Equipment	3.0, A-11	Х	Х		Х	Х		Х	Х		Х			
Interior Washing Operations (Including Mobile Contractors) 3.0. A-15 X X X X X X Painting, Finishing, and Coating of Vehicles, Products, and Cipuit application 3.0. A-25 X	Cleaning and Washing of Food Service Areas and Equipment	3.0, A-12					Х		Х						
Washing of Buildings, Roothops, and Other Large Surfaces 30, A-12 X X X X X Chemical Application - Other than Landscaping 30, A-22 X	Interior Washing Operations (Including Mobile Contractors)	3.0, A-14			Х								Х	Х	
Painting, finishing, and Coating of Vehicles, Products, and Equipment 30, A-25 X X X X C <thc< th=""> <thc< th=""> C <thc< td="" th<=""><td>Washing of Buildings, Rooftops, and Other Large Surfaces</td><td>3.0, A-15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Х</td><td>Х</td><td></td></thc<></thc<></thc<>	Washing of Buildings, Rooftops, and Other Large Surfaces	3.0, A-15											Х	Х	
Chemical Application - Other than Landscaping Application - Other than Landscaping Activities. Vegetation Management, and Irrigation 30, A-25 X	Painting, Finishing, and Coating of Vehicles, Products, and Equipment	3.0, A-22		Х		Х									
Landscaping Activities, Vegetation Management, and Irrigation 30, A-26 Image: Construction Projects X	Chemical Application - Other than Landscaping	3.0, A-25	Х		Х	Х					Х				Х
Clearing and Grading for Small Construction Projects 3.0, A-27 No No No No No Sidewalk Maintenance 3.0, A-32 X No No X <td< td=""><td>Landscaping Activities, Vegetation Management, and Irrigation</td><td>3.0, A-26</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Х</td><td></td><td>Х</td><td></td><td></td><td></td></td<>	Landscaping Activities, Vegetation Management, and Irrigation	3.0, A-26								Х		Х			
Sidewalk Maintenance30, A-32XXXKKXX <td>Clearing and Grading for Small Construction Projects</td> <td>3.0, A-27</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Х</td> <td></td> <td></td> <td></td>	Clearing and Grading for Small Construction Projects	3.0, A-27										Х			
Swimming Pool and Spa Cleaning and Maintenance30, A-33II <t< td=""><td>Sidewalk Maintenance</td><td>3.0, A-32</td><td></td><td>Х</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Х</td><td>Х</td><td></td><td></td></t<>	Sidewalk Maintenance	3.0, A-32		Х								Х	Х		
Roof Vents and Fugitive Emissions3.0, A-39XX <td>Swimming Pool and Spa Cleaning and Maintenance</td> <td>3.0, A-33</td> <td></td> <td>Х</td>	Swimming Pool and Spa Cleaning and Maintenance	3.0, A-33													Х
Mobile Fueling of Vehicles and Heavy Equipment3.0, A-48XVXXXXXVVV<	Roof Vents and Fugitive Emissions	3.0, A-39					Х		Х				Х		
Tacoma Stormwater Management Management Management6.0-2.81, \$143II	Mobile Fueling of Vehicles and Heavy Equipment	3.0, A-48	Х			Х				Х		Х			
Landscaping and Lawn/Vegetation Management6.0-2.8.1, S143Image of Cooking EquipmentXX	Tacoma Stormwater Management Manual (Tacoma 2021)														
Cleaning or Washing of Cooking Equipment6.0-2.1.3, S110KK<	Landscaping and Lawn/Vegetation Management	6.0-2.8.1, S143								Х					
Pesticides and Integrated Pest Management6.0-2.8.2, S144Image of the state	Cleaning or Washing of Cooking Equipment	6.0-2.1.3, S110					Х		Х						
Irrigation6.0-2.8.4, S146Image: Constraint of the	Pesticides and Integrated Pest Management	6.0-2.8.2, S144								Х					
Cover the Activity with a Roof or Awning6.0-2.12.1, S164XXXXXIII	Irrigation	6.0-2.8.4, S146								Х					
Cover the Activity with an Anchored Tarp or Plastic Sheet6.0-2.12.2, S165XXXIII <th< td=""><td>Cover the Activity with a Roof or Awning</td><td>6.0-2.12.1, S164</td><td>Х</td><td>Х</td><td></td><td>Х</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Cover the Activity with a Roof or Awning	6.0-2.12.1, S164	Х	Х		Х									
Surround the Activity Area with a Curb, Dike, or Bern or Elevate the Activity6.0-2.12.4, S167XXXXII <th< td=""><td>Cover the Activity with an Anchored Tarp or Plastic Sheet</td><td>6.0-2.12.2, S165</td><td>Х</td><td>Х</td><td></td><td>Х</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Cover the Activity with an Anchored Tarp or Plastic Sheet	6.0-2.12.2, S165	Х	Х		Х									
Ecology Stormwater Management Manual for Western Washington (Ecology 2019)Spill Prevention and CleanupIV-1, S455XXX	Surround the Activity Area with a Curb, Dike, or Berm or Elevate the Activity	6.0-2.12.4, S167	Х	Х		Х							Х		
Spill Prevention and CleanupIV-1, S455XX <td>Ecology Stormwater Management Manual for Western Washington (Ecology</td> <td>/ 2019)</td> <td></td>	Ecology Stormwater Management Manual for Western Washington (Ecology	/ 2019)													
Washing and Steam Cleaning Vehicles/Equipment/Building StructuresIV-2, S431XXXIVStorage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished ProductsIV-5, S429XXX<	Spill Prevention and Cleanup	IV-1, S455	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished ProductsIV-5, S429XX	Washing and Steam Cleaning Vehicles/Equipment/Building Structures	IV-2, S431	Х		Х								Х		
Spills of Oil and Hazardous SubstancesIV-6, S426XXX <td>Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products</td> <td>IV-5, S429</td> <td>Х</td> <td>Х</td> <td></td> <td>Х</td> <td></td> <td></td> <td>Х</td> <td></td> <td></td> <td>Х</td> <td></td> <td></td> <td></td>	Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products	IV-5, S429	Х	Х		Х			Х			Х			
Maintenance and Repair of Vehicles and Equipment IV-7, S414 X X IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Spills of Oil and Hazardous Substances	IV-6, S426	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	Maintenance and Repair of Vehicles and Equipment	IV-7, S414	Х			Х									



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2.2. Recommended Best Practices

This section provides a summary of best practices that are recommended for common mobile business activities for stormwater source control and pollution prevention. In addition, best practice recommendations are provided for municipal source control efforts for working across jurisdictional boundaries for stormwater pollution source control and enforcement strategies.

2.2.1. Recommendations for Mobile Businesses

Mobile businesses can perform the same or similar work as fixed location businesses, therefore many of the best activities are fundamentally the same. However, working at remote sites that are not under control of the mobile business creates unique challenges to performing some activities. These unique challenges of mobile business regarding stormwater can be summarized in three topics:

- 1. Site preparation, which includes managing areas where mobile work will be done
- 2. Drainage control, which includes managing runoff from washing activities and mobile work areas exposed to rain
- 3. Waste management, which include collection, storage, transportation, and disposal of hazardous wastes

Based on these unique challenges, the following best practices are recommended for mobile businesses.

The 4 Cs

The 4 Cs is a widely used pollution prevention campaign that appears in outreach materials for many types of businesses. It is a concise and effective way to convey four preventative activities , and we chose to also include the 4 Cs in the new brochure created for mobile automobile repair (see Appendix B).

Cover the work area and work materials.

Capture drips and spills within the work area before they reach the storm sewer.

Clean up spills immediately before they reach the storm sewer.

Contain liquids and waste materials, including wash water.

Cleaning and Washing Activities

For mobile businesses that perform cleaning and washing activities, special site preparation and control of wash water is needed. Each site is unique, and planning and preparing for washing activities is necessary.



Prepare Site

- Set up a tarped area surrounded by berms to capture wash water.
- Locate the wash site on flat ground or create a deeper collection area on the downhill side of the tarped area if the site is on a slope.
- Identify storm drains that are in the vicinity of the work area and place absorbent pads/socks around any drains where wash water could flow.

Washing

- For vehicle washing, consider using a commercial car wash instead since they have built-in treatment systems for wash water.
- Minimize the use of water and soap; use premoistened wipes or dry cloths for cleaning where possible.
- If wash water has soap or added chemicals, collect it with a wet-vacuum or pump and discharge it into the sanitary sewer (through a maintenance hole, sink, toilet, or other fixture connected to the sanitary sewer).
- Avoid using soap. If soap is needed, use a biodegradable type and discharge to a vegetated area that allows infiltration or to the sanitary sewer. Soapy water is prohibited from discharging to a storm drain or water body.
- If washing is performed with just cold water (not heated and no soap or added chemicals), then the wash water can be filtered of debris and routed to a grassy area to infiltrate in such a way that does not cause erosion. Some jurisdictions allow plain cold wash water to be released into a storm drain or ditch (check with the local jurisdiction).

Do Not

- Do <u>not</u> send wash water to the storm drain or ditch that has soap or any added chemicals.
- Do <u>not</u> perform washing activities in locations where the wash water cannot be controlled.
- Water released to a storm drain or ditch must not:
 - Be heated
 - Be unfiltered
 - Have soap or chemicals
 - Cause erosion

Using Specialty and Hazardous Chemicals

Specialty and hazardous chemicals used by mobile businesses present a challenge for pollution prevention since the chemicals all need to be transported to a work site and the waste materials need to



be controlled. Examples include solvent, paint, epoxy/glue, pesticides/herbicides/rodenticides, and polymers, among others. The best practices noted below also apply to vehicle fluids, such as fuel, oil, and hydraulic fluid.

- With vehicles or equipment, cover the ground or use a drip pan to catch any drips or overspray.
- Perform work on a dry day, or under cover if it is raining.
- Use portable secondary containment containers with lids, such as buckets with sealing lids, to store and transport bottles of specialty chemicals.
- Prevent the containers from spilling during transport by securing them in the vehicle.
- Know the hazards of the chemicals being used; have a copy of the Safety Data Sheet (SDS) on hand and use appropriate personal protective equipment (PPE).
- For application of pesticides, herbicides, rodenticide, and fertilizer, find and follow guidelines in the local jurisdiction's Integrated Pest Management Plan (IPMP).²

Do Not

- Do <u>not</u> leave containers of chemicals or fuel outside when not being used; keep equipment under cover to avoid exposure to rain.
- Do <u>not</u> mix raw waste materials with waste rags; keep them separate and labeled, such as used oil and oil-contaminated rags.

Storing, Transporting, and Disposing of Hazardous Waste

Because some mobile business work sites do not have existing infrastructure to manage waste, special steps are often needed by mobile businesses to store and transport hazardous waste that has the potential to cause stormwater pollution. Hazardous waste also includes "dangerous waste," which is the term used in Washington state regulation for solid waste that is harmful to human health and the environment. These include:

- Raw hazardous waste materials, such as scraped residues and oil
- Solid waste contaminated with hazardous waste, such as rags, filters, absorbent materials, and absorbent pads



² If a local IPMP cannot be found, then the Seattle Integrated Pest Management website is a good resource.: <u>https://www.seattle.gov/utilities/protecting-our-environment/sustainability-tips/landscaping/for-professionals/integrated-pest-management</u>

Follow these special steps for disposal of hazardous and dangerous wastes.

- Store raw hazardous waste materials and solid waste separately in a lidded container labeled "hazardous waste."
- Use designated waste collection containers with labels, including hazardous waste, non-hazardous waste, and other chemical-specific labels indicating what type of waste is in the container.
- Transport small quantities of hazardous waste to county or city hazardous waste drop-off facilities.
- Contract with a licensed waste hauler for transporting large quantities of hazardous waste.

2.2.2. Recommendations for Municipal Source Control Programs

Below are recommendations for municipal jurisdictions for including mobile businesses in their source control programs. The recommendations cover key items related to identification of mobile business and activities that could impact stormwater; the recommendations are not, however, meant to be comprehensive for every step of a source control inspection or for every type of mobile business.

Identify Mobile Businesses

- Develop a list of mobile businesses operating in your jurisdiction.
- Use the Keyword Search Tool developed in Task 3 of this Study (Aspect 2022b). The Keyword Search Tool is posted on Ecology's web page for the Study (LINK) and searches business license records to identify likely mobile businesses of interest to stormwater based on the business's description of its services. The Keyword Search Tool also includes ranking elements to help prioritize the output based on relative risk of a business's activities.

Contact Mobile Businesses

- Check if the business has a business license in your jurisdiction (if the business license has not been previously identified).
- Conduct a web search for the business to see if they have a website and confirm contact information.
- Contact the business in their home jurisdiction/office based on the registered business address.
- Explain why you're writing or calling: because they have a business license in your city.
- Confirm what their business is and ask if they travel into your jurisdiction to provide services.
- Ask where the business's home base of operations is located and what activities occur there versus at job sites.



Inspect Mobile Businesses

- Schedule a time with the business for a source control inspection at a site in your jurisdiction where they provide services.
- At the site, talk through the mobile business's activities, materials, and equipment.
- Ask what types of waste they produce and how they store and transport waste.
- During the source control inspection, be respectful of the property owner and recognize that the mobile business may not have control of the site.
- Some mobile businesses offer a variety of services, such as multiple types of washing activities or repair of equipment and vehicles, and source control inspections should cover all activities performed that could impact stormwater.

Coordinate with Other Jurisdictions

- Establish or maintain contact with your peers at neighboring jurisdictions (e.g., program managers for source control or illicit discharge detection and elimination [IDDE] or permit manager).
- Share the results of a mobile business inspection with neighboring jurisdictions, especially if issues are found that require follow-up or corrective action and the mobile business operates in multiple jurisdictions.
- If you are contacted by a neighboring jurisdiction about a mobile business, first check to see if they have a business license in your jurisdiction; if they do, then add the other jurisdiction's findings as notes or comments in your own tracking system for future reference.
- Consider conducting a joint inspection with another jurisdiction if the same mobile business operates in both jurisdictions, even if this means going outside of your jurisdiction.
- If enforcement is needed, share this outcome (as legally possible) with other jurisdictions where the mobile business operates.
- The jurisdiction where a violation occurs has the authority to enforce its source control ordinance regardless of where the mobile business has its administrative location.



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Appendix A

Outreach Materials for Mobile Businesses



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Outreach Materials for General/Multipurpose Mobile Businesses Activities



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Preventing Water **Pollution**

Tips for Mobile Cleaning Businesses

Mobile cleaning practices can produce:

- soaps and cleaners
- paint chips and dust
 - carpet fibers
 - dirt and grease



YOU can prevent that.

Standing on the edge of a storm drain is like standing on the shore of a stream.

Stormwater carries pollutants that harm aquatic life and impact swimming and fishing. According to the Washington State Department of Ecology, stormwater is the number one source of water pollution in the urban areas of Western Washington. Thousands of small spills from many of us add up to our biggest pollution problem.



MORE INFO:

Mobile Cleaners: http://www.cccleanwater.org/_pdfs/ MobileCleanerBrochure.pdf

Food-Related Cleaning:

http://www.portlandonline.com/bes/ index.cfm?a=41888&c-50367

Pressure Washing:

http://www.springfield-or.gov/ESD/ bmp%20powerwashbook.pdf

Carpet Cleaning:

http://www.ecy.wa.gov/washington_ waters/docs/Carpet_Cleaning_2011.pdf

THE POLLUTION PROBLEM

Polluted stormwater runoff can be deadly to fish and other aquatic life.

Some pollutants are obvious, like oil, soap and metals. But even simple things like temperature, pH (acidity) and turbidity (clarity of the water) are considered pollutants.



Metals are very toxic to fish and aquatic organisms. Zinc can wash off galvanized metal roofs or metal parts stored outside. Copper can enter water from vehicle brake pads and paint. Salmon and other fish are especially sensitive to even low levels of copper because copper inhibits their sense of smell.



Oil, fuel, grease, and other compounds degrade aquatic habitat and make water unhealthy for animals and humans. Spilled petroleum products may evaporate, sink into sediment, dissolve in the water, or be absorbed by living organisms where they can enter the food chain.



Soapy water can suffocate fish. All soaps, even non-toxic and biodegradable soaps, can harm aquatic life. Soaps coat the gills of fish and the aquatic insects they eat. Soaps can also destroy the natural protections (like external mucus layers) fish have against bacteria and parasites, and inhibit the ability of fish to reproduce. Many soaps also contain phosphorus, a nutrient which causes excessive algae growth. Bacteria that feed on dying algae use up the dissolved oxygen in water that fish need to breathe.



Even dirt can be deadly. Fine silt and dust can smother and kill fish eggs. Sediment can clog fish gills and obscure their vision, making it difficult for fish to find food and to see predators. Pollutants and bacteria can attach themselves to particles of dirt.

Temperature and pH are also pollution. Aquatic organisms are negatively affected by minor changes in temperature and pH. Hazardous wastes, including solvents and concrete dust, can affect pH and can kill aquatic life.

WASTEWATER (sewer system)



Indoor drains collect water from sinks, toilets, washing machines, and other sources. This water is treated at a wastewater treatment facility. The solids are removed and the cleaned water is discharged into a nearby water body.

STORMWATER





Outdoor drains and ditches collect water from hard surfaces like roofs, pavement and hard-packed ground. This water is piped through the stormwater system and discharged directly into nearby waterways like creeks, streams and marine waters.

THE POLLUTION SOLUTION

REMEMBER: ONLY RAIN DOWN THE STORM DRAIN. Help keep pollution out of our water by following these simple steps:

Keep a clean site. Prevent rainfall from mixing with sources of pollution or loose soils.

Prevent spills and leaks. Keep all



chemicals in closed, labeled containers. Store drip pans, paint, and batteries inside or under cover, where they are not exposed to rainfall. Keep dumpster areas clean and check often for leaks. **Get to know the drainage on your site.** This can help you prevent problems.

Filter debris from wash water and



dispose of it as regular garbage, if it is not contaminated with hazardous pollutants. Pipes can be clogged by materials such as carpet fibers and pet hair.



Clean up and report spills and leaks.



Keep absorbent materials handy, and clean up spills promptly. Don't hose down spills! Clean dirt and grime using dry methods like sweeping and vacuuming. Limit

spill damage by reporting spills of any size to: **Department of Ecology (425-649-7000)**.

Direct wash water to sewer drains, like



sinks or toilets. Contact your local sewer district for authorization to discharge to the sewer system. With permission from the local stormwater

authority, filtered wash water may occasionally be disposed of onto landscaped areas.

Maintain equipment to prevent leaks.



Service the tanks, hoses, and fittings to prevent leaks. Change filters frequently. Invest in cleaning equipment and practices that minimize water use.

Use a liquid waste hauling company, or



self-haul your waste if on-site disposal is not appropriate. Ensure that your waste is taken to an approved disposal site.

Block storm drains before starting



any outdoor work that might impact stormwater. In most cases, you will need to collect the dirty water and dispose of it via the sewer system (toilet or sink) or at a permitted

Septic tanks are for sewage, not industrial wastewater. In rural areas, you



may need to collect and transport your wastewater to an approved treatment facility, such as your local sewer district. Contact your local

off-site facility.



health district for details.

Check storm drains at least every six



months and remove sediments before they fill 60% of the capacity beneath the outlet pipe. Sediments may be removed with a shovel, bagged, and disposed of in the

garbage unless chemical spills have occurred. Contaminated sediments may need to be managed as hazardous waste. Call your local solid waste authority for management options.

Dispose of wash water to an approved



sewer system. If you do not have an approved wash area, collect your wash water and divert it to the sewer or bring your equipment to a commercial car wash.

These businesses are constructed to properly dispose of dirty wash water.



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SHING

DEPARTMENT OF

ECOLOGY

Puget Sound Starts Here.org

Anything ignitable, reactive, corrosive, or toxic must be disposed of as hazardous waste.

CONTACT YOUR LOCAL STORMWATER DEPARTMENT.

Many cities and counties in Washington have a stormwater permit that requires them to manage stormwater. These communities provide public education and take steps to control runoff and improve water quality. They can answer detailed questions about your area.



Whatcom County (360) 715-7450 www.co.whatcom.wa.us/ publicworks/water



Skagit County (360) 336-9400 www.skagitcounty.net



City of Bellingham (360) 778-7979 www.cob.org/stormwater



City of Ferndale (360) 685-2378 www.cityofferndale.org/ stormwater



City of Mount Vernon (360) 336-6204 www.ci.mount-vernon.wa.us



City of Burlington (360) 755-9715 www.ci.burlington.wa.us



City of Sedro-Woolley (360) 855-0771 www.ci.sedro-woolley.wa.us



MOBILE BUSINESSES

Prevent Pollution



All storm drains in Kirkland flow to the nearest creek, lake or wetland. It is illegal to allow pollutants to enter a storm drain and/or surface and groundwater (KMC 15.52). Property owners, businesses, and/or responsible parties can be subject to fines (KMC 1.12.200).

- Store liquid materials in leak-proof containers with tight-fitting lids
- Keep all pollutants out of storm drains, including:
 - Wash water from mop buckets or floor mats
 - Heated rinse water
 - Detergents or soaps (even biodegradable)
 - Dirt, sand, grit, concrete wash-out
 - Oils, grease, degreasers, and other chemicals
 - Paint, drywall, tile
 - Leaves, grass clippings, mulch, other debris
- Pressure wash with cold water only no soaps, no chemicals. Filter water and collect debris before it reaches a storm drain
- Dispose of all wash water in an approved sanitary sewer location only. Never dump outdoors or in storm drain



Kirkland Public Works Storm & Surface Water Division

If You Spill... It's Your Responsibility to Promptly Clean Up

- Keep a spill kit on hand and replenish materials, as needed
- Train your employees to use the kit and keep records of training
- Properly use materials and dispose of safely



• Call 425-587-3900 to report spills that enter a storm drain. Fines may be reduced or waived if self-reported

Need technical assistance or have questions about stormwater pollution prevention? Visit *kirklandwa.gov/stormwater* or contact Kirkland Public Works at 425-587-3800

Have wash water with oils, paint, concrete or other contamination? Call the King County Business Waste Line at 206-263-8899 for proper disposal information

You must have a City of Kirkland license prior to doing business in Kirkland. Visit *kirklandwa.gov/Business* for more information

REPORT WATER POLLUTION Call: (425) 587-3900





Kirkland Public Works Storm & Surface Water Division

10-2021







Runoff from rain and the pollutants it picks up flows in here...



...and ends up here.



Storm System Maintenance Soak Up Runoff Mobile Businesses Maintenance Shops Food Services Dumpsters and Compactors

Want more information? Go to www.CleanWaterKitsap.org and check out "At Your Business".











Maintenance Providers

For an updated list of providers, visit www.KitsapGov.com/sswm/maint_providers.htm.

This listing is not an endorsement of any kind from Kitsap County.

Manage Your Site for Clean Runoff

Maintain Your Stormwater System

<section-header>

Contact a maintenance provider to clean catch basins when half full of sediment

- Dirty stormwater systems pollute streams and Puget Sound.
- Inspect at least yearly. To find out what your responsibilities are, visit www. KitsapGov.com/sswm/maint_guide.htm or call 360.337.5777.

2. Dispose of washwater properly



Pour mop water down indoor drains

- Wash floor mats indoors.
- Never hose spills into storm drains.

- Collect or screen washwater when washing your building, sidewalk, or parking lot.
- Never use soaps or chemicals for outdoor washing.

3. Maintain clean outdoor areas



Dumpsters must be leak proof, call your waste hauler to replace leaking dumpsters

- Close dumpster lids.
- Keep dumpster area trash-free.
- Store food grease properly.
- Store waste drums and barrels indoors or under cover and away from storm drains.
- Use kitty litter or sand to soak up spills immediately and dispose of properly.
- Dispose of hazardous waste properly. Call Kitsap1 at 360.337.5777 or go to
 www.kitsapgov.com/sw/recycle3.asp for safe disposal options.
- Mark drains on your property. Call 360.337.5777 for information.
- Report water pollution. If you see something, say something.



Regular inspections reduce flooding and water pollution

Regularly maintained stormwater systems reduce flooding and water pollution. Inspect and maintain facilities at least yearly and clean debris, sediment, and vegetation as needed, especially after major storms.

- Remove debris and trash from grates, swales, and ponds.
- Look into all storm drains, vaults, and tanks. If water is covering the outlet pipe and it is not raining, call to schedule maintenance.
- NEVER enter a catch basin, tank, or vault.
- Replace absorbent pads in oil/water separators yearly and after each spill.
- Keep vegetation in swales 3" 6" tall.
- For detailed steps on checking sediment depth in catch basins, tanks, and vaults, go to www.KitsapGov.com/sswm/pdf/check_ sediment_depth.pdf
- Dispose of storm drain sediments properly. NEVER spread them on the ground.


Unlike water in sanitary sewers (from sinks and toilets), water that flows into storm drains is **not treated** before entering our waterways and should never contain washwater or pollutants generated by mobile businesses.



You can protect water quality by using and deploying BMPs appropriate to your Mobile Business.

Who is H₂OC?

 H_2OC is YOU! H_2OC is also a cooperative stormwater program which includes all 34 cities in Orange County, the County of Orange, and Orange County Flood Control District (OCFCD). Clean and healthy beaches, creeks, rivers, bays, wetlands, and ocean are important to Orange County. H_2OC provides resources to residents and businesses to encourage personal action and prevent polluted runoff from entering our waterways.

BEST MANAGEMENT PRACTICES For Businesses

WATER POLLUTION AND THE MOBILE BUSINESS INDUSTRY

YOU ARE THE SOLUTION TO RUNOFF POLLUTION

How is Water Quality Affected by Mobile Businesses?

The mobile business industry generates a variety of waste products which can become pollutants. These can include metals, grease, oil, chemicals, dirt, and bacteria. If not properly managed, washwater containing these pollutants can be transported to Orange County's rivers, creeks, channels, and ocean through our storm drain system.

Examples of Mobile Businesses using BMPs to contain and collect pollutants and washwater.

Cleaning

Carpet

contain and collect

washwater

Join Us

Visit **h2oc.org** to learn more about runoff, water pollution, and how you can be the solution to runoff pollution and protect our water resources!

Contact

- **24-hour Pollution Reporting Hotline:** 1-877-89-SPILL (1-877-897-7455)
- **24-hour Reporting Website:** myOCeServices.ocgov.com
 - For emergencies, dial 911

* There are several criteria that washwater must meet before it can be discharged to landscaped areas or the sanitary sewer system. Visit h2oc.org for more information.





Pet

Groomina

By law, mobile businesses are required to implement best management practices (BMPs) to prevent runoff pollution.

Best Management Practices for Mobile **Businesses**

Implement these required best management practices (BMPs) to be in compliance and avoid enforcement actions:



l ocate

business operations away from storm drain inlets to prevent accidental flows or discharges from reaching the storm drain system.

Contain

your work area by deploying adequate and effective BMPs prior to beginning work.

Collect

all washwater using a wet/dry vacuum, pump, washwater tank, or alternative recovery system. Washwater tanks must remain closed at all times until the contents can be properly disposed.

Dispose

of washwater properly* by following one or more of the options below:

With property owner permission, direct the flow of washwater to a landscaped area. All washwater must completely soak into the ground before you leave the site.

- Locate and protect all drains and catch basins where washwater could potentially enter the storm drain system.
- No discharges to the curb and gutter or storm drain system are allowed.
- Minimize water use and use dry cleanup methods in the work area before performing work.
- Use appropriate BMPs specific to your mobile business.
- Regularly inspect and maintain equipment to prevent spills/leaks and ensure proper function.
- For mobile vehicle washing, use a drycleaning method or portable water containment mat equipped with berms.
- Dispose washwater in a sewer cleanout, utility sink, or toilet with property owner permission. Remove all heavy debris, hazardous materials, or anything that can clog the sink or toilet.
- Take washwater off site for proper disposal at a sanitary sewer dump station, your business location, or place of residence.

What Pollutants are **Generated By Mobile Businesses?**



Vehicle Washing

When vehicles are cleaned, pollutants generated can include toxic cleaning chemicals, automotive fluids, dirt, and metals from brake dust (copper, lead, nickel, and zinc).



Carpet Cleaning

Carpet cleaning services can generate pollutants including toxic cleaning chemicals, dirt, and carpet fibers.



Pet Grooming

Mobile pet grooming services can generate pollutants including bacteria, soaps, chemicals (e.g. flea medication), fur, and dirt.



Power washing of buildings and impervious surfaces such as walkways, patios, roofs, walls, or waste storage areas can generate pollutants including dirt, debris, bacteria, and chemicals.

obile businesses are integral to our community and like other businesses need to properly dispose of their waste products. As mobile businesses such as power washers and car detailers mainly use water it is important for these businesses to prevent waste and waste water from entering storm drains and polluting streams, rivers, bays and the ocean.

While water used to clean carpets, buildings, vehicles or used during construction may not be considered polluted, the chemicals, dirt and other materials carried by the wastewater lead to contaminants in our water sources.

The information contained in this brochure is intended to help you and other mobile businesses use best management practices to properly dispose of waste water.

Paving/Grading Operations

Paving, surfacing, resurfacing or sawcutting are all activities that can be done in a stormwater

safe way that will protect our waterways while allowing your business to thrive.

By following these simple tips, you can be sure that your paving and grinding operations will protect our waterways.

- Avoid paving during the wet season when feasible.
- Store materials away from drainage courses.
- Shovel or vacuum saw cut slurry from the site. Cover or barricade storm drains during saw cutting to contain the slurry.
- Collect, remove and recycle all broken asphalt.
- Don't allow sand or gravel placed over new asphalt to be washed into storm drains, streets or creeks.
- Train your employees and sub contractors in pollution prevention and reduction.



For more information, please visit www.ocwatersheds.com

To report a spill, call the Orange County 24-Hour Water Pollution Problem Reporting Hotline at (1-877-89 SPILL) 1-877-897-7455.

For emergencies, dial 911.

The compliance requirements for best management practices contained in this brochure provide useful information about how you can keep soap, chemicals and washwater from your mobile business from entering the storm drain system. If you have any questions or suggestions, please contact your city's stormwater representative or call the Orange County Stormwater Program at 714-955-0600.



Help Prevent Ocean Pollution:

Compliance Best Management Practices for Mobile Businesses

> The Ocean Begins at Your Front Door



Compliance Best Management Practices for Mobile Businesses

Vehicle Washing:

When vehicles are cleaned, the following pollutants are often generated:

- Heavy Metals
 - copper, lead, nickel and zinc
- Hydrocarbons
- oil & grease
- Toxic Chemicals
 - solvents, chlorinated compounds, glycols
- Acids and alkalis
- Sediment
 - dirt and sand

When vehicles are cleaned in driveways or on the street, chemicals and pollutants drain into the street, gutters and eventually into the storm drain system. It is preferable to use a waterless car wash whenever possible.

Power Washing:

Power washing of buildings generates dirt and other pollutants; waste water from this must also be properly disposed.



Follow Best Management Practices (BMPs)

IT'S THE LAW! The following BMPs will help you maintain compliance with regulations.

- Minimize water use.
- Vacuum or shake floor mats into a trash can.
- Sweep wash area to remove debris
- Use cleaning products as directed on their labels (Even biodegradable products impact our waterways).
- If feasible, wash vehicle on a vegetated or gravel surface where washwater can soak into the ground instead of on a paved surface where runoff is more likely.
- Use sand bags, straw wattles or berm mats to contain the washwater runoff so it does not drain down streets and gutters.
- Before the washing process starts, protect storm drain inlets by inserting a filter in front of any downstream storm drains so any washwater cannot enter. Remove the filter before leaving the site. Rinse the filter in a utility sink so the pollutants from the washwater captured in the filter go to the sewer system for treatment.
- Use a "wet-vac" to vacuum up the washwater for proper disposal.

Materials such as wet-vacuums, mats, sand bags and storm drain filters may be available at your local hardware or construction materials stores.

How to Dispose of Washwater Properly:

• Option 1

With property owner permission, direct the flow of washwater to a vegetated area with berms or sand bags so that it can soak into the ground. Washwater must completely soak into the vegetation before you leave the site*.

• Option 2

With property owner permission, use a "wet-vac" to vacuum up water and dispose in a sewer cleanout, utility sink, toilet, etc. Be careful not to discharge heavy debris, hazardous materials or anything that can clog the sink or toilet*.

• Option 3

Take washwater off site for proper disposal in the sanitary sewer system at your home or business location*.

IMPORTANT NOTE:

Washwater and any waste material from engine cleaning must be treated with an OIL/ WATER SEPARATOR before being disposed of at a centralized waste treatment facility.

*For more detailed information about the proper disposal of wastewater generated by mobile businesses and outdoor activity, please log on to our website www.ocwatersheds.com/pe/business and click on "Mobile Businesses" for the IC24 report, which is a fact sheet with additional best management practices (bmp).

Carpet Cleaning:

Carpet cleaning services must adhere to the proper disposal of the washwater collected to prevent water pollution.

- Washwater from carpet cleaning activities should never be discharged into the street, gutter, driveway, parking lot or storm drain.
- Dispose of washwater properly as noted within this brochure.
- Employees must be trained to ensure they follow best management practices and understand stormwater discharge prohibitions.







stormwater pollution prevention Mobile Business

PartnersForCleanWater.org

FACT SHEET #1

INTRODUCTION

The Boise River is an important resource in our community. It offers many recreational opportunities to our citizens and provides a critical habitat important to our natural environment. Citizens, businesses, industry and government must work together to protect the River and our other water resources in the Treasure Valley.



Mobile Businesses create important economic contributions by providing necessary services to the community. Due to the nature of their operations, if not managed properly, mobile businesses have the potential to cause stormwater pollution. The Partners for Clean Water have developed this fact sheet to help educate mobile business owners and employees on what they can do to prevent stormwater pollution and protect the Boise River. This fact sheet provides information for all mobile businesses but is focused specifically to mobile carpet cleaners, pet related mobile businesses, mobile power washing and mobile vehicle washing businesses.

Mobile Businesses can minimize or eliminate their contribution to storm water, preventing pollution and ultimately protecting the water quality in the Boise River.

Keeping the pollutants out of the Boise River and our ground water ensures that future generations will be able to enjoy all of the treasures of our valley!



WHAT IS STORMWATER RUNOFF AND STORMWATER POLLUTION?

Stormwater runoff is a major cause of pollution in urban areas. When rain falls or snow melts and cannot infiltrate into the ground, runoff is generated from paved or impervious surfaces. This runoff is collected in the storm drainage system.

There are many types of stormwater pollutants including litter, oils, grease, chemicals, fertilizers, pesticides, sediment and bacteria. These pollutants come from many sources, primarily generated by the activities of people on our lands. For example, excess nutrient pollution can be generated from residential or agricultural areas when too much fertilizer is used on lawns or crops. Pollutants like litter or oil and grease can flow to the storm drainage system from roadways or parking lots.

It is important to remember that in the Boise area,



This storm drainage inlet, also known as a catch basin,



STORMWATER REGULATIONS

The Partners for Clean Water are regulated by Federal Clean Water Act regulations that require implementation of various measures to prevent stormwater pollution and improve the quality of our surface waters.

Municipal Stormwater ordinances and requirements prohibit the discharge of non-stormwater flows to the storm drainage system. Mobile business operators must ensure that any discharge or flow from their operations do not enter the storm drainage system. Violations of stormwater ordinances and requirements can result in civil or criminal penalties. But more importantly, violations can harm our waters and the environment. These violations are called "illicit discharges".

In the Lower Boise River watershed, Boise, Garden City and the Ada County Highway District have enacted regulations to prevent Illicit Discharges to the storm drainage system. These regulations can be reviewed on the Partners for Clean Water website partnersforcleanwater.org



Paint disposal into a gutter, as shown in this picture, is not permitted and is an illicit discharge to the storm drainage system.

MOBILE BUSINESSES ENHANCED EDUCATION AND OUTREACH

Implementing pollution prevention practices is important for all mobile businesses. The following Mobile Businesses have been selected by the Clean Water Partners to received enhanced public education and outreach on stormwater pollution prevention.

Mobile Vehicle Washing

Vehicle washing activities must comply with applicable regulations and cannot cause a discharge to the storm drainage system. Ideally, vehicles will be washed indoors in a location with floor drains connected to the sanitary sewer system to capture wash wastewater. If indoor washing is not viable, a storm drain **inlet protection device** should be used. An inlet protection will trap runoff before it enters the storm drain system and allow it to be collected and discharged properly to the sanitary sewer system.



Samples of Inlet Protection Devices. Photos courtesy of Ertec Environmental Systems.



Mobile Cleaning or Pressure Washing

Power/Pressure washing activities can generate pollution from the discharge of waste water. If chemicals are used in washing activities, discharges can be particularly harmful to our waters. These activities must comply with all applicable regulations and cannot cause a discharge to the storm drainage system.

There are several best management practices for power/pressure washing activities. Cleaning surface with dry methods, such sweeping or by using absorbents should be considered. Where surfaces cannot be cleaned with dry methods alone, it is important to minimize the amount of water used during washing. Also, chemicals should be used only when necessary during washing operations. If washing activities result in any discharge, storm drain inlet protection devices must be used so that waste water can be captured and properly disposed.

Mobile Carpet Cleaning

Similar to vehicle and power washing, mobile carpet cleaning operations can generate pollution from the discharge of process waste water. This discharge, collected during the carpet cleaning extraction process, must be disposed properly. Prior to disposal, carpet



fibers and other solids should be removed and disposed in the trash so that they do not cause sewer clogs. Employees should also be prepared with a spill clean-up kit, in the instance of an equipment failure on a truck-mounted mobile extraction unit, that could cause a discharge to the storm drain system.

Mobile Pet Care

Due to the chemical content of certain animal related products and medications, a discharge into the storm drain system from mobile pet businesses can be harmful to our waters. Like other mobile businesses, mobile pet care businesses must comply with all applicable regulations and cannot cause a discharge to the storm drainage system. First, mobile pet businesses should consider using organic or all-natural shampoo or other pet care products, this approach helps control pollution at its source. If a mobile pet business conducts activities inside a van or truck, the vehicle should be designed with adequate wastewater storage facilities to ensure that capacity is available for storing wastewater and disposing it properly.



POLLUTION PREVENTION PRACTICES FOR MOBILE BUSINESSES

The following pollution prevention practices, also known as Best Management Practices or BMPs, are applicable to all Mobile Businesses:

Employee Training

The most effective tool to prevent pollution is knowledge. Training information and programs allow employees to complete their job duties effectively and prevent pollution. Training programs should identify key business activities that have the potential to generate pollution. Once those activities have been identified, employees should understand the methods necessary to prevent pollution. The development of standard operating procedures (SOPs), written guidelines that identify methods for completing key business tasks and pollution prevention procedures, are helpful to support and reinforce training topics.



Training programs should be customized to meet the needs of each business. These programs can be developed in-house or by using other pre-developed, commercially available training programs.

Water Usage

When possible, mobile businesses should adjust their operations to use cleaning methods that do not use water such as sweeping. If water is needed, please use as little as possible. Additional water usage will increase the potential for pollution.

Detergent and Chemical Use

It is important to follow labeling and usage directions for all detergents and chemicals. Using biodegradable and non-toxic products is helpful, but remember that even these types of products can cause pollution. Reductions in the amount of cleaners, detergents and chemicals helps to control pollution at the source.

Mobile Business Equipment

Proper maintenance of mobile business equipment is critical to good operations. Equipment such as hoses, water recovery tanks, seals, valves and other similar items should be checked frequently and maintained as needed. Mobile business operators should be prepared to address equipment failures; failing equipment does not excuse illicit discharges to the storm drainage system.

Spills

Mobile businesses must implement measures to prevent spills. Hazardous materials should be stored properly in their original containers with appropriate re-sealable caps or lids. When possible, perform transfers of hazardous materials indoors or under-cover, in locations where a potential spill cannot reach the storm drain system. If there is a spill, never hose it down for clean-up, instead keep an absorbent powder or spill clean-up kit.

Storm Drain Protection

Mobile businesses should provide protection for storm drains as an additional measure of pollution prevention. Impermeable barriers, made from materials like heavy duty vinyl, are available for purchase through various commercial vendors. If any wastewater is collected by the storm drain barrier, it should be vacuumed and properly disposed.

Disposal

In general, it is acceptable to dispose of mobile business wastewater to the sanitary sewer system by draining the waste water to a utility sink, toilet or other appropriate connection to the sewer system. No wastewater from a mobile business can be discharged to a storm drain or sewer. If mobile business activities generate stormwater runoff, the operator must block adjacent storm drains with a storm drain protection barrier, collect the water and dispose properly. If you have any questions about proper disposal, don't hesitate to contact the appropriate Partners for Clean Water representative.

CONTACT INFORMATION AND ADDITIONAL RESOURCES

Stormwater Pollution Hotline – Boise, Garden City and the Ada County Highway District (208) 395-8888

Partners for Clean Water Website (includes staff contact information) partnersforcleanwater.org

United States Environmental Protection Agency (USEPA) www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

Stormwater Education Toolkit

www.stormwater.ucf.edu/toolkit

City of Bellingham, WA – Stormwater University Pollution Prevention Tips www.cob.org/services/environment/stormwater/Pages/swu-pollution-prevention-tips.aspx

City of Newport Beach, CA – Business Stormwater Pollution Prevention

www.newportbeachca.gov/government/departments/public-works/water-quality-and-conservation/business-stormwater-pollution-prevention

Keep it Clean Partnership (Colorado) – Stormwater Protection

www.keepitcleanpartnership.org/pollution-prevention/business/

Washington Department of Ecology – Public Education and Outreach Materials www.ecy.wa.gov/programs/wq/stormwater/municipal/resources/PERMITTEEproducts.html

San Diego, CA – Best Management Practices for Mobile Businesses www.sandiego.gov/sites/default/files/legacy/stormwater/pdf/jurmpapp11.pdf

Bay Area Stormwater Management Association

basmaa.org

Disposing of Wash Water

- With permission from the sanitary district and the property owner, wash water from mobile cleaners can be discharged to floor drains, utility or mop sinks, toilets, or cleanouts
- All discharges to the sanitary sewer must meet the sanitary district's discharge requirements and not contain hazardous materials
- Have appropriate equipment to discharge wastewater to the sanitary sewer, such as a pump and flexible hosing
- Direct water to landscaping or gravel surfaces. Wash water must completely soak into vegetation before you leave the site



Para una copia de este folleto en español, por favor comuniquese con el Programa de Agua Limpia de Contra Costa al 925-313-2360.

Questions?

Local Pollution Control Agencies

Central Contra Costa Sanitary District 925-228-9500
Crockett/Valona Sanitary District 510-787-2992
Delta-Diablo Sanitation District 925-756-1900
Discovery Bay Community Services District 925-634-1131
Dublin-San Ramon Services District 925-828-0515
Ironhouse Sanitary District 925-625-2279
Mt. View Sanitary District 925-228-5635
Rodeo Sanitary District 510-799-2970
Stege Sanitary District 510-524-4668
West County Wastewater District 510-222-6700
Municipality Contact List: ccleanwater.org/municipality-contact-list

If you have questions about the proper BMPs for surface cleaning, or about illicit dumping and stormwater pollution, please contact the Contra Costa Clean Water Program at:

> 1-800-NO-DUMPING (1-800-663-8674) or go to www.cccleanwater.org





255 Glacier Drive, Martinez, CA 94553-4897 p. 925.313.2360 f. 925.313.2301 WASH WATER DISPOSAL PRACTICES FOR MOBILE CLEANERS & BUSINESSES

> Vehicle Washers Automobile Detailing Steam Cleaners Mobile Pet Groomers Window Washers Power Washers Food Vendors







Protect Every Drop Clean Creeks Start With Clean Streets

Printed on recycled paper 30% post consumer content

WHY SHOULD WE BE CONCERNED WITH WASH WATER DISPOSAL?

Wash water from mobile cleaning may contain:

- Soaps and dirt
- Oil and grease
- Toxic chemicals and heavy metals

Pollutants draining from mobile cleaning activities are washed into the street and the storm drain system which then flows to our creeks, Bay, and Ocean without any cleaning or filtering.



These pollutants may harm wildlife and degrade water quality in our creeks, Bay, and Ocean.

Allowing any material (liquid or solid) to be dumped into the storm drain, hosed off the pavement in to a storm drain, or placed where it could be carried to the storm drain by rainwater is an illegal discharge and subject to civil and criminal prosecution. Federal, state, and local regulations **prohibit the discharge of anything but rain water into the storm drain**.

WHAT ABOUT BIODEGRADABLE AND NON-TOXIC CLEANING PRODUCTS?

Cleaning products labeled "non-toxic" and "biodegradable" can still harm wildlife if they enter a storm drain system. Fish, for example, are affected by both regular and biodegradable soap!

BEST MANAGEMENT PRACTICES (BMPs) FOR WASH WATER DISPOSAL Plan Ahead

- Become a BASMAA-recognized Mobile Cleaner to learn about acceptable wash water disposal practices. Visit www.basmaa.org
- Contact your local wastewater district to determine specific wash water requirements (see list at back of flyer)
- Contact your local water authority regarding applicable water conservation regulations and restrictions



Specialist using a recovery system.

- Have appropriate equipment on hand for blockage of storm drains if necessary and collection of wash water
- Train employees on the proper use of equipment and acceptable practices on the job site

At the Job Site

- Walk the area to identify storm drains
- Block off storm drains that may be affected
- Sweep the wash and runoff area to remove debris
- Have a spill kit available in case of accidental spill or release
- Contain the wash area so that water does not flow into storm drains, down streets or gutters (using sand bags, mats or berms)
- Minimize water use
- Collect the wash water
- Remove all debris or sediment accumulated during the washing activities and dispose of it properly



A storm drain cover with vacuum hose.



THE MOBILE CLEANER'S GUIDE **BEST MANAGEMENT PRACTICES (BMPs)**

COMMON POLLUTANTS

Carpets and Upholstery

- Carpet fibers
- Cleaning chemicals and solvents

Vehicle and Equipment Cleaning

- · Heavy metals (copper, lead, nickel, and zinc)
- · Oil and grease
- Antifreeze
- · Cleaning chemicals and solvents
- · Acids and alkalis

Food Service Industry

- · Food waste
- Fats, oil, and grease
- Cleaning chemicals, disinfectants, and pesticides

Swimming Pools and Spas

- Copper and chlorine
- · Solids from filter backwash

Surface Cleaning

- Heavy metals (copper, lead, zinc)
- Oil and grease
- Trash

Water Softeners

 Brine (chlorides, calcium, magnesium)

TIP: If removing paint, verify it does not contain lead or other toxic pollutants that may require handling and disposal as hazardous waste.

ABOUT THIS GUIDE



Most people or businesses don't realize their practices may affect our local streams, creeks, lakes, rivers, or ocean with pollution. This guide provides general Best Management Practices (BMPs) for business operations. The BMPs are not limited to those presented in this handout. Additional resources are listed for a more extensive array of BMPs available.

Mobile cleaning operations can generate significant amounts of wash water and wastewater that can contain common pollutants such as sediment, oil and grease, soap, metals, and food waste. When rain does not soak into the ground, it can travel across bare earth, driveways, sidewalks, and streets to the nearest storm drain inlet. A storm drain then transports the stormwater through pipes that discharge to our local streams, creeks, lakes, rivers, and ocean. Pollutants can be picked up by stormwater runoff, and if we are not careful, pollution can end up in our water. You can help reduce water pollution by following a four-step approach:

- 🚹 Do a dry clean-up before washing down.
- Wash without soaps and solvents, unless you have 100% containment.
- 3 Keep wash water out of storm drains.
- 👍 Dispose of wash water and/or wastewater correctly and legally by discharging to the sanitary sewer or to a landscaped area (check local regulations).
- Even if you use a small amount of water and it evaporates onsite, the areas may need to be swept clean to collect any residual pollutants left behind.

Did you know? Even cleaning products labeled "Non-Toxic" and "biodegradable" are not safe. "Non-Toxic" means the product is not toxic to the user. "Biodegradable" means the product will eventually break down. These products are still harmful to wildlife and the environment.

MOBILE CLEANING—CARPETS AND UPHOLSTERY

- Never discharge wash water or wastewater from carpet and upholstery cleaning activities to the street, gutter, or near a storm drain.
- Wastewater from carpet and upholstery cleaning must be collected and discharged to a sink, toilet, or another drain connected to the sanitary sewer either onsite or at the service provider's facility.



MOBILE CLEANING—VEHICLE AND EQUIPMENT CLEANING

- Never discharge wash water or wastewater from vehicle and equipment cleaning activities to the street, gutter or near a storm drain.
- Use a portable or temporary containment pad to collect the wash water and discharge to a sink, toilet, or another drain connected to the sanitary sewer either onsite or at the service provider's facility.
- If vehicles and equipment are washed by use of a bucket and/or hose equipped with an automatic shut-off nozzle and the water evaporates, the washing area should be swept clean to collect any residual pollutants left behind.
- Wash water in contact with engine parts may contain hazardous materials that require handling and disposal as hazardous waste.

FOR ADDITIONAL INFORMATION CONTACT OUR PARTNERING AGENCIES

City of Buellton www.CityofBuellton.com Public Works Department

805.688.5177

City of Carpinteria ww.carpinteria.ca.us Public Works Department 805.880.3415 swmp@cityofbuellton.com stormwater@ci.carpinteria.ca.us

City of Goleta vw.CityofGoleta.org Public Works Department 805.961.7500 stormwater@cityofgoleta.org

City of Lompoc www.CityofLompoc.com Economic and Community elopment Department 805.875.8275 stormwater@ci.lompoc.ca.us

City of Santa Barbara vw.sbcreeks.com Creeks Division 805.897.2658 creeks@santabarbaraca.gov

City of Solvang w.CityofSolvang.com Public Works Department 805.688.5575 stormwater@cityofsolvang.com

Santa Barbara County w.SBProjectCleanWater.org Project Clean Water 805.568.3440 cleanwater@cosbpw.net







WANT T

KNOW MORE

The Cities of Buellton.

Lompoc, Santa Barbara,

County of Santa Barbara have extensive Stormwater

Management Programs.

selection of information

and useful tools to help

Take advantage of the following

with an even greater

your business.

materials

service

of time.

FREE services to you:

Download or print BMP

Be sure to always check:

discharge requirements

Drought restrictions

TIP: Arrange a location to discharge wash water ahead

· Local wastewater authority's

Business license requirements for the City where you are

operating your mobile cleaning

ONLY RAIN DOWN

THE STORM DRAIN

Carpinteria, Goleta,

and Solvang and the

THE MOBILE CLEANER'S GUIDE BEST MANAGEMENT PRACTICES (BMPs)

MOBILE CLEANING

FOOD SERVICE INDUSTRY

- Wash water from cleaning trash enclosures must be collected and discharged to a sink, toilet, or another drain connected to the sanitary sewer.
- Clean floor/kitchen mats, filters, and garbage cans in a sink or near another drain connected to the sanitary sewer. Do not wash these items in a parking lot, alley, sidewalk, street, or gutter.



Did you know? Floor/kitchen mats, filters, and garbage cans can also be cleaned at a public car wash that discharges to a sanitary sewer.

SWIMMING POOLS AND SPAS

- Do not clean a filter in the street, gutter, or near a storm drain.
- Rinse cartridges and/or backwash diatomaceous earth filters into a landscaped or unpaved area. Don't forget to dispose of the spent diatomaceous earth in the trash.
- Swimming pool and spa water must be discharged to sanitary sewer unless access to sanitary sewer connection is unavailable. If a sanitary sewer connection is not available, the swimming pool and spa water must be de-chlorinated before discharging to a landscape area.



SURFACE CLEANING

- Washing buildings and hardscape areas such as sidewalks and driveways is not allowed except where necessary to protect the public health and safety. Pressure washing is allowed for construction as long as the water is filtered, captured, and discarded appropriately.
- Use dry methods for cleaning up spills (use absorbent, broom sweep) rather than rinsing down areas.
- Wash water must be collected and discharged to a sink, toilet, or other drain connected to the sanitary sewer or be directed to a landscaped or unpaved area. Try to wash without soaps and solvents.
- Setup a perimeter berm and/or block storm drain inlets.
- Use mop bucket for spot cleaning.
- Use a shop vacuum to collect wash water, and dispose of it appropriately.

WATER SOFTENERS

- Do not discharge wash water or wastewater from water softener cleaning activities in the street, gutter, or near a storm drain.
- Wash water or wastewater from water softener cleaning (including brine) must be collected and discharged to a sink, toilet, or another drain connected to the sanitary sewer.



www.CitvofBuellton.com



City of Carpinteria www.carpinteria.ca.us



a City of Goleta



City of Lompoc www.CityofLompoc.com City of Santa Barbara www.sbcreeks.com City of Solvang



Santa Barbara County www.SBProjectCleanWater.org



Outreach Materials for Animal/Pet Grooming



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BEST PRACTICES FOR MOBILE PET CARE

PROPER DISPOSAL OF WASTEWATER

Tips For Pet Care Providers

The Clean Water Program's friendly and knowledgeable staff support companies like yours in preventing water pollution. The fact that you're reading this fact sheet probably means you have already decided to take steps to do the right thing with the wastewater from your business. Thank you for helping to keep our water safe and healthy.

Step 1: Filter

Filter the wash water before discharging to the sanitary sewer. Fur and other solids in the wash water can cause blockages in the sewer system. Dispose of filtered material in the garbage.

Step 2: Discharge Properly

It is important that wash water from pet care activities shampoos be discharged into a **cleanout**, sink, toilet or other drain connected to the **sanitary sewer system** — never into a street, gutter, parking lot or **storm drain**. There are two options for disposing of water with pest control chemicals:

- Arrange with your customer to discharge the wash water from their pet into a toilet or utility sink on their premises, after receiving approval from you local wastewater treatment authority. OR
- Empty the wash water into a utility sink or other indoor sewer connection at your home base, after receiving approval from your local wastewater treatment authority.



Keep wash waters, pest control fluids and animal hair OUT of storm drains.



Pouring wash water from pet care activities into the gutters or storm drains will damage sensitive habitats and kill wildlife. Water flowing into storm drains travels directly to local creeks and then to San Francisco Bay. It does not go to a water treatment plant first.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.



Protecting Alameda County Creeks, Wetlands & the Bay

cleanwaterprogram.org



What about biodegradable and non-toxic cleaning products?

These guidelines apply even to cleaning products labeled *"non-toxic"* and *"biodegradable."*

- "Non-toxic" means the product is not toxic to the user.
- *"Biodegradable"* means the product will eventually break down. Biodegradable products can still harm aquatic wildlife since they need time to break down before they are safe. When biodegradable products enter a creek, they are generally still toxic and can harm wildlife and plants.

What about leftover or unwanted pet shampoos and other pet grooming products?

Unwanted pet care products may contain pesticides or other chemicals that should not be poured down the drain, flushed down a toilet, or put in the trash. Contact the Hazardous Waste agency for your area for more information on proper disposal.

KEY DEFINITIONS

A **Cleanout** is a pipe fitting with a removable plug for inspecting and cleaning out sewer drain pipes.

The **Storm Drain System** was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.

The **Sanitary Sewer System** collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.

clean water

CLEAN WATER PROGRAM

Simple changes to your operations and maintenance can help you comply with local regulations. The Clean Water Program makes it easy.

cleanwaterprogram.org

For More Help

For advice and approval on wastewater disposal to the sanitary sewer system, contact:

Castro Valley Castro Valley Sanitary District .. (510) 537-0757

Cities of Fremont, Newark or Union City

Union Sanitary District (510) 477-7500

City of Hayward (510) 881-7900

City of Livermore

Cities of San Lorenzo, unincorporated portions of San Leandro and Hayward Oro Loma Sanitary District (510) 481-6971

City of San Leandro

City of San Leandro...... (510) 577-3401

Local Stormwater Agencies

For advice on avoiding disposal to the storm drain system, contact:

-/			
Alameda	(510)	747-79	30
Albany	(510)	528-57	70
Berkeley	(510)	981-64	00
Dublin	(925)	833-66	30
Emeryville	(510)	596-37	28
Fremont	(510)	494-45	70
Hayward	(510)	881-79	00
Livermore	(925)	960-81	00
Newark	(510)	578-42	86
Oakland	(510)	238-66	00
Piedmont	(510)	420-30	50
Pleasanton	(925)	931-55	00
San Leandro	(510)	577-34	01
Unincorporated Alameda	, ,		
County	(510)	670-58	68
Union City	(510)	675-53	80
	1		

Local Hazardous Waste Agencies



MOBILE PET GROOMER AND STYLIST GUIDE BEST MANAGEMENT PRACTICES (BMPs)

COMMON POLLUTANTS

Mobile Pet Groomer and Stylist

- Soaps, detergents, and disinfectants
- Chemicals (flea dip rinses and
- equipment cleaning)

 Dirt and sediment
- Hair, fur, and nail waste
- Pet wasteWastewater

• wastewate

Mobile Unit

- Antifreeze
- Hydraulic/transmission fluid



WANT TO KNOW MORE?

The Cities of Buellton, Carpinteria, Goleta, Lompoc, Santa Barbara, Solvang, and the County of Santa Barbara have extensive Stormwater Management Programs, with an even greater selection of information and useful tools to help your business protect our environment!

Take advantage of the following FREE services:

- Download or print BMP materials
- City of Santa Barbara Certified Business Program
- County of Santa Barbara Green
 Business Program

Be sure to always check:

- Local city ordinances, periodically.
- Drought restrictions.
- Business license/certificate requirements.
- Wastewater Treatment Provider
- Professional Pet Groomer & Stylists Alliance Standards of Care, Safety and Sanitation Manual.

ONLY RAIN DOWN THE STORM DRAIN

ABOUT THIS GUIDE

Many mobile pet groomers and stylists don't realize that their habits and actions can pollute streams, creeks, lakes, rivers, or the ocean in many locations. This guide provides stormwater pollution prevention practices for groomers.

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Mobile pet groomers and stylists may generate pollutants from a malfunction of a mobile unit that could be transported to the storm drain and into our waterways. You can help reduce water pollution year-round by implementing the BMPs in this guide.

MOBILE PET GROOMER AND STYLIST BMPs

MINIMIZING TOXIC CHEMICAL USE

- Products and/or chemicals used in the process of grooming and styling must comply with all applicable local, state and federal guidelines, rules and regulations and be pet friendly.
- Only use products (such as flea dip solutions) that are approved for disposal within the sanitary sewer.
- Consider less toxic grooming practices by using eco-friendly products and equipment that reduce product amount and use less water.

Did you know? Even cleaning products labeled "non-toxic" and "biodegradable" may not be safe. "Non-toxic" means the product is not toxic to the user. "Biodegradable" means the product will eventually break down. These products are still harmful to wildlife and the environment.

WASTEWATER

- Never discharge wash water or wastewater from pet washing and grooming activities to the street, gutter, or near a storm drain.
- Wastewater from pet washing and grooming activities must be collected and discharged to a sink, toilet, or another drain connected to the sanitary sewer.

MOBILE UNIT AND EQUIPMENT CARE

- · Never rinse off mobile unit, equipment, cages, crates, and tubs into the street, gutter, or storm drain.
- When washing your mobile unit, use a hose equipped with an automatic shutoff nozzle, and make sure wash water drains to a landscaped area or unpaved surface, not the storm drain.
- If possible, take your mobile unit to a local commercial car wash where wastewater is captured and treated.
- Repair mobile unit or equipment leaks quickly.

Did you know? Antifreeze is poisonous to pets and wildlife who are attracted to its sweet smell and taste. Keep antifreeze in closed containers and dispose of antifreeze at your nearest hazardous waste collection center or at a scheduled drop-off event.

TRASH

• Dispose of non-toxic packaging or waste products such as hair, fur and nails from grooming and styling activities in the trash and/or recycling containers.

SPILL PREVENTION AND CLEANUP

- In case a product spills outdoors, keep a spill kit available in your mobile unit.
- Clean spills or drips immediately.
- Use dry methods for cleaning up spills (absorbent, sweep) rather than rinsing down areas and dispose of it properly.

TRAINING

- Provide BMP training to all new employees and offer existing employees an annual refresher on stormwater pollution prevention.
- Post BMPs within the mobile unit.
- Keep all training records on-site and available for inspection.





www.carpinteria.ca.us Public Works Department 805.880.3415 stormwater@ci.carpinteria.ca.us City of Goleta www.CityofGoleta.org Public Works Department 805.961.7500 stormwater@cityofgoleta.org City of Lompoc www.CityofLompoc.com nmunity Development Department 805.875.8275 stormwater@ci.lompoc.ca.us

City of Santa Barbara www.sbcreeks.com Creeks Division 805.897.2658 creeks@santabarbaraca.gov City of Solvang www.CityofSolvang.com Public Works Department 805.688.5575 stormwater@cityofsolvang.com Santa Barbara Coun

www.SBProjectCleanWater.org Project Clean Water 805.568.3440 cleanwater@cosbpw.net



GUÍA DE PELUQUERÍA Y ESTILISTA DE MASCOTAS MOVÍL **MEJORES PRACTICAS DE MANEJO (BMPs)**

CONTAMINANTES **COMUNES**

Peluquería y estilista de mascotas móvil

- · Jabones, detergentes, y desinfectantes
- · Productos químicos como enjuagues de pulgas y limpieza de equipos
- Tierra y sedimento
- · Cabello, pelaje, y desperdicio de uñas
- Desechos de mascotas
- Aguas residuales ٠

Unidad móvil

- Anticongelante
- Fluido hidráulico y de transmisión
- · Aceite, grase, gasolina, y diésel

¿QUIERE **SABER MAS?**

Las ciudades de Buellton, Carpintería, Goleta, Lompoc, Santa Bárbara, Solvang, v el condado de Santa Bárbara tienen programas extensos de maneio de aguas pluviales, con mayor selección de información y herramientas útiles para ayudar a su negocio proteger el medio ambiente.

Aproveche los siguientes servicios GRATUITOS:

- Descargue o imprima el material del BMP
- Programa de negocios certificados de la ciudad de Santa Bárbara
- Programas sostenibles del condado de Santa Bárbara

Asegúrese de siempre comprobar:

- Los requisitos de su autoridad local de descarga de aguas residuales.
- Restricciones de seguía.
- Requisitos de licencia/certificadas para ٠ negocios para la ciudad donde están operando su servicio móvil.
- Proveedor de tratamiento de aguas pluviales
- Manual de estándares de ciudad, seguridad y saneamiento de la Alianza Profesional de Estilistas y Peluquería de Mascotas.

SOLO LA LLUVIA POR EL DRENAJE

ACERCA DE ESTE GUÍA

Muchos negocios móvil de peluquería y estilista de mascotas no se dan cuenta que sus prácticas pueden afectar nuestros arroyos, lagos, ríos o mares con contaminación. Este guía proporciona mejores prácticas para las operaciones de su negocio que previene la contaminación de aguas pluviales.

Los pelugueros y estilistas de mascotas móviles pueden generar contaminantes por un mal funcionamiento de la unidad móvil que podría transportarse al desagüe pluvial y a nuestras vías fluviales. Usted puede ayudar a reducir la contaminación del aqua durante todo el año implementando las BMP en este quía.

PELUQUERÍA Y ESTILISTA DE MASCOTAS MÓVIL BMPs

MINIMIZAR EL USO DE QUIMICOS TÓXICOS

- · Los productos y/o los productos químicos deben cumplir con todas las regulaciones locales, estatales y federales aplicadas y deben ser compatibles con las mascotas.
- Utilice solo productos (como soluciones de protección contra pulgas) que estén aprobados para su eliminación dentro del alcantarillado sanitario.
- Considere prácticas de aseo menos tóxicas utilizando productos y equipos ecológicos que reduzcan la cantidad de productos y usen menos agua.

¿Sabía Que? Incluso productos de limpieza con la etiqueta "no tóxico" y "biodegradable" significa que el producto no es tóxico pare el usuario. "Biodegradable" significa que dada suficiente tiempo, el producto eventualmente se hará descomposición. Estos productos son todavía prejudiciales para la vida silvestre y el medio ambiente.

AGUAS RESIDUALES

- Nunca descargue agua de lavado o aguas residuales de las actividades de lavado y aseo de mascotas a la calle, la canaleta o cerca de un desagüe pluvial.
- Las aguas residuales de las actividades de aseo deben recogerse y descargarse en un fregadero, inodoro u otro desagüe conectado a la alcantarilla sanitaria.

CUIDADO DE UNIDAD MÓVIL Y EQUIPOS

- Nunca enjuague la unidad móvil, el equipo, las jaulas, las cajas y las bañeras en la calle, la canaleta o el desagüe pluvial.
- Cuando lave su unidad móvil, use una manguera equipada con una boquilla de cierre automática y asegúrese de que el agua de lavado drene a un área ajardinada o superficie sin pavimentar, no al drenaje pluvial.
- Si es posible, lleve su unidad móvil a un lavado de autos local donde se capturen las aguas residuales y se las trate. •
- Repare las fugas de la unidad móvil o del equipo rápidamente. •

¿Sabía Que? El anticongelante es venenoso para las mascotas y la vida silvestre que son atraídas por su dulce olor y sabor. Mantenga el anticongelante en recipientes cerrados y deséchelo en un centro de recolección de desechos peligros o en un evento de entrega programado.

BASURA

· Deseche los envases no tóxicos o los productos de desecho como el cabello, el pelaje y las uñas de las actividades de aseo y peinado en los contenedores de basura y/o reciclaje.

PREVENCIÓN DE DERRAMES Y LIMPIEZA

- En caso de que un producto se derrame, tenga disponible un kit de derrames en su unidad móvil.
- · Limpie los derrames o goteos inmediatamente.
- Use métodos secos para limpiar los derrames (absorbente, barrido) en lugar de enjuagar las áreas y disponga adecuadamente.

ENTRENAMIENTO

- Brinde entrenamiento sobre los BMP a todos los nuevos empleados y ofrezca a los empleados existentes una actualización anual sobre la prevención de la contaminación de las aguas pluviales.
- Publique BMP dentro de la unidad móvil.
- Mantenga todos los registros de capacitación en el sitio y dispóngalos disponible para inspección.



www.SBProjectCleanWater.org Project Clean Water 805.568.3440 stormwater@cityofsolvang.com cleanwater@cosbpw.net

www.CityofBuellton.com Public Works Department 805.688.5177 swmp@citvofbuellton.com

www.carpinteria.ca.us Public Works Department 805.880.3415 stormwater@ci.carpinteria.ca.us

www.CityofGoleta.org Public Works Departmen 805.961.7500 stormwater@citvofgoleta.org

www.CityofLompoc.com nunity Development Department 805.875.8275 stormwater@ci.lompoc.ca.us

ww.sbcreeks.co Creeks Division 805.897.2658 creeks@santabarbaraca.gov







Use proper equipment for mobile pet services Contact your local hardware or construction material stores for available tools and materials for mobile pet services including vacuum pumps, sand or gravel bags, etc.



City of Laguna Niguel Community Development Department 30111 Crown Valley Parkway Laguna Niguel, CA 92677 <u>www.cityoflagunaniguel.org</u> 949-362-4360



STORMWATER PROGRAM

BEST MANAGEMENT PRACTICES FOR MOBILE PET SERVICES



30111 Crown Valley Parkway Laguna Niguel, CA 92677

Best Management Practices for Mobile Pet Services

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from pet-related services.

Why should we be concerned with pet grooming waste water discharge?

Washing and grooming activities can pollute waterways if they are not properly managed. Wastewater containing soaps, chemicals (flea dip residues or equipment cleaning solutions), fur, sediment and other wastes can enter the river if discharged to them. Water quality may be affected - some wastes are toxic - others have a "nutrient load" that can upset the ecosystem by causing algal blooms.

Please note that it is unlawful for wash water or other non-storm water, generated by mobile pet services to enter storm drains. <u>Mobile pet services</u> that do not prevent waste water from <u>entering the storm drain systems are</u> <u>subject to Administrative Citations</u> <u>and/or fines.</u>

Best Management Practices (BMPs)

Mobile pet services must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use. Unused water may be directed to landscape as long as it doesn't contain any pollutants or soaps.
- Remove any fur or sediment from the wastes to avoid clogged drains. Use a strainer in the drain and empty to the trash.
- Avoid spills and leaks by maintaining equipment/use equipment that is adequately sized for the job and keeping soaps and chemicals in closed containers and in secondary containment.
- Sweep wash area to remove debris.
- Wash area must be contained so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Discharge wastes from equipment cleaning to a sink.

Options for wash water management

- Preferred Option: Zero discharge or closed-loop recycled water
 - Second Option: Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Community Development Department at (949) 362-4360 or visit our website at www.cityoflagunaniguel.org Thank you for your effort in helping to improve the quality of our environment. **Outreach Materials for Buildings and Grounds**



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Before You Clean

Before performing mobile surface cleaner operations, here are some BMPs to follow to insure that you are protecting our waterways:

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 Become a BASMAA certified mobile cleaner: Acquire the online training from the Bay Area Stormwater Management Agencies Association (BASMAA) for mobile surface cleaning. This program will train you on how to clean different surface areas in an environmentally acceptable way. To become a BASMAA certified mobile surface cleaner go to: www.basmaa.org.

2. Acquire a Wastewater Permit: Contact the local sanitary district and acquire any required permits to discharge your wash water. Also, obtain permission to discharge to the property owner's sanitary sewer plumbing.

3. Dry Cleanup first: Remove dirt and other debris with a vacuum before washing the area.

4. Collect Wash Water: Cover the storm drains to keep the wash water from entering. Clean the area with little or no soap and collect the wash water to dispose down the sanitary sewer system, if permitted to do so.



Questions?

If you have questions about the proper BMPs for surface cleaning, or if you have questions about illicit dumping and stormwater pollution, please contact the Contra Costa Clean Water Program at:

1-800-N0-DUMPING (1-800-663-8674) or go to www.cccleanwater.org



Water is life. Rescue it. 255 Glacier Drive, Martinez, CA 94553-4897

p. 925.313.2360 f. 925.313.2301

WASH WATER DISPOSAL PRACTICES FOR

MOBILE SURFACE CLEANERS





Water is life. Rescue it.

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WASH WATER DISPOSAL PRACTICES FOR MOBILE SURFACE CLEANERS



Spinner cleaning a gas station, to collection system.

It is illegal to allow anything other than rain water to be discharged to a storm drain.

Wash water should never be discharged to a street, gutter, parking lot, or storm drain. If discharged or disposed of improperly, materials such as solvents, dirt, and soapy water can degrade water quality and creek habitats. Individuals who improperly handle and dispose of non-stormwater materials down the storm drain are subject to civil and criminal prosecution.

How are the Storm Drain and Sanitary Sewer Systems Different?

Throughout urban communities, the storm drain system transports rainwater to local creeks, the bay, the delta, and to the ocean. This system was created to prevent flooding within communities and homes. All water and materials that enter the storm drain system is **untreated**. The sanitary sewer is a plumbed system that transports used water from buildings to a wastewater collection and treatment facility, where the water and sewage is treated before being released back into the environment.

If you see an outdoor drain and are unsure of its use, assume it is a storm drain and do not discharge wash water to it.

Where Can You Dispose of Wash Water?

Any person who conducts cleaning operations, which generate wash water must perform cleaning operations based on established best management practices (BMPs). With permission from the sanitary district and the property owner, wash water from mobile cleaners can be discharged into a:

- **1.** Floor, Utility or Mop Sink
- **2.** Toilet
- 3. Drain connected to the sanitary sewer system



Specialist using a recovery system.



A storm drain cover with vacuum hose.

Mobile surface cleaning contractors need to contact the local sanitary district to procure a discharge permit if required before discharging their wash water to the sanitary sewer system.

All wash water discharged to a sanitary system must:

- **1.** Meet the discharge requirements of the local sanitary sewer district
- 2. Not contain hazardous materials
- Cleaning products labeled "nontoxic" and "biodegradable" can still harm wildlife if they enter the storm drain system. These products are prohibited discharges to the storm drain system.

Outreach Materials for Carpet and Furniture Cleaning



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Did you know? Storm drains discharge directly to our lakes, creeks, and waterways UNTREATED. This is why it is dangerous and illegal to dispose of carpet cleaning wash water in the storm drain system. Wastewater contains toxic chemicals and can harm humans, sensitive habitats, and wildlife.



Focus on Carpet Cleaning

Preventing stormwater pollution is good business

Good Business Practices for Carpet Cleaning & Wastewater Disposal

Why is wastewater from carpet cleaning operations a concern?

Wastewater from carpet cleaning may contain dirt, soap, oil, grease, solvents, and other toxic chemicals. These common pollutants can enter our waterways and harm the animals and plants that live there.

How and where you dispose of carpet cleaning wastewater matters. Imagine swimming in a stew of carpet cleaning wastewater – it's not a pretty picture. But this is exactly what can happen if your carpet cleaning waste enters a storm drain. Water that goes into storm drains or ditches is not treated and goes directly to our lakes, rivers, and creeks. Carpet cleaning businesses must implement appropriate best management practices (BMPs) to prevent these pollutants from entering storm drains or ditches.

Best management practices help protect the environment

How? It's Easy. Be smart! Plan ahead. You can take simple steps to complete carpet cleaning work without polluting the environment.

- *Make sure your equipment is well serviced and that all filters are operating properly. Maintain the tanks, hoses, and fittings to prevent wastewater leaks.
- Where possible, invest in cleaning equipment and cleaning practices that minimize water use.
- *Train your operators and employees on appropriate carpet cleaning best management practices, as well as pollution prevention and wastewater discharge requirements.
- *Check with your clients when booking the job. Is this location on sewer or septic system?



please reuse and recycle

Ecology publication #11-01-004 (February 2011)

Areas on a sewer system

Arrange with the client to allow you to discharge into the toilet or utility sink on the premises. If this is not possible, plan to transport the wastewater off-site and dispose of it properly at an authorized sewage discharge point.



Areas on Septic Systems

At a location with a septic system, plan to store wastewater and residues in a collection tank and transport them to an authorized sewage discharge point for proper disposal.

Identify the wastewater disposal option that will be used and ensure that you meet all the requirements to do so. Contact your local sewer authority for information about requirements.



Smart Carpet Cleaning Practices

*** Assess the site:** Before starting the job, do a quick check of the location of stormwater drains and ensure that they are protected from any runoff or spills.

*** Vacuum before cleaning:** This minimizes the amount of debris in the wastewater.

*** Follow instructions:** Always use the recommended type and quantity of chemicals (including water-based, biodegradable, and low-phosphate products, where available) according to the manufacturer's instructions. Remember, just because a product is biodegradable doesn't mean it can be discharged to a storm drain. Store and handle detergents and chemicals in a contained area where any spills will not enter the storm drain.

***Filter all wastewater** before discharging into the sewer system, since fibers and other debris in the wastewater can clog pipes. The filtered materials may be disposed of in the garbage, unless the waste is contaminated. Waste contaminated with hazardous pollutants must comply with hazardous materials disposal requirements. If you have any questions about finding out if wastes are hazardous and how they should be disposed of, contact a hazardous waste specialist at your nearest Ecology office. See the contact list at: http://www.ecy.wa.gov/ reportenviroproblem.html#lookup.

Dispose of wastewater properly.

Did you know? You should never dispose of carpet cleaning wastewater into a septic system. The chemicals may cause the system to fail and contaminate groundwater and drinking water.



Is your business part of the problem or part of the solution?

Knowing your role can help protect Washington waters, save you money in fines, and also prevent negative publicity about your business. All businesses have a role in keeping our lakes, rivers, marine and ground waters clean. Our health and economy depend on it. Your business can be a pollution solution!

Contact information:

Justine Asohmbom, Puget Sound Education Coordinator 425-649-7108 juas461@ecy.wa.gov

Special accommodations:

To ask about the availability of this document in a format for the visually impaired, call the Communications and Education Program at 360-407-7472. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Remember: Only rain down the drain.

BEST PRACTICES FOR CARPET CLEANERS

PROPER DISPOSAL OF WASTEWATER

Tips for Carpet Cleaners

The Clean Water Program's friendly and knowledgeable staff support companies like yours in preventing water pollution. The fact that you are reading this fact sheet probably means you have already decided to take steps to do the right thing with the wastewater from your business. Thank you for helping to keep our water safe and healthy.

Step 1: Filter

First, you should filter the wash water before discharging to the sewer. Fibers and other debris in the water can cause sewer blockages and overflows. The filtered material can go in the garbage, provided the carpet was not contaminated with hazardous materials. See page two for information on how to properly dispose of hazardous materials.

Step 2: Discharge properly

Next, it's important that wash water and rinse water from carpet cleaning be discharged into a *cleanout*, sink, toilet or other drain connected to the *sanitary sewer system*, and never into a street, gutter, parking lot or *storm drain*.

Allowing any material (liquid or solid) to be dumped into the storm drain, hosed off the pavement into a storm drain or placed where it can be carried to the storm drain by rainwater is an illegal discharge, and the individual could face civil and criminal prosecution for each violation.

KEY DEFINITIONS

The *Storm Drain System* was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.



Protecting Alameda County Creeks, Wetlands & the Bay

cleanwaterprogram.org



Keep carpet cleaning wash water OUT of storm drains.



Pouring cleaning fluids or soapy wash water from carpet cleaning activities into the gutters or storm drains will damage sensitive habitats and kill wildlife. Water flowing into storm drains travels directly to local creeks and then to San Francisco Bay. It does not go to a water treatment plant first.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.



Proper Procedures for Disposal

- Arrange with your customer to discharge into a toilet or utility sink on their premises, after receiving approval from the local wastewater treatment authority. OR
- Empty your spent cleaning fluid into a utility sink or other indoor sewer connection at your home base after receiving approval from your local wastewater treatment authority.

What about biodegradable and non-toxic cleaning products?

These guidelines apply even to cleaning products labeled "non-toxic" and "biodegradable."

- "Non-toxic" means the product is not toxic to the human user.
- "Biodegradable" means the product will eventually break down. Biodegradable products can still harm aquatic wildlife since they need time to break down before they are safe. When biodegradable products enter a creek, they are generally still toxic and can harm wildlife and plants.

What if you've cleaned carpets contaminated with hazardous materials?

Hazardous materials, such as mercury and some solvents and spot removers, cannot be discharged to the sanitary sewer or disposed of as garbage. All hazardous waste must be properly managed and disposed.

For Help with Hazardous Waste Disposal

Alameda County Household & Small Business Hazardous Waste Program, www.acgov.org/aceh/household

California Department of Toxic Substances Control, www.dtsc.ca.gov/HazardousWaste

KEY DEFINITIONS

A *Cleanout* is a pipe fitting with a removable plug for inspecting and cleaning out sewer drain pipes.

The *Sanitary Sewer System* collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.



cleanwaterprogram.org

CLEAN WATER PROGRAM

Simple changes to your operations and maintenance can help you comply with local regulations. The Clean Water Program makes it easy.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.

For More Help

For advice and approval on wastewater disposal to the sanitary sewer system, contact:

Castro Valley Castro Valley Sanitary District .. (510) 537-0757

City of Livermore

City of Livermore (925) 960-8100

Cities of San Lorenzo, unincorporated portions of San Leandro and Hayward Oro Loma Sanitary District (510) 481-6971

City of San Leandro

City of San Leandro..... (510) 577-3401

Local Stormwater Agencies

For advice on avoiding disposal to the storm drain system, contact:

system, comuci.	
Alameda	(510) 747-7930
Albany	(510) 528-5770
Berkeley	(510) 981-7460
Dublin	(925) 833-6650
Emeryville	(510) 596-3728
Fremont	(510) 494-4570
Hayward	(510) 881-7900
Livermore	(925) 960-8100
Newark	(510) 578-4286
Oakland	(510) 238-6544
Piedmont	(510) 420-3050
Pleasanton	(925) 931-5511
San Leandro	(510) 577-3401
Unincorporated Alameda	
County	(510) 567-6700
Union City	(510) 675-5301
Clean Water Program	(510) 670-5543

Local Hazardous Waste Agencies

Before You Clean

Before performing carpet cleaning operations, here are some BMPs to follow to insure that you are protecting our waterways:

1. Become a BASMAA certified mobile cleaner: Acquire the online training from the Bay Area Stormwater Management Agencies Association (BASMAA) for mobile surface cleaning. This program will train you on how to clean different surface areas in an environmentally acceptable way. To become a BASMAA certified mobile surface cleaner go to: www.basmaa.org.

2. Acquire a Wastewater Permit: Contact the local sanitary district and acquire any required permits to discharge your wash water. Also, obtain permission to discharge to the property owner's sanitary sewer plumbing.

3. Dry Cleanup first: Vacuum debris off carpets before cleaning the carpeted area to reduce the material in wash water.

4. Collect Wash Water: Clean the carpet with little or no soap and collect the wash water to dispose down the sanitary sewer system, if permitted to do so.



Questions?

If you have questions about the proper BMPs for surface cleaning, or if you have questions about illicit dumping and stormwater pollution, please contact the Contra Costa Clean Water Program at:

1-800-N0-DUMPING (1-800-663-8674) or go to www.cccleanwater.org



Water is life. Rescue it.

255 Glacier Drive, Martinez, CA 94553-4897 p. 925.313.2360 f. 925.313.2301

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WASH WATER DISPOSAL PRACTICES FOR

CARPET CLEANERS





Water is life. Rescue it.

WASH WATER DISPOSAL PRACTICES FOR CARPET CLEANERS

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Specialist using a professional vacuum system.

It is illegal to allow anything other than rain water to be discharged to a storm drain.

Wash water should never be discharged to a street, gutter, parking lot, or storm drain. If discharged or disposed of improperly, materials such as solvents, dirt, and soapy water can degrade water quality and creek habitats. Individuals who improperly handle and dispose of non-stormwater materials down the storm drain are subject to civil and criminal prosecution.

How are the Storm Drain and Sanitary Sewer Systems Different?

Throughout urban communities, the storm drain system transports rainwater to local creeks, the bay, the delta, and to the ocean. This system was created to prevent flooding within communities and homes. All water and materials that enter the storm drain system is **untreated**. The sanitary sewer is a plumbed system that transports used water from buildings to a wastewater collection and treatment facility, where the water and sewage is treated before being released back into the environment.

If you see an outdoor drain and are unsure of its use, assume it is a storm drain and do not discharge wash water to it.

Where Can You Dispose of Wash Water?

All carpet cleaners who conduct cleaning operations, which generate wash water must perform cleaning operations based on established best management practices (BMPs). With permission from the sanitary district and the property owner, wash water from



A professional vacuum system collecting wash water.

carpet cleaners can be discharged into a:

- 1. Floor, Utility or Mop Sink
- 2. Toilet
- 3. Drain connected to the sanitary sewer system
- Carpet cleaners need to contact the local sanitary district to procure a discharge permit if required before discharging their wash water to the sanitary sewer system.

All wash water discharged to a sanitary system must:
1. Meet the discharge requirements of the local sanitary sewer district (certain cleaning products, such as spot removers, may contain toxic organic compounds and should be used very sparingly.)
2. Not contain hazardous materials

Cleaning products labeled "nontoxic" and "biodegradable" can still harm wildlife if they enter the storm drain system. These products are prohibited discharges to the storm drain system.



Specialist using a vacuum system to collect wastewater.

Outreach Materials for Construction, Building, and Painting



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CALL FOR MORE INFORMATION

PAINT (English)

Serving businesses

THE SMALL QUANTITY GENERATOR PROGRAM

Businesses are not eligible to use the household hazardous waste collection sites, or battery, oil and paint recycling sites. Businesses may use the Conditionally Exempt Small Quantity Generator Programs that are operated by the county of Sacramento and the city of Sacramento. These programs provide a practical method of handling small amounts-up to 220 pounds or 27 gallons-of hazardous wastes generated by businesses.

These services are available to businesses located throughout Sacramento County. Program information, including application requirements and fees, is available by appointment. A current information packet on these programs may be obtained by calling:

County of Sacramento North Area Recovery Station: (916) 876-9458

City of Sacramento Sacramento Recycling and Transfer Station: (916) 379-0500

STORM DRAINS VS. SANITARY SEWERS

Storm drains and sanitary sewers have two distinct functions. It's important to understand the difference.

Storm drains collect and transport runoff from rainfall. Typically these are the drains located in streets and in parking lots. Storm drain systems do not remove pollutants from water before it is discharged to creeks and rivers.

Sanitary sewers collect wastewater from indoor plumbing such as toilets, sinks, washing machines and floor drains and take it to a sewage treatment plant. The treatment plant removes many pollutants from wastewater before it is discharged to the river.





Sacramento Stormwater **Quality Partnership**

Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova) QUALITY PARTNERSHIP (916) 808-4H2O (4426); www.beriverfriendly.net

FOR BUSINESS

BERC helps businesses understand and comply with environmental regulations. This business service is free and confidential.

Business Environmental Resource Center (BERC) (916) 874-2100; www.sacberc.org

Non-emergency Illegal Discharges	(916) 808-4H20
	(4426)
Sanitary Sewer Discharges	
Sacramento Regional County	
Sanitation District (Regional San)	
Wastewater Source Control Section	(916) 875-6470
City of Galt	(209) 366-7260

Hazardous Waste Disposal

Sacramento County	(916)875-8550
City of Sacramento	(916) 264-5011
City of Citrus Heights	(916) 727-4770
City of Elk Grove	(916) 627-3232
City of Folsom	(916) 355-8367
City of Galt	(209) 366-7260
City of Rancho Cordova	(916) 851-8710

Stormwater Departments

Sacramento County	(916) 874-6851
City of Sacramento	(916) 264-5011
City of Citrus Heights	(916) 727-4770
City of Elk Grove	(916) 687-3005
City of Folsom	(916) 355-8344
City of Galt	(209) 366-7260
City of Rancho Cordova	(916) 851-8710

PAINTING WITHOUT POLLUTING

A practical paint disposal and cleanup guide for Sacramento residents and contractors



SACRAMENTO STORMWATER **QUALITY PARTNERSHIP**

mproper disposal of paint can be harmful to the environment. Waste materials from painting include excess paint, used thinner, cleanup water and wastes from preparation work such as chips and scraping. Even watersoluble latex paints contain chemicals that are harmful to aquatic life and drinking water supplies.

Paint, solvents, thinners and waste from preparation work may contaminate soil and groundwater if disposed of on the ground or in a septic tank.

The following paint disposal and cleanup guidelines can help you protect the environment and keep you in compliance with the law.

ADOPT ENVIRONMENTALLY FRIENDLY OPTIONS FOR HANDLING PAINTS AND SOLVENTS

- Avoid buying too much paint to begin with. Careful planning can save you money and reduces the amount of leftover materials.
- **Before cleaning brushes**, brush out as much paint as possible.
- Drain and recycle excess paint from spray equipment prior to cleaning with water or solvent.
- **Carefully store leftover paint** for future use or give it away to someone who can use it.
- **Discard dry paint cans** and disposable brushes in the trash.
- Recycle empty spray cans using either the county or city curbside recycling program.

LATEX PAINTS

Residents in the Sacramento area may recycle latex paint at the following locations. These services are free. Call first to confirm current hours:

OPEN TO ALL RESIDENTS:

North Area Recovery Station Household Hazardous Waste Drop-off area 4450 Roseville Road, (916) 875-5555

Sacramento Recycling and Transfer Station 8491 Fruitridge Road, (916) 379-0500

CITY OF CITRUS HEIGHTS:

Use the North Area Recovery Station

CITY OF ELK GROVE:

Use the Elk Grove Special Waste Collection Center

CITY OF FOLSOM:

Household Hazardous Waste Door-to-Door Collection Service, (916) 355-8367; call to schedule an appointment or use either North Area Recovery Station

CITY OF GALT:

(209) 366-7260; call for information or use the **Elk Grove Special Waste Collection Center**

RECYCLING:

There are multiple retailers that offer free recycling. Get complete details at *www.paintcare.org*.

Contractors, commercial painters and

residents may recycle latex paint through the Conditionally Exempt Small Quantity Generator Program. For more information and to make an appointment contact:

County of Sacramento:	(916) 875-5555
City of Sacramento:	(916) 379-0500

Both programs are open to small quantity generators throughout Sacramento County.

- Wastewater from cleanup of latex paint on brushes, rollers and tools used may be discharged to the sanitary sewer. Never pour excess paint into the storm drain or sanitary sewer. Excess paint in buckets must be removed and properly handled as leftover paint prior to washing paint buckets.
- Contractors at construction sites should use disposal facilities designated by the property owner or site superintendent. Wastewater from cleaning equipment used for latex paint may not be disposed of on the ground. This wastewater may be drained into the sanitary sewer, if available, at the construction site. Note: This is for latex paint wastewater cleanup only and not for excess paint; neither paint nor wastewater can be disposed of if the site is served by a septic tank. If there is no sanitary sewer available on site, clean up off-site where there is sewer access to avoid transporting or handling wastewater.

OIL-BASED PAINTS AND THINNERS

- Avoid using oil-based paints. If possible, use latex products instead.
- Avoid using solvents for cleanup. Use disposable brushes, rollers, trays and containers. Let them dry and then throw them in the trash.
- Consider reusing thinner. Let particles settle out and pour off clear thinner for reuse. Dispose of the unusable portion as hazardous waste (see Latex Paints).

Residents in the county or city may dispose of oil-based paint, used thinner and partially-full spray cans at household hazardous waste collection centers.

Contractors may dispose of oil-based paint and thinners as hazardous waste through the Conditionally Exempt Small Generator Program.

PROTECT YOURSELF AND THE ENVIRONMENT

- Use lead-safe practices when preparing surfaces and other remodeling activities. Protect yourself, your family and the environment by contacting the county of Sacramento's Environmental Management Department (Environmental Health) at (916) 875-8440 for questions on lead testing and on using lead-safe practices.
- Avoid generating large amounts of wastewater by wet scraping rather than pressure washing.
- Pressure wash only if the house was built after 1978, or if testing shows that the old paint is lead-free.
- Capture wastewater from pressure washing before it flows to the storm drain. If the paint does not contain lead, the wastewater may be allowed to soak into the soil. After paint chips are filtered or settled out, wastewater also may be discharged to the sanitary sewer, with a permit from the Sacramento Regional County Sanitation District (Regional San), (916) 875-6470. For detailed pressure washing information call (916) 874-2100.
- Contact the County of Sacramento's Environmental Management Department (Hazardous Materials) at (916) 875-8550 for information on the proper disposal of preparation work waste that contains lead.


Tips on how to properly deal with wastewater when painting

- Find an on-site sewer connection to discharge wastewater (or pour it into an approved sewer system). Never pour wastewater onto the street or into storm drains, ditches, or other means of drainage
- Recycle, return or wherever you don't need water-based (latex) paints. Empty cans or those with dried latex paint can go in the trash.
- Recycle leftover paint thinner and oil-based paint or treat as hazardous waste. For detailed instructions, see Household Hazardous Waste
- If you only use water to pressure wash a building before painting it, place a screen in storm drains to prevent small paint chips from entering.

Tips on how to prevent or control a sewage spill when painting

- Clean up any sewage leaks or spills immediately. If these leak into a storm drain system, contact your city or county authorities.
- Keep a spill kit on hand in case something goes wrong. Train your employees to use the spill kit materials and keep a record of the training they receive.

Do you have any questions about the proper disposal of wastewater? Contact the authorities of the city or county where you work. This page intentionally left blank

Outreach Materials for Equipment and Vehicles



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Preventing Water Pollution Tips for Vehicle Washing and Detailing Businesses

Vehicle washing and detailing practices can produce:



If these pollutants reach waterways, they can cause significant water pollution problems.

YOU can prevent that.

Standing on the edge of a storm drain is like standing on the shore of a stream.

Stormwater carries pollutants that harm aquatic life and impact swimming and fishing. According to the Washington State Department of Ecology, stormwater is the number one source of water pollution in the urban areas of Western Washington. Thousands of small spills from many of us add up to our biggest pollution problem.



MORE INFO:

Stormwater BMPs for the Automotive Industry: The Green Wrench Guide. http://www.projectcleanwater.org/pdf/ green_wrench_guide-final.pdf

EPA Fleet Maintenance Fact Sheets: http://www.epa.gov/regiong/waste/p2/ autofleet/factfleet.html

Closed Loop Vehicle Wash Facilities: http://www.dep.state.fl.us/water/ wastewater/docs/GuideBMPClosed-LoopRecycleSystems.pdf

THE POLLUTION PROBLEM

Polluted stormwater runoff can be deadly to fish and other aquatic life.

Some pollutants are obvious, like oil, soap and metals. But even simple things like temperature, pH (acidity) and turbidity (clarity of the water) are considered pollutants.



Metals are very toxic to fish and aquatic organisms. Zinc can wash off galvanized metal roofs or metal parts stored outside. Copper can enter water from vehicle brake pads and paint. Salmon and other fish are especially sensitive to even low levels of copper because copper inhibits their sense of smell.



Oil, fuel, grease, and other compounds degrade aquatic habitat and make water unhealthy for animals and humans. Spilled petroleum products may evaporate, sink into sediment, dissolve in the water, or be absorbed by living organisms where they can enter the food chain.



Soapy water can suffocate fish. All soaps, even non-toxic and biodegradable soaps, can harm aquatic life. Soaps coat the gills of fish and the aquatic insects they eat. Soaps can also destroy the natural protections (like external mucus layers) fish have against bacteria and parasites, and inhibit the ability of fish to reproduce. Many soaps also contain phosphorus, a nutrient which causes excessive algae growth. Bacteria that feed on dying algae use up the dissolved oxygen in water that fish need to breathe.



Even dirt can be deadly. Fine silt and dust can smother and kill fish eggs. Sediment can clog fish gills and obscure their vision, making it difficult for fish to find food and to see predators. Pollutants and bacteria can attach themselves to particles of dirt.

Temperature and pH are also pollution. Aquatic organisms are negatively affected by minor changes in temperature and pH. Hazardous wastes, including solvents and concrete dust, can affect pH and can kill aquatic life.

WASTEWATER (sewer system)

Indoor drains collect water from sinks, toilets, washing machines, and other sources. This water is treated at a wastewater treatment facility. The solids are removed and the cleaned water is discharged into a nearby water body.

STORMWATER





Outdoor drains and ditches collect water from hard surfaces like roofs, pavement and hard-packed ground. This water is piped through the stormwater system and discharged directly into nearby waterways like creeks, streams and marine waters.

THE POLLUTION SOLUTION

REMEMBER: ONLY RAIN DOWN THE STORM DRAIN. Help keep pollution out of our water by following these simple steps:

Keep a clean site. Prevent rainfall from mixing with sources of pollution or loose soils.

Get to know the drainage on your site. This can help you prevent problems.

Prevent spills and leaks. Keep all



chemicals in closed and labeled containers. Store drip pans, paint, and batteries inside or under cover, where they are not exposed

to rainfall. Keep dumpster areas clean and check often for leaks.

Cover and secure lids to garbage cans



and dumpsters. Do not dispose of flammable or hazardous materials in your dumpster. Ensure that dumpsters and trash

containers are not leaking and do not store them near storm drains.

Clean up and report spills and leaks.



Keep absorbent materials handy, and clean up spills promptly. Don't hose down spills! Clean dirt and grime using dry methods

like sweeping and vacuuming. Limit spill damage by reporting spills of any size to: **Department of Ecology (425-649-7000)**.

Dispose of wash water to an approved



sewer system. If you do not have an approved wash area, collect your wash water and divert it to the sewer or bring your equipment to

a commercial car wash. These businesses are constructed to properly dispose of dirty wash water.

Check storm drains at least every six



months and remove sediments before they fill 60% of the capacity beneath the outlet pipe. Sediments may be removed with

a shovel, bagged, and disposed of in the garbage unless chemical spills have occurred. Contaminated sediments may need to be managed as hazardous waste. Call your local solid waste authority for management options.

Pre-clean oily parts with a reusable rag. Avoid hose-off degreasers. Reusable rags



should be washed by a commercial laundry service. Disposable rags soiled with waste oil can be thrown in the garbage. Disposable

rags soiled with solvent-based cleaners or paints must be disposed of as hazardous waste.



You may be required to have an oil/



water separator. Check with your local jurisdiction. These devices can be installed in drains to ensure oily water doesn't

enter water systems. They must be regularly maintained to remove the oil and sediment.

Block storm drains before starting



any outdoor work that might impact stormwater. In most cases, you will need to collect the dirty water and dispose of it via the sewer

system (toilet or sink) or at a permitted off-site facility.

DEPARTMENT OF ECOLOGY State of Washington Puget Sound Starts Here.org

Anything ignitable, reactive, corrosive, or toxic must be disposed of as hazardous waste.

CONTACT YOUR LOCAL STORMWATER DEPARTMENT.

Many cities and counties in Washington have a stormwater permit that requires them to manage stormwater. These communities provide public education and take steps to control runoff and improve water quality. They can answer detailed questions about your area.



Whatcom County (360) 715-7450 www.co.whatcom.wa.us/ publicworks/water



Skagit County (360) 336-9400 www.skagitcounty.net



City of Bellingham (360) 778-7979 www.cob.org/stormwater



City of Ferndale (360) 685-2378 www.cityofferndale.org/ stormwater



City of Mount Vernon (360) 336-6204 www.ci.mount-vernon.wa.us



City of Burlington (360) 755-9715 www.ci.burlington.wa.us



City of Sedro-Woolley (360) 855-0771 www.ci.sedro-woolley.wa.us



BEST PRACTICES FOR MOBILE BUSINESSES

PROPER DISPOSAL OF WASTEWATER

Tips For Mobile Businesses

The Clean Water Program's friendly and knowledgeable staff support companies like yours in preventing water pollution. The fact that you're reading this fact sheet probably means you have already decided to take steps to do the right thing with the wastewater from your business. Thank you for helping to keep our water safe and healthy.

Step 1: Plan Ahead

- Determine where you will discharge wash water before starting a new job.
- Be sure to have equipment on hand (i.e. long hoses, sump pump, etc) for directing discharge to sanitary sewer access points.

Step 2: Divert and Collect Wash Water

- Walk the area to identify storm drains.
- Contain wash area so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Cover the storm drains to prevent wash water from entering and divert wash water to the sanitary sewer system if permitted to do so.
- Use a "wet-vac" to vacuum up the contained wash water for proper disposal.
- If feasible, wash on a vegetated or gravel surface where wash water can infiltrate into the ground without runoff.

Step 3: Discharge Properly

It is important that wash water from mobile businesses be discharged into a *cleanout*, sink, toilet or other drain connected to the *sanitary sewer system* — never into a street, gutter, parking lot or *storm drain*.



Protecting Alameda County Creeks, Wetlands & the Bay

cleanwaterprogram.org



Keep wash waters from automobile detailing and washing, power washing and steam cleaning OUT of the storm drains.



Draining wash water from mobile business activities into the gutters or storm drains will damage sensitive habitats and kill wildlife. Water flowing into storm drains travels directly to local creeks and then to San Francisco Bay. It does not go to a water treatment plant first.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.



What about biodegradable and non-toxic cleaning products?

These guidelines apply even to cleaning products labeled *"non-toxic"* and *"biodegradable."*

- "Non-toxic" means the product is not toxic to the user.
- *"Biodegradable"* means the product will eventually break down. Biodegradable products can still harm aquatic wildlife since they need time to break down before they are safe. When biodegradable products enter a creek, they are generally still toxic and can harm wildlife and plants.

Be a BASMAA Recognized Mobile Cleaner

Take the online "mobile surface cleaning" training from BASMAA (Bay Area Stormwater Management Agencies Association). This program will train you on how to clean different surfaces in an environmentally acceptable way and publish your name as a trained cleaner. Visit www.basmaa.org.

Only Rain to the Drain

Allowing any material (liquid or solid) to be dumped into the storm drain, hosed off the pavement in to a storm drain or placed where it could be carried to the storm drain by rainwater is an illegal discharge, and the individual could face civil and criminal prosecution for each violation.

KEY DEFINITIONS

A *Cleanout* is a pipe fitting with a removable plug for inspecting and cleaning out sewer drain pipes.

The *Storm Drain System* was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.

The *Sanitary Sewer System* collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.



cleanwaterprogram.org

CLEAN WATER PROGRAM

Simple changes to your operations and maintenance can help you comply with local regulations. The Clean Water Program makes it easy.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.

For More Help

For advice and approval on wastewater disposal to the sanitary sewer system, contact:

Cities of Alameda, Albany, Berkeley, Emeryville, Oakland or Piedmont

East Bay Municipal Utility District (EBMUD)...... (510) 287-1651

Castro Valley

Castro Valley Sanitary District .. (510) 537-0757

City of Dublin

Cities of Fremont, Newark or Union City

Union Sanitary District (510) 477-7500

City of Hayward

City of Hayward (510) 881-7900

City of Livermore

City of Livermore (925) 960-8100

City of Pleasanton

City of Pleasanton (925) 931-5500

Cities of San Lorenzo, unincorporated portions of San Leandro and Hayward

Oro Loma Sanitary District (510) 481-6971

City of San Leandro

City of San Leandro...... (510) 577-3401

Local Stormwater Agencies

For advice on avoiding disposal to the storm drain system, contact:

oyolom, comaci.	
Alameda	(510) 747-7930
Albany	(510) 528-5770
Berkeley	(510) 981-7460
Dublin	(925) 833-6650
Emeryville	(510) 596-3728
Fremont	(510) 494-4570
Hayward	(510) 881-7900
Livermore	(925) 960-8100
Newark	(510) 578-4286
Oakland	(510) 238-6544
Piedmont	(510) 420-3050
Pleasanton	(925) 931-5500
San Leandro	(510) 577-3401
Unincorporated Alameda	
County	(510) 567-6700
Union City	(510) 675-5301
Clean Water Program	(510) 670-55/3

Outreach Materials for Exhaust Hoods and Fats Oils & Grease (FOG)



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Best Practices for Cleaning Hood Filters, Ducts, and Fans

Hood filters, ducts, and fans are designed to collect oil-laden air for sanitation, ventilation, and fire prevention. If not cleaned, these components can be flammable and attract pests.

- Wipe and scrape grease from hood filters and walls weekly or more frequently
- Annual cleaning/inspections by a contractor is recommended. If you hire a contractor to clean your roof vents, filters, ducts, and/or fans, they must follow the same rules as your business. Your business is responsible if contractors pollute.
- Wash hood filters inside at a utility sink or near a floor drain
- Ensure that no wash water or process water is discharged to roof drains, outside storm drains, or ditches
- When disposing of wash water to the sanitary sewer system ensure:
 - o Wash water passes through a grease interceptor
 - o Solids are strained out and placed into the garbage
- Collect and store grease from the duct and fan system in a watertight, structurally sound, and non-combustible container and dispose of properly



What is stormwater?

Rainwater or snow that can pick up pollution and carry it to local waterways from parking lots and roadways through storm drains or ditches.

ONLY RAIN DOWN THE STORM DRAIN



Grease buildup on rooftop can overflow into your roof drain and onto your parking lot, where the pollution is carried to local waterways.



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BMPs FOR GREASE INTERCEPTORS



FOG Blocking Sewer Line



Fast Food Grease Trap



Interceptor not functioning

A grease interceptor is a device designed to separate FOG from liquid waste prior to the wastewater entering the sanitary sewer collection system. There are two main types of grease interceptors:

• Hydro-mechanical Grease Interceptor (Trap) – is a smaller device located inside a grease generating facility, typically located under a three compartment dishwashing sink

■ **Gravity Grease Interceptors** (Interceptor) – is a large concrete vault remotely located underground and outside of a grease generating facility.

Grease Interceptors and traps shall be maintained in efficient operation at all times. Cleaning is needed when the accumulations of FOG (fats, oils and grease) and settled solids exceed 25% of the design capacity and/or if FOG is visible in the effluent port.

Never flush sinks, interceptors or traps with hot water or use drain cleaners, solvents, emulsifiers, enzymes or bacterial agents - They only push the FOG further down the pipe where it will eventually cool, congeal and clog the sanitary sewer system.

If self cleaning your trap, you must thoroughly scrape all internal components including the sides, lid and removable baffles. Ensure that all FOG and food waste from the trap is disposed of in a water tight container. Ensure that the trap is functioning as originally designed then fill with cold water before put back in use.

Frequent skimming of the trap will help minimize cleaning cycles.

Keep the provided maintenance log for your trap in an area where it is easily accessible and visible for employees, inspectors and contractors. Document the required information on the log when routine cleaning and maintenance is performed.



EXHAUST CLEANING INCLUDING HOOD, FILTERS, DUCTS AND FANS

Grease that collects in exhaust systems is a threat to contaminating the storm drainage system, clogging the sanitary sewer system, damaging your roof, blocking your roof drains, and attracting rodents. Dirty, greasy hoods and ducts are highly flammable. If not cleaned and maintained properly they can cause serious fire damage.

Greasy hood filters

BMPs FOR PROFESSIONAL CLEANING COMPANIES

Exhaust cleaning typically results in greasy, chemical laden wastewater. Contaminated wastewater must be collected and properly disposed of offsite by the professional cleaning company.

If any wastewater is discharged to the sanitary sewer system, the contractor must ensure that:

- The wastewater has a pH between 5.5 and 9.0 prior to disposal.
- The water temperature is less than 150° F.
- It passes through a grease interceptor.
- It is properly strained and the strained material is thrown in the garbage can.
- All cleaning takes place inside to ensure that no wastewater enters the storm drainage system, public streets, and ditches.

BMPs FOR TENANT/EMPLOYEES

- It is crucial that employees clean removable hood filters, wipe down walls and empty the drip pan at least weekly or at intervals necessary to prevent the accumulation of grease. This will prevent the build up of FOG on your roof, in the down spouts, and in nearby storm drains.
- Initially, wipe and scrape off as much grease as possible when cleaning hood filters and walls. Dispose of the grease in the garbage can.
- Wash hood filters with hot water (less than 150° F) in sinks that flow to a grease interceptor. If soap is necessary, use small amounts of low emulsion type soap.
- Ensure that the roof has a rainproof, structurally sound, non-combustible container to collect grease from the fan and duct system.

For more information about FOG and implementing BMPs in your kitchen, please call 253-856-5500 or go to KentWA.gov

oputW12440_4_15



Implementing effective Best Management Practices in your kitchen

Don't want a clog, get rid of your FOG Keep FATS, MS and GREASE out of your drain!









FATS, M and GREASE



Bakery Grease Trap



Illicit Discharge into Storm Drain



Fats, oils and grease (FOG) come from meat, fish, lard, cooking oil, butter, shortening, sour cream, cheese, gravies, sauces, mayonnaise, cream, and food scraps.

Discharging FOG from your business can cause expensive blockages and other damage to the City of Kent's sanitary sewer system. Additionally, the illegal discharge of pollutants and nonstormwater, such as FOG, into the City of Kent's municipal separate storm sewer system ("MS4") is prohibited and can have adverse impacts on the environment and public health.

If not disposed of properly, FOG and food waste can harden and adhere to the walls of your plumbing.

Your business can avoid these issues by implementing Best Management Practices (BMPs) inside and outside your business.

BMPs IN YOUR KITCHEN

- BMPs should always be used at your food service establishment and include good housekeeping practices, preventative maintenance procedures, spill prevention and cleanup, employee training, and regular inspection of pollution sources. Utilize this educational BMP brochure as a training tool and reminder for business owners, staff and contractors.
 - Scrape or wipe pots, pans, dishes, utensils, hood filters and all other cooking equipment before rinsing or washing. Dispose of food waste and FOG in the garbage.
 - Sweep floors before mopping. Mop with low emulsion soaps. DO NOT dump mop bucket waste water outside your facility where it can discharge to a nearby storm drain.
 - Post a "BMP" poster or "No Grease" poster above the sink. It will serve as a constant reminder and an educational tool for employees working in the kitchen.
 - Ensure all sinks and floor drains have properly fitted screens and strainers in place at all times and that they are cleaned on a regular basis. This will reduce the build up of food waste in your grease interceptor and side sewer.
 - Limit the water temperature used in sinks to 150° F.
 - Use absorbent paper under fryer baskets so it can be thrown away.



Mop Bucket Wastewater

Not Using Strainer

licit Discharge Clogged Mo

- unauthorized use.

- outdoors.



Sewer Backub

BMPs OUTSIDE YOUR KITCHEN

Educate kitchen staff and hired professionals that only clean rainwater is allowed to enter the storm drains.

• Wash all floor mats, grills, garbage cans, hood filters, baking racks, interceptor components, and other miscellaneous equipment in an area that drains to the sanitary sewer.

 Collect and recycle yellow grease (used cooking oil, waste fryer grease, and grill grease) in leak proof rendering containers with tight fitting lids to prevent rainwater from entering. Never dispose of these greasy materials down indoor or outdoor drains.

• Secure rendering containers to prevent accidental spills, vandalism or

• Check grease storage containers, dumpsters and trash compactors on a regular basis for leaks. Repair or replace any that are leaking, corroded, or otherwise deteriorating. Store them away from storm drains.

• Keep dumpster lids closed to avoid pests and the collection of rainwater.

Clean up any spills or leaks inside or outside immediately using dry methods, such as absorbent material or pads. Properly dispose of the soiled material in the garbage.

Never wash spills, leaks or used cleanup material into storm drains or into nearby streets or ditches.

Sweep instead of hosing down or pressure washing parking lots, sidewalks and outside areas. Never use detergents or degreasers when cleaning

erflowing Rendering Barrell to Storm Drai



Buckets of FOG

Compactor Leaking into Storm Drai

MOBILE FOOD SERVICE How to manage and dispose of materials and wastes.





FATS, OILS, & GREASE (FOG)

- Properly store and dispose of FOG.
- Ensure that FOG is not discharged to the sanitary sewer.
- FOG can have a negative impact on storm drain systems.

STORM DRAINS

- Never dispose of mop water, cleaners, or FOG down storm drains.
- Never discharge vehicle or equipment wash water down storm drains.
- Only rain is allowed down storm drains.



Jurisdiction Department

STORAGE & DISPOSAL

- Store liquid materials in leak-proof containers with tight fitting lids.
- Ensure proper disposal of hazardous materials such as cleaners generated on site.

SPILLS

- Clean up onsite spills of cleaning chemicals and FOG.
- Train employees on spill cleanup procedures.
- Have a spill response plan.

Need technical assistance or have questions? Visit [website here] or contact [contact information here].

In partnership with:



CONTACT US

First Last (123) 456-7890 First.Last.@yourdomain.gov

Pollution Prevention Program Mobile Food Vendor Environmental Guidelines



Mobile Food Vendors

Mobile Food Vendors, like catering trucks, hot dog stands, street fair booths, and kiosks are mobile businesses that prepare, cook, and serve food to the public.

They are required to possess a valid permit with the Spokane Regional Health District Food Safety Program.

They are potential pollution sources to the storm drain unless Best Management Practices are used to prevent pollution.

Hazardous Materials Disposal

Stormdrains in streets and parking lots connect to the river and creeks without any water treatment.

It is prohibited to allow anything other than rainwater to go down the storm drain.





Pollution Prevention Program 1101 W. College Ave., Spokane, WA 99201 509.324.1560, ext. 3 | *TDD* 509.324.1464 | srhd.org

How Can You Do Your Part?

Only Rain Down the Drain

The storm drain system is ONLY for collecting rainwater. All other sources of water and pollutants are prohibited from entering the stormdrain, which is known as an illicit discharge.*

No Dumping

- Do not pour grease, food waste, wash water, or anything else down the storm drain.
- Any spills must be cleaned up and disposed of immediately.
- A spill kit should be handy for such emergencies. Spill kit should include:
 - Plastic Bag
 - Labels
 - Broom
 - Absorbent, like
 "kitty litter"



Hold All Wash Water On Board

All wash water used for cleaning must be held on board until it can be properly discharged at your facility's sanitary sewer connection (e.g.: cleanout, mop sink).

You must also properly dispose of melted ice water and cooling equipment discharge.

No Trash in the Storm Drain

- Trash is a pollutant when it enters the storm drain.
- Remember some trash can be recycled.
- Other items, such as floor cleaners, pesticides, and solvents are toxic and should not be mixed in with trash but disposed of as hazardous waste.
- No liquid wastes (water or oil) in the trash. Make the wet waste "dry" by mixing with kitty litter.
- Check around your operation and clean up any trash before leaving the area, by sweeping.
- * Illicit discharges can enter the Spokane River or local creeks untreated and harm fish, wildlife and pose a risk to human health and safety.

Outreach Materials for Landscaping



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THE LANDSCAPER'S GUIDE BEST MANAGEMENT PRACTICES (BMPs)



COMMON POLLUTANTS

Landscape Maintenance

- Pesticides •
- Fertilizers
- Herbicides
- Oil, grease, gasoline, and diesel
- Sediments
- Trash
- Green waste (tree leaves, grass clippings)

For more information on alternative pesticide products and where to buy products locally, visit **Our Water Our World** at http://ourwaterourworld.org/

Training

- Regularly train crews on safe landscaping practices
- Become a Green Gardener by completing the class in Santa Barbara (Santa Barbara City College) or Santa Maria (Allan Hancock College) and learn about resource efficient and pollution prevention landscape maintenance practices.

To learn more about Green Gardening and Water Conservation, visit *Water Wise* at www.WaterWiseSB.org

Need mulch? Free mulch is readily available throughout the county. For the location of free mulch piles, visit *Less Is More* at http://lessismore.org

ABOUT THIS GUIDE

Many people and businesses don't realize their landscape practices can impact our local streams, creeks, rivers, or ocean with pollution. This guide provides general Best Management Practices (BMPs) for landscaping business operations. Additional resources are listed for a more extensive array of suitable BMPs.

Landscape maintenance activities sometimes generate pollutants that can be picked up while watering or by stormwater runoff and then transported to the nearest storm drain and into our local streams, creeks, rivers, and ocean. You can help reduce water pollution by implementing the following approaches:

- \mathbf{x} Implement an Integrated Pest Management (IPM) program that use biological and cultural controls to prevent and manage pests, promote healthy plants, and reduce pesticide exposure risks to human health and the environment.
- Ă Keep landscape maintenance equipment and machinery tuned and in top running condition to eliminate leaks and increase fuel efficiency.
 - Plant drought-tolerant plants using natural landscaping and xeriscaping to reduce water and pesticide use.
 - Keep material stockpiles and chemicals covered, away from storm drain inlets, and out of the street.
 - Have spill cleanup materials readily available and use dry methods to clean up spills.
- Store, handle, and dispose of chemicals and/or spill cleanup materials properly.

Did you know? Grasscycling is a natural way to fertilize your lawn and will reduce clean up time. Initially cut your grass at a height of one inch and leave grass clippings on the lawn when mowing. After the first cut, follow the one-third rule by mowing often enough so no more than one-third of the length of the grass blade is cut in any one mowing.

EVALUATE LANDSCAPE MAINTENANCE

- Use non-chemical solutions such as amending soils with compost, weeding by hand, and replacing plants with native and climate appropriate (drought tolerant) plants.
 - Consider green chemical treatments to replace fertilizers, pesticides, and herbicides.
- Convert to smart-controllers that adjust irrigation based on weather conditions.

PROPERLY MANAGE IRRIGATION AND RUNOFF

- Time and locate irrigation heads to minimize runoff.
 - Minimize irrigation runoff by using an evapotranspiration-based irrigation schedule and rain sensors.
- Avoid over-watering landscape areas not only to conserve water but to avoid runoff water, which may
- carry fertilizers, nutrients, and pesticides into creeks and rivers and eventually to the ocean. Use a hose nozzle to control the amount of water you use or set irrigation systems to reflect your city
- water conservation requirements. Regularly inspect irrigation system for leaks. Ensure sprinklers are not directed to hardscape/concrete.
- Use border at pavement edges to reduce overspray and runoff.

USE MULCH OR OTHER EROSION CONTROL MEASURES

- Mulch, wood chips, and other cover material retain soil moisture and prevent erosion.
- For areas around trees and shrubs, leave three to four inches of mulch in place to reduce evaporation and build healthy soil.

Did you know? Mulch increases the soil's water-holding capacity resulting in the need for less irrigation and regulates soil temperature for a healthy plant root zone.

FOR ADDITIONAL INFORMATION CONTACT OUR PARTNERING AGENCIES

•

City of Buellton www.CityofBuellton.com Public Works Department

805.688.5177 swmp@cityofbuellton.com stormwater@ci.carpinteria.ca.us

City of Carpinteria /ww.carpinteria.ca.us Public Works Department 805.880.3415

City of Goleta ww.CityofGoleta.org Public Works Department 805.961.7500 stormwater@cityofgoleta.org

City of Lompoc www.CityofLompoc.com Economic and Community velopment Department 805.875.8275 stormwater@ci.lompoc.ca.us

City of Santa Barbara ww.sbcreeks.com Creeks Division 805.897.2658 creeks@santabarbaraca.gov

City of Solvang w.CityofSolvang.com Public Works Department 805.688.5575 stormwater@cityofsolvang.com

Santa Barbara County w.SBProjectCleanWater.org Project Clean Water 805.568.3440 cleanwater@cosbpw.net



THE LANDSCAPER'S GUIDE BEST MANAGEMENT PRACTICES (BMPs)



WANT TO **KNOW MORE?**

The Cities of Buellton. Carpinteria, Goleta, Lompoc, Santa Barbara and Solvang, and the County of Santa Barbara have an extensive Stormwater Management Program, with an even greater selection of information and useful tools to help vour business go green!

Take advantage of the following FREE services to you:

Download or print BMP materials.

Be sure to always check:

- Local landscape ordinances periodically.
- Drought restrictions.
- Business license requirements for the city where you are operating your landscape service.

TIP: Adjust irrigation schedules by adjusting your sprinkler time to the County of Santa Barbara's Water Wise recommended % Watering Adjust Value at www.WaterWiseSB.org

ONLY RAIN DOWN THE STORM DRAIN

PROPERLY MANAGE PESTICIDE, HERBICIDE, AND FERTILIZER USE

- The label on a pesticide container is a legal document. Use pesticides as instructed only.
- Select a pesticide specifically for the pest to be controlled. Identify the specific problem by taking a sample to your local nursery or local Agricultural Commissioner's Office, or contact the Master Gardener Program.
- Use mechanical and/or natural methods to remove pests first. This may reduce the need for chemical treatments.
- Apply ready-to-use non-aerosol pesticide, herbicide, or fertilizer products instead of mixing your own concentrates.
- Consider alternative management methods such as pest-resistant plants, sealing entryways, removing food sources, and eliminating nesting sites. Always start with natural, non-toxic methods for pesticide control.

PROPERLY HANDLE AND DISPOSE OF CHEMICALS

- Mix or use only what you need. When it comes to chemical treatments, more is not better-spot treat in areas that do not exceed two square feet whenever possible. Avoid over spray or off-target applications.
 - Make sure to handle and store chemicals properly in accordance with the product Safety Data Sheet (SDS) and ensure storage areas are designed to contain spills.
- Do not apply pesticides, herbicides, and fertilizers during irrigation, within 48 hours of predicted rainfall, or when wind speeds are above five miles per hour.
- · Handle gasoline, diesel, oil and grease cautiously. Use a funnel and/or spout to prevent spilling when fueling equipment.
- Be prepared for handling spills. Keep a spill kit nearby containing personal protective equipment and absorbent materials (sand, kitty litter or sawdust). Cover spills with absorbent materials and put contaminated material into a sealed plastic bag or bucket with a lid, and dispose of it as hazardous waste.
- Don't dump chemicals down drains, sinks, sewers, gutters, or onto soil. Dispose of unwanted chemicals via the local hazardous waste collection event (residents) or a state-approved hazardous waste contractor (business).

Did you know? Occupational Safety and Health Administration (OSHA) Hazard Communication Standard has adopted the Globally Harmonized System (GHS) approach to classify chemicals and communicate hazard information on labels and SDS. For more information about the GHS, visit OSHA's website http://www.osha.gov

CLEANUP AND DISPOSAL OF LANDSCAPE WASTE

- DO NOT blow landscaping waste into street or storm drain inlets or use a hose to rinse dirt and debris off paved surfaces.
- Sweep up residual sediment, leaves, and landscaping waste to prevent dispersal by wind or through contact with rain
 - or irrigation water runoff. These flows can wash the waste into a nearby stream, creek, river, or ocean,
- Dispose of landscaping waste:
- Grass clippings, tree leaves and trimmings, bushes/shrubs and trimmings, tree limbs/branches (< 4 inch diameter) in a green waste container or even better, leave them on site as mulch to eliminate hauling waste.
 - Tree limbs and branches (\geq 4 inch diameter) at a permitted landfill or by compositing/mulching.

REGULATIONS, REGISTRATION, AND REPORTING

- Comply with California Code of Regulations Section 6970 Surface Water Protection in Outdoor Nonagricultural Settings.
- Use a professional with a Qualified Applicator Certificate with Category Q or Category B, or a Qualified Applicator License with Category B to supervise pesticide use.
- Obtain a Maintenance Gardener Pest Control Business License from the California Department of Pesticide Regulation (DPR).
- Register annually with the Santa Barbara County Agricultural Commissioner's Office.
- Record the types and amounts of pesticides, herbicides and fertilizers used.
- Submit Pesticide and Herbicide Usage Records to the Santa Barbara County Agricultural Commissioner's Office.



www.CitvofBuellton.com



City of Carpinteria www.carpinteria.ca.us



City of Goleta www.CitvofGoleta.com



City of Lompoc www.CitvofLompoc.com City of Santa Barbara www.sbcreeks.com

City of Solvang www.CitvofSolvang.com www.SBProjectCleanWater.org



Equipment

- Keep landscape maintenance equipment and machinery in good working order.
- Train employees on how to prevent stormwater pollution and acceptable practices on the job.
- Have proper supplies on hand to block storm drains and collect runoff.
- Adjust mower height for the type of grass and season.
- Keep an easily accessible spill kit on site in case of spills or accidental discharges.

Only rain down the drain.

It is illegal to allow any material (liquid or solid) to be dumped into the storm drain system. This includes hosing off pavement into a storm drain, or where it could enter the storm drain system by rainwater or irrigation.

Federal, state and local regulations prohibit this discharge. Illegal discharge is subject to civil and criminal prosecution.

If you see active discharges into storm drains, catch basins or waterways, call 911.

If you see illegal dumping within Contra Costa County, please contact:

1-800-NO-DUMPING (1-800-663-8674)



The storm drain system includes catch basins, inlets, culverts and piping that are directly connected to our creeks and waterways. Stormwater is not treated. Litter, plant debris, chemicals, and concrete washout that enter the storm drain system flow into our creeks and waterways.

Questions?

If you have questions about the proper BMPs for landscaping and stormwater pollution prevention, please contact the Contra Costa Clean Water Program at:

www.cccleanwater.org

255 Glacier Drive, Martinez, CA 94553-4897 p. 925.313.2360 f. 925.313.2301

Para una copia de este folleto en español, por favor comuniquese con el Programa de Agua Limpia de Contra Costa al 925-313-2360.

BEST MANAGEMENT PRACTICES FOR LANDSCAPING PROFESSIONALS

Lawn and Garden Maintenance Mowing Services Landscape Contractors Tree and Shrub Services Plant Maintenance Services

Do your part to prevent your landscape practices from harming our waterways by keeping all debris and landscape runoff out of the storm drain system.

ONLY RAIN DOWN THE DRAIN





Protect Every Drop Clean Creeks Start With Clean Streets

Printed on recycled paper 30% post consumer content

Pesticides, Herbicides, and Fertilizers

- Obtain appropriate licenses for pesticide applications, pest control and pesticide uses. For more information, contact California Department of Pesticide Regulation at www.cdpr.ca.gov.
- When possible, use less toxic alternatives. For more info visit http://ourwaterourworld.org.
- Consider non-chemical solutions such as weeding by hand, amending with compost or mulch, choosing native and drought-tolerant plants.
- Use chemicals as directed on labels. Prepare only the amount that you need. Spot treat areas if possible.
- Use pesticides if there is a pest problem instead of on a regular, preventative schedule.
- If needed, apply chemicals on non-irrigation days or when there is no predicted rainfall or high winds for the following 48 hours.



Proper irrigation waters plants; not sidewalks.

Hardscaping and Concrete Management

- Conduct grading and excavation work during dry weather.
- Sweep or use dry-clean up methods.
- Wash out trucks or equipment so that wash water is contained and treated.
- Collect concrete washout and solid waste in properly labeled, secure containers and transport for proper disposal.
- Store materials under cover, away from drainage areas.



Example of dry sweeping.

Irrigation

- Prevent runoff from irrigation. Runoff can carry landscape chemicals and other pollutants into the storm drain system.
- Regularly inspect and adjust sprinklers. Replace broken heads and repair sprinkler lines as needed.

- Use water-efficient irrigation systems such as drip irrigation or microspray.
- Contact your local water authority regarding applicable water conservation regulations and restrictions.

Plants and Vegetation Management

- Keep hardscaped areas, storm drain system and creeks free of landscaping debris.
- Grass cycle on lawns and rake leaves into an area of the landscaping where they can decompose on site.
- When removing plant material, store securely for transport or use onsite organics collection.
- Become a Rescape Qualified Professional. To find out how, visit ReScapeCA.org.



Properly tarped loads prevent flyaway material.

Outreach Materials for Pool and Spa Cleaning



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HOT TUB & POOL WATER DISPOSAL

Prevent Pollution



All storm drains in Kirkland flow to the nearest creek, lake or wetland. You can be subject to fines (KMC 15.52, 1.12.200) for allowing pollutants to enter storm drains.

DISPOSAL METHODS

Sanitary Sewer (PREFERRED METHOD)

- Use hot tub or pool's permanent drain connection to sanitary sewer, sanitary sewer cleanout on your property or an indoor drain (ex. utility sink or toilet)
- Never drain water to private septic system

Landscaped Area (NO SANITARY SEWER ACCESS) or Storm Drain (NO OTHER METHODS AVAILABLE)

- Discontinue adding chemicals & turn off heater
- Use neutralizing chemicals or let water "sit" long enough to reduce chlorine level to 0.10 ppm or less
- Test water to determine chlorine (must be 0.10 ppm or less) and pH levels (must be between 6 and 8)
- Water must be free of coloration, dirt, suds, algae, filter media and acid cleaning wastes
- Water must not flow onto neighboring properties or cause soil erosion



Kirkland Public Works Storm & Surface Water Division

TIPS

- Clean pool or hot tub regularly. Maintain proper chlorine levels, pH, water hardness, water filtration, and circulation
- Do not discharge water to septic system. It is prohibited and may cause the system to fail
- Pool & hot tub filter backwash and cleaning water must be collected, contained, and disposed of in the sanitary sewer system
- Dispose of diatomaceous earth filter material in trash
- Never discharge filter backwash or cleaning water to the ground, surface waters or storm drainage system
- Properly store and dispose of pool chemicals

Have questions about pollution prevention? Visit kirklandwa.gov/stormwater or contact Kirkland Public Works at 425-587-3800

REPORT WATER POLLUTION Call: (425) 587-3900 Puget Sound Starts Here



Kirkland Public Works Storm & Surface Water Division

0-2021

BEST PRACTICES FOR POOLS, SPAS, AND FOUNTAINS

PROPER DISPOSAL OF WASTEWATER

Don't Drain Pools, Spas and Fountains to Storm Drains

When pools are drained into streets, the water flows into storm drains and then straight to local creeks and the San Francisco Bay. It does not go to a wastewater treatment plant first. Water from pools, spas and fountains contain chemicals harmful to fish and aquatic plants living and growing in our watersheds, creeks and Bay. Help contribute to preserving a healthy watershed by using these recommended practices to maintain your pools, spas and fountains

Drain Properly

- Drain pool, spa or fountain water to a sanitary sewer cleanout.
- Don't drain water into a street, gutter or storm drain.
- Draining water that contains copper algaecide or residual chlorine to a storm drain is prohibited.
- Contact your local stormwater agency for assistance with locating the sanitary sewer.

General Maintenance

- Keep your pool, spa or fountain well-maintained with a balanced pH to reduce the need for chemicals or drainage.
- Avoid using copper based algaecides. Ask your pool maintenance service or store for help resolving persistent algae problems without using copper algaecides.
- Select pool products with reduced phosphate. Without phosphate, algae cannot thrive.

Cleaning

- Never clean filters in the street, gutter or storm drain.
- If you need to clean your pool filters, rinse over landscaped areas.
- Fresh water will dilute the chlorine so it won't harm plants or grass.
- Clean sand and diatomaceous earth filters onto a dirt area.
- Keep backwash out of the street and storm drain.
- Dispose of spent filter materials in the trash.



Protecting Alameda County Creeks, Wetlands & the Bay

cleanwaterprogram.org



Keep pool, spa and fountain water out of gutters, streets and storm drains.

Only Rain to the Storm Drain.



Reduce draining by maintaining your pool.

Draining pools, spas, and fountains to storm drains can pollute our creeks and the Bay. Discharge should be directed to sanitary sewer drains.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.



Did You Know...?

- Chlorine is an effective sterilizer that kills bacteria in pool water. Chlorinated water similarly kills sensitive fish and animals essential to healthy creeks and watersheds.
- Even small amounts of chlorine are harmful to fish. Dozens of fish were killed after a drinking water pipe burst sending thousands of gallons of chlorinated water into a San Francisco Bay area creek in 2013.
- Copper is used to destroy algae in pools, spas and fountains. When copper-treated water enters our creeks and waterways it has a similar effect on the plants and organisms in these environments. Copper additives are highly toxic to most aquatic species even in small amounts.
- Most wastewater treatment plants can remove some, but not all copper. It is essential to reduce or eliminate the use of copper in pools, spas and fountains to protect our waterways.
- Phosphate is an effective plant nutrient that promotes algae growth in creeks. Algae blooms in creeks reduce the amount of oxygen in the water and cause warming of creeks to levels that damage fish and plant life dependent upon a clean water to survive.

KEY DEFINITIONS

A *Cleanout* is a pipe fitting with a removable plug for inspecting and cleaning out sewer drain pipes.

The *Storm Drain System* was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.

The *Sanitary Sewer System* collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.



cleanwaterprogram.org

CLEAN WATER PROGRAM

Simple changes to your operations and maintenance can help you comply with local regulations. The Clean Water Program makes it easy.

Learn more about preventing water pollution and the Clean Water Program at www.cleanwaterprogram.org.

For More Help

For advice and approval on wastewater disposal to the sanitary sewer system, contact:

Cities of Alameda, Albany, Berkeley, Emeryville, Oakland or Piedmont

East Bay Municipal Utility District (EBMUD)......(510) 287-1651

Castro Valley

Castro Valley Sanitary District .. (510) 537-0757

City of Dublin

Cities of Fremont, Newark or Union City

Union Sanitary District (510) 477-7500

City of Hayward

City of Hayward (510) 881-7900

City of Livermore

City of Livermore (925) 960-8100

City of Pleasanton

City of Pleasanton (925) 931-5500

Cities of San Lorenzo, unincorporated portions of San Leandro and Hayward

Oro Loma Sanitary District (510) 481-6971

City of San Leandro

City of San Leandro..... (510) 577-3401

Local Stormwater Agencies

For advice on avoiding disposal to	the	storm drain
system, contact:		
Alameda(5	10)	747-7930
Albany(5	10)	528-5770
Berkeley(5	10)	981-7460
Dublin	25)	833-6650
Emeryville(5	10)	596-3728
Fremont(5	10)	494-4570
Hayward(5	10)	881-7900
Livermore	25)	960-8100
Newark	10)	578-4286
Oakland(5	10)	238-6544
Piedmont(5	10)	420-3050
Pleasanton(9	25)	931-5500
San Leandro(5	10)	577-3401
Unincorporated Alameda		
County(5	10)	567-6700
Union City(5	10)	675-5301
Clean Water Program(5	10)	670-5543

Appendix B

New Outreach Materials



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Carry a Spill Kit

• Use absorbent pads or materials to cleanup drips and spills of chemicals, gas, or oil.



Hazardous waste

• **Car batteries:** bring to a designated battery recycler.



- Used oil: store in a container with a secured lid labelled "Used Oil." Filters can go in the garbage if oil if fully drained
- Shop towels and rags: if dirty with oils, solvent, or anti-freeze, use a laundry service or dispose at an approved hazardous waste facility.





 Engine parts: remove residual automotive fluids and store separately (don't mix wastes). If parts are stored outside, cover with a tarp and elevate off the ground to avoid contact with rain.



- **Absorbent materials:** used absorbents for oil can be bagged and put in the garbage. Absorbents with other vehicle or equipment fluids are hazardous waste.
- Dispose of hazardous waste properly.
 - Option 1: use a licensed waste hauler.
 - Option 2: bring small quantities of accepted waste to a hazardous waste drop-off location.
- **Keep records** of your hazardous waste disposal: who hauled it, how much was hauled, and when it was hauled.





Find a Hazardous Waste Service Provider Find a Hazardous Waste Disposal Site

To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at Chelsea.Morris@ecy.w.gov, or visit ecology.wa.gov/accessibility.

For Relay Service or TTY call 711 or 877-833-6341.





Stormwater Pollution Prevention for **MOBILE AUTO REPAIR BUSINESSES**

Keep our communities, creeks, lakes, and Puget Sound healthy.



Prevent Pollution Using the Four Cs

COVER

- Protect the work area from rain and work under cover.
- Cover materials stored outdoors, including parts, containers, and equipment.



CAPTURE



• Use drip pans/containers with lids to collect vehicle waste fluids.



Use absorbent pads or materials to catch drips in work areas and during fluid transfer. If it is raining do not use waste cardboard.

CLEAN

- Cleanup spills immediately.
- Prevent spills from reaching storm drains, natural waters, soil/vegetated areas, and cracks in the pavement.
- Sweep and/or vacuum the work site DO NOT hose it down.

CONTAIN



- Transfer and transport waste fluids in containers with a secure lid.
- Use secondary containment pallets under containers to catch spills and drips.
- Do NOT dispose of waste fluids on the ground, in the street, or into a storm drain.

Mobile Auto Repair Best Practices for Pollution Prevention



Body Repair, V Sanding, and Painting

- Use vacuum sanding equipment.
- Use solvent alternatives, such as cleaning with a wire brush or use alcohol-based cleaner.
- For sanding and spot painting, cover ground to capture drips and contain all sanding dust.
- Transfer paint and liquids over drip pans or absorbent pads to prevent material from contacting the ground.
- Auto body paint coating must be done in a spray booth with special features to minimize environmental impact.



Repair and Mechanical Work

- Use drip pans and absorbent pads to catch drips.
- Water and rags that contain a significant amount of degreaser/solvents or automotive fluids, such as oil and gas, are considered hazardous waste and must be disposed of properly.
- Transfer waste fluids to a designated waste storage container as soon as possible; do not leave drain pans and other open containers of fluids unattended. Label the container's contents.
- Never pour automotive fluids or solvents to the ground, into a storm drain, waters bodies, or into a dumpster.









Tenga con usted un kit para derrames

• Use paños o materiales absorbentes para limpiar fugas y derrames de sustancias químicas, gasolina o aceite.



Desechos peligrosos

• Baterías de automóvil: llevar a un centro designado de reciclaje de baterías.



- Aceite usado: guardar en un recipiente con tapa hermética y rotulado
 "Aceite usado". Los filtros pueden depositarse en la basura después de drenar por completo el aceite.
- Toallas y trapos del taller: si están sucios de aceites, solventes o anticongelante, use un servicio de lavandería o deséchelos en un centro aprobado de recolección de desechos peligrosos.





Piezas de motor: elimine los residuos de líquidos automotrices y guárdelos por separado (no mezcle los desechos). Si las piezas se almacenan en el exterior, cúbralas con una lona y sepárelas del piso para evitar que entren en contacto con la lluvia.



- Materiales absorbentes: los absorbentes usados con aceite pueden meterse a una bolsa y depositarse en la basura. Los absorbentes con otros líquidos de vehículos o equipos son desechos peligrosos.
- Elimine los desechos peligrosos de manera apropiada.
 - Opción 1: contrate a un recolector de desechos autorizado.
 - Opción 2: lleve cantidades pequeñas de desechos aceptados a un centro de recolección de desechos peligrosos.
- **Mantenga registros** de su eliminación de desechos peligrosos: quién los transportó, qué cantidad se transportó y cuándo se transportó.





Encuentre un proveedor de servicios para materiales peligrosos tinyurl.com/y64pt48r

Encuentre un centro de eliminación de materiales peligrosos tinyurl.com/46nczhbk

Para solicitar una adaptación conforme a la ADA, llame a Ecología al teléfono 360-407-6600 o envíe correo electrónico a Chelsea.Morris@ecy.wa.gov, o visite ecology.wa.gov/accessibility.

Para servicio de retransmisión o TTY, llame al 711 o al 877-833-6341.





Prevención de la contaminación del agua pluvial para EMPRESAS DE REPARACIÓN AUTOMOTRIZ MÓVIL

Cuide la salud de nuestra comunidades, arroyos, lagos y de Puget Sound.



INFORMACIÓN DE CONTACTO Y LOGOTIPO LOCAL

Prevenga la contaminación con estos cuatro pasos

CUBRIR

- Proteja el área de trabajo de la lluvia y trabaje bajo una cubierta.
- Cubra los materiales que se guardan en exteriores, como piezas, recipientes y equipos.



CAPTURAR



- Use bandejas y recipientes con tapa para recolectar los líquidos de desecho de los vehículos.
- Use cubiertas o materiales absorbentes para capturar el goteo en las áreas de trabajo y durante las transferencias de líquidos. Si está lloviendo, no use cartón.

LIMPIAR

- Limpie los derrames de inmediato.
- Evite que los derrames lleguen a las entradas del drenaje pluvial, aguas naturales, áreas con tierra o v egetación y grietas en el pavimento.
 Barra o aspire el lugar de trabajo –

NO lo limpie con manguera.

CONTENER



- Transfiera y transporte los líquidos de desecho en recipientes con tapa hermética.
- Use tarimas de contención secundaria debajo de los recipientes para atrapar los derrames y fugas.
- NO vierta los líquidos de desecho en el suelo, en la calle, ni en el drenaje pluvial.

Mejores prácticas para prevenir la contaminación en la reparación automotriz móvil



Hojalatería, lijado y pintura

- Use equipo de lijado con aspiradora.
- Use alternativas a los solventes, como limpiar con un cepillo de alambre o usar un limpiador con base de alcohol.
- Para lijar y pintar zonas específicas, cubra el suelo para capturar el goteo y contenga todo el polvo de lijado.
- Transfiera la pintura y los líquidos sobre bandejas o cubiertas absorbentes para impedir que el material entre en contacto con el piso.
- La pintura automotriz debe hacerse en una caseta de pintura con características especiales para minimizar su impacto ambiental.

Pintura

automotriz a

pequeña escala

pscleanair.gov/215/

Rules-Requirements



Reparaciones y trabajos mecánicos

- Use bandejas y cubiertas absorbentes para capturar el goteo.
- El agua y los trapos que contengan una cantidad significativa de desengrasantes, solventes o líquidos automotrices, como gasolina o aceite, se consideran desechos peligrosos y deben eliminarse de manera apropiada.
- Transfiera los líquidos de desecho a un recipiente designado para almacenamiento de desechos lo antes posible; no deje sin atención las bandejas de drenado u otros recipientes abiertos con líquidos. Marque el recipiente para indicar su contenido.
- Nunca vierta líquidos automotrices o solventes en el suelo, el drenaje pluvial, cuerpos de agua o depósitos de basura.




Carry a Spill Kit

• Use absorbent pads or materials to cleanup drips and spills of chemicals, gas, or oil.



Power Tools and Equipment Maintenance

- Store gas and other fuels in labeled container with a closeable lid and nozzle.
- Place drip pans or absorbent pads on the ground in the refueling area to catch drips.
- Put rags with oil, gas, grease, or chemicals into a container labeled "Hazardous Waste." Keep the lid closed.



Hazardous Waste Disposal

- Landscaping activities can create hazardous waste that needs special disposal, including rags or absorbent materials with:
 - Vehicle and equipment fluids, including gas, oil, grease, thinner, and solvent.
 - Organic chemicals, including pesticides, herbicides, and fertilizer.
- Dispose of hazardous waste properly.
 - **Option 1:** use a licensed waste hauler.
 - **Option 2:** bring small quantities of accepted waste to a hazardous waste drop-off location.
- **Keep records** of your hazardous waste disposal: who hauled it, how much was hauled, and when it was hauled.





Find a Hazardous Waste Service Provider tinyurl.com/y64pt48r Find a Hazardous Waste Disposal Site

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For Relay Service or TTY call 711 or 877-833-6341.





Stormwater Pollution Prevention for COMMERCIAL LANDSCAPING

Keep our communities, creeks, lakes, and Puget Sound healthy.



Commercial Landscaping Best Practices for Pollution Prevention

Pesticides, Herbicides, and Fertilizer

- Follow guidelines in an Integrated Pest Management Plan, either your own or one from your local jursidiction.
- Know your noxious weeds and local noxious weed laws.
- Use organic fertilizer when possible.
- Spread only the amount needed (and not more), follow label instructions.
- Keep the lid closed when not using, and make sure the label is legible and accurate.
- Store chemicals indoors or under cover and on a secondary containment pallet to catch any spills or drips.
- Never apply chemicals if it is raining or about to rain.



King County Integrated Pest Management Plan

kingcounty.gov/ipm



Integrated Pest Management Plan Weed Control Practices

> kingcounty.gov/ WeedControlPractices



- Check equipment for leaks before using.
- Refuel equipment over a drip pan or oil-absorbent pad to catch drips.
- Use electric or

battery-powered equipment and minimize the use of gasoline and oil.

Excavating and Grading

- Avoid tracking mud and dirt onto the street, sidewalks, and gutters from vehicles and equipment when excavating and grading.
- Protect storm drains at and near jobsites using filter bags or absorbent socks/booms.
- Use fiber rolls, vegetation mats, silt fencing, and other erosion control materials to stabilize the soil after grading or excavating.
- Direct muddy water into landscaped areas to soak into the ground.



- Blow dead leaves and grass clippings into beds as mulch. Do not blow onto streets or into storm drains.
- Rinse empty containers and dispose of rinse water in landscaped areas or reuse when

making another spray mixture of the same chemical.

- Sweep up dry materials.
- Use water for cleanup ONLY where it will drain to landscaped areas.
- Do NOT use soap or chemicals in wash water, and do NOT direct it to the street, gutter, or storm drain.

Irrigation

 Use programmed irrigation systems to avoid overwatering, which may cause soil erosion.
 Prevent runoff from entering surface waters and paved areas.

Train Crews

- Train crews yearly on the use of hazardous chemicals and how to avoid spills and how to clean them up.
 - Keep a record of the trainings and which staff attended.







Tenga con usted un kit para derrames

• Use paños o materiales absorbentes para limpiar fugas y derrames de sustancias químicas, gasolina o aceite.



Mantenimiento de equipos y herramientas motorizadas

- Guarde la gasolina y otros combustibles en recipientes rotulados con tapa y boquilla.
- Coloque bandejas para escurrimientos o paños absorbentes en el piso, en el área de carga de combustible, para capturar los goteos.
- Coloque los trapos con aceite, gasolina, grasa o sustancias químicas en un recipiente con el rótulo "Materiales peligrosos". Mantenga cerrada la tapa.



Eliminación de desechos peligrosos

• Las actividades de jardinería pueden generar desechos peligrosos que deben eliminarse de manera especial, y que incluyen a los trapos y materiales absorbentes con:



- Líquidos de vehículos y equipos, como gasolina, aceite, grasa, thinner y solventes.
- Sustancias orgánicas, como pesticidas, • herbicidas y fertilizantes.
- Elimine los desechos peligrosos de manera apropiada.
 - **Opción 1:** contrate a un recolector de desechos autorizado.
 - **Opción 2:** lleve cantidades pequeñas de • desechos aceptados a un centro de recolección de desechos peligrosos.
- Mantenga registros de su eliminación de desechos • peligrosos: quién los transportó, qué cantidad se transportó y cuándo se transportó.





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tinyurl.com/y64pt48r

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Para servicio de retransmisión o TTY, llame al 711 o al 877-833-6341.





Prevención de la contaminación del agua pluvial para **JARDINERÍA COMERCIAL**

Cuide la salud de nuestra comunidades, arroyos, lagos y de Puget Sound.



INFORMACIÓN DE CONTACTO Y LOGOTIPO LOCAL

Mejores prácticas para prevenir la contaminación en la jardinería comercial

Pesticidas, herbicidas **v** fertilizante

- Siga las directrices de un plan integrado de control de plagas, ya sea de usted o de su jurisdicción local.
- Conozca sus hierbas nocivas y las leyes locales referentes a hierbas nocivas.
- Use fertilizante orgánico siempre que sea posible.
- Esparza solamente la cantidad necesaria (y no más), siga las instrucciones de la etiqueta.
- Mantenga cerrada la tapa cuando no lo esté usando. asegúrese de que la etiqueta sea legible y correcta.
- Guarde las sustancias químicas en interiores o bajo techo y en una tarima de contención secundaria, para atrapar las fugas y derrames.
- Nunca aplique sustancias guímicas cuando esté lloviendo o a punto de llover.

ERTILIZANTE



Plan integrado de control de plagas del condado de King





Practicas de control de hierbas del plan integrado de control de plagas

kingcounty.gov/ WeedControlPractices

Mantenimiento de jardines

- Revise que el equipo • no tenga fugas antes de usarlo.
- Cargue de • combustible el equipo sobre una bandeja o un trapo absorbente para atrapar el goteo.
- Use equipos eléctricos o a baterías, y minimice el ٠ uso de gasolina y aceite.

Excavación y nivelación

- Al hacer trabajos de excavación o nivelación, no arrastre lodo y tierra a la calle, las aceras y las canaletas con vehículos y equipos.
- Proteja los drenajes pluviales que estén en los lugares de trabajo, o cerca de ellos, con bolsas filtrantes o cordones absorbentes.
- Use rollos de fibra, tapices vegetales, cortinas de • sedimentación y otros materiales para control de la erosión para estabilizar la tierra después de nivelar o excavar.
- Dirija las aguas lodosas hacia zonas con jardines, . para que se absorban en el suelo.



- Sople las hojas secas y el césped cortado hacia la tierra para usar como mantillo. No las sople hacia las calles, ni a las entradas del drenaje pluvial.
- Enjuague los recipientes vacíos y deseche el agua de enjuague en áreas con jardines, o reutilícela al preparar otra

mezcla para aerosol de la misma sustancia química.

- Barra los materiales secos.
- Use agua para limpiar SOLAMENTE cuando se drenará a áreas con jardines.
- NO use jabón o sustancias guímicas en el agua para lavar y NO la dirija hacia las calles, las canaletas o las entradas de drenaje pluvial.

Riego

• Use sistemas de riego programables para evitar el riego excesivo, que puede provocar erosión del suelo. Evite que los escurrimientos lleguen a aguas superficiales o áreas pavimentadas.

Capacitación de trabajadores

- Capacite cada año a sus trabajadores sobre el uso de sustancias químicas peligrosas, cómo evitar derrames y cómo limpiarlos.
- Mantenga un registro de los cursos de capacitación y los empleados que asistieron.









Special Considerations for Buildings: PCBs

- Buildings built or renovated from about 1950 to 1979 had widespread use of PCBs (polychlorinated biphenyls).
- PCBs may be present in caulking, grout, joint materials, paints, sealants, lubricants, roofing, metal coatings, and light ballasts.
- PCBs are toxic and cancercausing chemicals.

Wash Water Disposal

 Wash water that contains solid waste and petroleum products must be filtered prior to disposal.

Type of Wash Water	Dispose to Sanitary Sewer	Dispose to Ground	Dispose to Storm Drain or Natural Water Body
Plain water + filtered	\checkmark	\checkmark	\checkmark
Soapy water + filtered	\checkmark	*	×
Dirty/turbid water	\checkmark	*	×
Oily water + oil-absorbing filter	\checkmark	*	×
Dirty or soapy water with no filtration	\checkmark	X	×

*check with your local jurisdiction

Hazardous Waste Disposal

 Pressure washing can create hazardous waste that needs special disposal, including:

PCBs In Buildings

tinyurl.com/tmbth5wn

- » Dirty absorbent materials that may contain PCBs.
- Rags or absorbent pads with gasoline, oils, grease, thinner, solvent, or organic chemicals.
- Dispose of hazardous waste properly.
 - » **Option 1:** Use a licensed waste hauler.
 - » Option 2: Bring small quantities of accepted waste to a hazardous waste drop-off location.
- **Keep records** of your hazardous waste disposal: who hauled it, how much was hauled, and when it was hauled.





Find a Hazardous Waste Service Provider tinyurl.com/y64pt48r Find a Hazardous Waste Disposal Site

To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at Chelsea.Morris@ecy.w.gov, or visit ecology.wa.gov/accessibility.

For Relay Service or TTY call 711 or 877-833-6341.





Stormwater Pollution Prevention for **PRESSURE** WASHING

Keep our communities, creeks, lakes, and Puget Sound healthy.



Pressure Washing Best Practices for Pollution Prevention

The Problem

- Wastewater from washing practices can contain toxic pollutants.
- Pressure washing can release pollutants from surfaces due to the force of the water.
- When not cleaned up properly, waste from washing can pollute stormwater runoff.
- Storm drains flow to the nearest creek, lake, wetland, or Puget Sound.

Only Rain Down the Drain

- Regulations and laws about pressure washing can vary by location, and some jurisdictions strictly regulate pressure washing.
- But they all have one thing in common: ONLY RAIN DOWN THE DRAIN.
- Do NOT use soap or chemicals.
- Wash water that contains soap (including biodegradable), chemicals, soil, or is untreated should NOT be dumped these are pollutants and can kill fish.



Stormwater Pollution Education Guide apps.ecology.wa.gov/ publications/ documents/0710058.pdf

OUR PART, ONE DROP

Setup

»

- Identify where wash water will flow and temporarily cover storm drains.
- Use a containment system to capture wash water.
 - » For ground surfaces, use a pressure washer with a built-in water reclaimation system.
 - » For equipment and vehicles, line the area with a ground tarp and surround it with a temporary berm.
- Equipment needed for portable wash water containment system:
 - Storm drain grate covers
 - Ground cover tarps » Sanc
 - » Portable pump and shoses
- » Sand bags
 » Absorbent pads and socks/boom

» Portable ground

berm



• While washing, move or adjust the containment system to capture and contain the wash water.

Treat the Wastewater

- Use filter fabric to filter the water.
- Solid pieces of waste go into the garbage.

General Best Practices for Pressure Washing

- Sweep work areas to cleanup.
- Cover or block nearby storm drains.
- Do NOT direct or pour wash water into a storm drain.
- DO manage wash water by one of these options:
 - 1. Direct into a landscaped area to soak into the ground.
 - 2. Discharge to the sanitary sewer (toilet or indoor sink) is okay if the water has only small amounts of grit or oil.



DIY Wash

Water Reclaim

System

youtube.com/watch

v=cmdxslBDtFE

BMPs for Washing and Steam Cleaning Vehicles / Equipment / Building Structures

tinyurl.com/59ms2ck7



Sweep and use dry cleanup methods.







Consideraciones especiales para edificios: PCB

 Los edificios construidos o renovados entre 1950 y 1979 utilizaron de manera general materiales llamados PCB (policlorobifenilos).



• Los PCB son sustancias químicas tóxicas y pueden provocar cáncer.

Eliminación del agua de lavado

• El agua de lavado que contenga desechos sólidos y productos de petróleo debe filtrarse antes de eliminarse.

Tipos de agua de lavado	Eliminar en el drenaje sanitario	Eliminar en la tierra	Eliminar en el drenaje pluvial o cuerpos de agua
Agua limpia y filtrada	\checkmark	\checkmark	\checkmark
Agua jabonosa y filtrada	\checkmark	*	×
Agua sucia o turbia	\checkmark	*	×
Agua con aceite y filtro absorbente de aceite	\checkmark	*	×
Agua sucia o jabonosa sin filtrar	\checkmark	×	×

*consulte a su jurisdicción local.

Eliminación de desechos peligrosos

- El lavado a presión puede generar desechos peligrosos que deben eliminarse de manera especial, que incluyen:
 - Materiales absorbentes sucios que pueden contener PCB.
 - » Trapos o materiales absorbentes con gasolina, aceites, grasa, thinner, solventes o sustancias orgánicas.
- Elimine los desechos peligrosos de manera apropiada.
 - » Opción 1: contrate a un recolector de desechos autorizado.
 - » Opción 2: lleve cantidades pequeñas de desechos aceptados a un centro de recolección de desechos peligrosos.
- **Mantenga registros** de su eliminación de desechos peligrosos: quién los transportó, qué cantidad se transportó y cuándo se transportó.





Encuentre un proveedor de servicios para materiales peligrosos tinyurl.com/y64pt48r Encuentre un centro de eliminación de materiales peligrosos tinyurl.com/46nczhbk

Para solicitar una adaptación conforme a la ADA, llame a Ecología al teléfono 360-407-6600 o envíe correo electrónico a Chelsea.Morris@ecy.wa.gov, o visite ecology.wa.gov/accessibility.

Para servicio de retransmisión o TTY, llame al 711 o al 877-833-6341.





Prevención de la contaminación del agua pluvial para LAVADO A PRESIÓN

Cuide la salud de nuestra comunidades, arroyos, lagos y de Puget Sound.



INFORMACIÓN DE CONTACTO Y LOGOTIPO LOCAL



PCB en edificios

tinvurl.com/tmbth5wn

Mejores prácticas para prevenir la contaminación en el lavado a presión

El problema

- Las aguas residuales del lavado pueden contener contaminantes tóxicos.
- El lavado a presión puede liberar contaminantes de las superficies debido a la fuerza del agua.
- Cuando no se limpian correctamente. los residuos del lavado pueden contaminar los escurrimientos de aguas pluviales.



El drenaje pluvial fluye hacia el arroyo, lago o humedal más cercano, o a Puget Sound.

Solo lluvia en el drenaje

- Las reglamentaciones y leyes referentes al lavado a presión pueden variar según el lugar, y algunas jurisdicciones regulan estrictamente el lavado a presión.
- Pero todas tienen una cosa en común: SOLO LLUVIA EN EL DRENAJE.
- NO use jabón ni sustancias químicas.
- El agua de lavado que contenga jabón (incluso biodegradable), sustancias químicas, suciedad o que no esté tratada, NO debe vaciarse en el drenaje; estos contaminantes pueden matar peces.



Guía educativa sobre la contaminación de aguas pluviales apps.ecology.wa.gov/ ublications. cuments/0710058.pdf

OUR PART, ONE DROP

Preparación

- Identifique a dónde fluirá el agua del lavado y cubra temporalmente las entradas del drenaje pluvial.
- Use un sistema de contención para capturar el agua . de lavado.
 - » En la superficie del suelo, use una lavadora a presión con un sistema integrado de recuperación de agua.
 - » En equipos y vehículos, cubra el área con una lona superficial y rodéela con una barrera temporal para contener el agua.
- Equipo necesario para un sistema portátil de contención del agua de lavado:
 - » Cubiertas de entradas Barrera terrestre » de drenaje pluvial portátil
 - » Lonas para cubrir el suelo
 - Bomba portátil » y mangueras
- Bolsas de arena » » Cubiertas y cordones
- absorbentes

no hay cubierta sobre el piso



• Mientras hace el lavado, mueva o ajuste el sistema de contención para capturar y contener el agua de lavado.

Trate las aguas residuales

- Use un filtro de tela para filtrar el agua. •
- Los desechos sólidos deben ir a la basura.

Mejores prácticas generales para el lavado a presión

- Barra las áreas de trabajo que limpiará.
- Cubra o bloquee las entradas de drenaje pluvial cercanas.
- NO dirija ni vierta el agua de lavado al drenaje pluvial.
- Maneje el agua de lavado con una de estas opciones:
 - 1. Diríjala hacia zonas con jardines, para que se absorba en el suelo.
 - 2. Descárguela en el drenaje sanitario (inodoro o lavabo en interiores), no hay problema si el agua tiene pequeñas cantidades de suciedad o aceite.



Barra y use métodos de limpieza en seco.



Sistema de recuperación de agua de lavado

youtube.com/watch ?v=cmdxslBDtFE



Mejores prácticas para lavar y limpiar con vapor vehículos, equipos y edificios

tinyurl.com/59ms2ck7

NO limpie el piso con manguera.



Appendix C

Stormwater Best Management Practices for Mobile Business Activities



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BMPs from King County 2021 Stormwater Pollution Prevention Manual



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A-3: Storage of Liquid Materials in Portable Containers

The following best management practices (BMPs) apply to the outdoor storage of liquid materials in portable containers and indoor storage where the potential exists to flow outside.

Storage of reactive, combustibles or flammable liquids must comply with local Fire Code. The local fire district must be consulted for limitations on clearance of roof covers over containers used to store flammable materials.

Potential pollutants can include but are not limited to hydrocarbons, metals, nutrients, oil and grease, oxygen demanding substances, PCBs, pH, and other pollutants.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- Place tight-fitting lids on all containers.
- Enclose or cover the containers.
- Raise containers off the ground with a spill containment pallet or similar method to contain the material in the event of a spill or accident.
- Place drip pans or absorbent materials under all potential drip and spill locations during filling and unloading of containers. Properly dispose of collected liquids and used absorbent materials. Turn over empty drip pans when not in use or move under cover.
- Do not use metal drums for liquid chemicals that are corrosive.
- Label all containers with the product name and associated hazards (e.g., flammable, corrosive, toxic or reactive).
- Have spill cleanup materials/spill kit located nearby.
- Have a spill plan with current contact information.
- Train all employees on spill response methods and procedures.

Required Routine Maintenance

- Sweep and clean the container storage areas as needed. Do not hose down the area to the stormwater drainage system.
- Routinely check containers and replace any compromised ones. Check nearby catch basins to ensure nothing spilled into them. Dispose of all spilled liquids properly.
- Inspect spill control devices routinely and properly remove and dispose of accumulated oil and debris.

• Storage of reactive, combustible, or flammable liquids must comply with local Fire Code requirements. The local fire district must be consulted for limitations on clearance of roof covers over containers used to store flammable materials.

- *King County Stormwater Pollution Prevention Manual*, Chapter 5: Information Sheets
 - o <u>Containment</u>
 - o <u>Disposal</u>
 - o Spill Response and Cleanup Plan

A-5: Storage and Use of Pesticides and Fertilizers

The following best management practices (BMPs) apply to the storage and use of pesticides and fertilizers. Pesticides include herbicides, rodenticides, insecticides, and fungicides. Washington pesticide law requires most businesses that commercially apply pesticides to the property of another to be licensed as a Commercial Applicator from the Washington State Department of Agriculture.

For irrigation, landscaping, and vegetation maintenance, please refer to activity sheet A-26: Landscaping Activities, Vegetation Maintenance, and Irrigation.

Potential pollutants can include but are not limited to fecal coliform bacteria, metals, nutrients, oil and grease, oxygen demanding substances, PCBs, pH, sediment, and other pollutants.

BMPs are required by King County Water Quality Code (KCC 9.12). If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs: Storage

- Store pesticides and fertilizers in impervious containment areas that prevent water from coming into contact with the product.
- Containment areas must be secured to prevent unauthorized personnel from coming into contact with the materials.
- Containers and bags must be covered, intact, and off the ground. If a container or bag has been opened (including tears and punctures) or is showing signs of leakage, secondary containment is also required.
- Immediately clean up any spilled fertilizer or pesticides. Sweep paved storage areas as needed. Collect and dispose of spilled materials. Do not hose down the area.
- Keep pesticide and fertilizer contaminated waste materials in designated covered and contained areas.
- Dispose of contaminated pesticide and fertilizer waste materials properly.
- Store and maintain spill cleanup materials near the storage area.
- Do not discharge spills, leaks or stormwater containing pesticides or fertilizers to the stormwater drainage systems or to the sanitary sewer. Unused product, stormwater contaminated with pesticides and/or fertilizers, and spilled material must be collected and disposed of properly, according to the product label.

Required BMPs: Fertilizer Application

- Never apply fertilizers if it is raining or about to rain. The longer the period between fertilizer application and either rainfall or irrigation, the less fertilizer runoff occurs.
- Determine the proper fertilizer application for the types of soil and vegetation involved.

- Follow manufacturers' recommendations and label directions.
- Train employees on the proper use and application of fertilizers.
- Keep fertilizer granules off of impervious surfaces. Clean up any spills immediately. Do not hose down any spilled pesticide or fertilizer to a storm drain, conveyance ditch, or surface waters.
- If possible, do not fertilize areas within 100 feet of water bodies including wetlands, ponds, and streams.
- Avoid fertilizer applications in stormwater drainage systems, including ditches ponds and swales.
- Unless approved by the local jurisdiction, do not apply fertilizer at commercial and industrial facilities, to grass swales, buffer areas or filter strips if the area drains to sensitive water bodies.
- Apply fertilizers in amounts appropriate for the target vegetation and at the time of year that minimizes losses to surface and ground waters.

Supplemental BMPs: Fertilizer Application

- Apply the minimum amount of slow-release fertilizer necessary to achieve successful plant establishment.
- Do not fertilize when the soil is dry or during a drought.
- Test soils to determine the correct fertilizer application rates.
- Evaluation of soil nutrient levels through regular testing ensures the best possible efficiency and economy of fertilization.
- Fertilization needs vary by site depending on plant, soil, and climatic conditions.
- Choose organic fertilizers when possible.
- Use slow-release fertilizers such as methylene urea, isobutylidene, or resin coated fertilizers when appropriate, generally in the spring. Use of slow-release fertilizers is especially important in areas with sandy or gravelly soils.
- Time the fertilizer application to periods of maximum plant uptake. Washington State Department of Ecology generally recommends application in the fall and spring, although Washington State University turf specialists recommend four fertilizer applications per year.
- Do not use turf fertilizers containing phosphorous unless a soil sample analysis taken within the past 36 months that indicates the soil of the established lawn is deficient in phosphorus. For more information about restrictions on turf fertilizers containing phosphorus, visit the Washington State Department of Agriculture's website <a href="https://agr.wa.gov/departments/pesticides-and-fertilizers/fertilizer

Required BMPs: Pesticide Application

• All procedures shall conform to the requirements of Chapter 17.21 RCW and Chapter 16-228 WAC.

- Train employees on proper application of pesticides and disposal practices.
- Follow manufacturers' application guidelines and label requirements.
- Avoid excessive application of chemicals. Do not apply pesticides in quantities that exceed the limits on the product's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label.
- Conduct spray applications during weather conditions as specified on the label requirements and applicable local and state regulations. Do not apply during rain or immediately before expected rain (unless the label directs such timing).
- Clean up any spilled pesticides immediately. Do not hose down to a storm drain, conveyance ditch, or surface water.
- Flag all sensitive areas including wells, creeks, and wetlands prior to spraying.
- Post notices and delineate the spray area prior to the application, as required by the local jurisdiction, or by the Washington State Department of Ecology.
- Mix pesticides and clean the application equipment under cover in an area where accidental spills will not enter surface or ground waters, and will not contaminate the soil.
- Follow the FIFRA label requirements for disposal. If the FIFRA label does not have disposal requirements, the rinseate from equipment cleaning and/or triple-rinsing of pesticide containers should be used as product or recycled into product.
- Collect the equipment wash water (rinseate) and store it in a labelled leakproof container with a lid. Reuse the wash water when making another spray mixture of the same pesticide. Do not mix different pesticide wash waters. Do not dump the wash water down a storm drain, to a conveyance ditch, surface water or to the ground. Unused wash water will most likely be a regulated hazardous waste, requiring special disposal.
- The pesticide application equipment must be capable of immediate shutoff in the event of an emergency.

Supplemental BMPs: Pesticide Application

- Use manual pest control strategies, such as physically scraping moss from rooftops and using rodent traps.
- Remove weeds/vegetation in stormwater ditches, detention ponds and drainage swales by hand or other mechanical means.
- Use pesticides only as a last resort. Consider alternatives to the use of pesticides such as:
 - Covering or harvesting weeds, substitute vegetative growth, and manual weed control/moss removal.
 - Soil amendments, such as compost, that are known to control some common diseases in plants, such as Pythium root rot, ashy stem blight, and parasitic nematodes.
- Implement a pest-use plan which should include at a minimum:

- A list of selected pesticides and their specific uses.
- Brands and formulations of the pesticides.
- Application methods and quantities to be used.
- Equipment use and maintenance procedures.
- Safety, storage, and disposal methods.
- Monitoring, record keeping, and public notice procedures.
- Develop and implement an Integrated Pest Management (IPM) program if pests are present. The following steps are adapted from *Least Toxic Pest Management for Lawns*, written by Sheila Daar.
 - Step One: Correctly identify problem pests and understand their life cycle.
 - Learn more about the pest.
 - Observe it and pay attention to any damage that may be occurring.
 - Learn about the life cycle.
 - Many pests are only a problem during certain seasons, or can only be treated effectively in certain phases of the life cycle.
 - \circ $\;$ Step Two: Establish tolerance thresholds for pests.
 - Decide on the level of infestation that must be exceeded before treatment needs to be considered. Pest populations under this threshold should be monitored but don't need treatment.
 - Step Three: Monitor to detect and prevent pest problems.
 - Monitor regularly to anticipate and prevent major pest outbreaks.
 - Conduct a visual evaluation of the lawn or landscape's condition. Take
 a few minutes before mowing to walk around and look for problems.
 - Keep a notebook, record when and where a problem occurs, then monitor for it at about the same time in future years.
 - Specific monitoring techniques can be used in the appropriate season for some potential problem pests, such as European crane fly.
 - Step Four: Modify the maintenance program to promote healthy plants and dis-courage pests.
 - Review your landscape maintenance practices to see if they can be modified to prevent or reduce the problem.
 - A healthy landscape is resistant to most pest problems. Lawn aeration and over-seeding along with proper mowing height, fertilization, and irrigation will help the grass out-compete weeds.
 - Correcting drainage problems and letting soil dry out between waterings in the summer may reduce the number of crane-fly larvae that survive.
 - Step Five: If pests exceed the tolerance thresholds:

- Consider the most effective management options concurrent with reducing impacts to the environment. This may mean chemical pesticides are the best option in some circumstances.
- Consider the use of physical, mechanical, or biological controls.
- Study to determine what products are available and choose a product that is the least toxic and has the least non-target impact.
- Step Six: Evaluate and record the effectiveness of the control, and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.
 - Keep records!
 - Note when, where, and what symptoms occurred, or when monitoring revealed a potential pest problem.
 - Note what controls were applied and when, and the effectiveness of the control.
 - Monitor next year for the same problems.
- Conduct any pest control activity at the life stage when the pest is most vulnerable. For example, if it is necessary to use a Bacillus thuringiens application to control tent caterpillars, apply it to the material before the caterpillars cocoon or it will be ineffective. Any method used should be site-specific and not used wholesale over a wide area.
- Choose pesticides categorized by the EPA as reduced risk, such as the herbicide imazamox, and choose the least toxic pesticide available that is capable of reducing the infestation to acceptable levels. The pesticide should readily degrade in the environment and/or have properties that strongly bind it to the soil.
- When possible, apply pesticides during the dry season so that the pesticide residue is degraded prior to the next rain event.
- If possible, do not spray pesticides within 100 feet of water bodies. Spraying pesticides within 100 feet of water bodies including any drainage ditch or channel that leads to open water may have additional regulatory requirements beyond just following the pesticide product label. Additional requirements may include:
 - Obtaining a discharge permit from the Washington State Department of Ecology.
 - Obtaining a permit from the local jurisdiction.
 - Using an aquatic labeled pesticide and adjuvant.
- Once a pesticide is applied, evaluate its effectiveness for possible improvement. Records should be kept showing the effectiveness of the pesticides applied.
- Develop an adaptive management plan and annual evaluation procedure including: (adapted from Daar's *Least Toxic Pest Management for Lawns*)
 - A review of the effectiveness of pesticide applications.

- Impact on buffers and sensitive areas, including potable wells. If individual or public potable wells are located in the proximity of commercial pesticide applications, contact the regional Ecology hydrogeologist to determine if additional pesticide application control measures are necessary.
- Public concerns.
- Recent toxicological information on pesticides used/proposed for use.

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - <u>A-2: Outdoor Storage of Liquid Materials in Stationary Tanks</u>
 - o <u>A-3: Storage of Liquid Materials in Portable Containers</u>
 - o <u>A-26: Landscaping Activities, Vegetation Management, and Irrigation</u>
- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets
 - o <u>Containment</u>
 - o <u>Covering</u>
 - o <u>Disposal</u>
- For soils testing, contact the King Conservation District (425-282-1900 or district@kingcd.org, a soils testing professional, or a Washington State University Extension office, 206-205-3100.
- Comply with WAC 16-228 (General Pesticide Rules) and WAC 16-229 (Secondary and Operational Area Containment for Bulk Pesticides).
- For more information, refer to the Pesticide Information Center Online (PICOL) Databases at https://picol.cahnrs.wsu.edu/

A-11: Cleaning or Washing of Tools and Equipment

The following best management practices (BMPs) apply to the cleaning of tools and equipment such as lawn mowers, edgers and grass trimmers, tools used at equipment repair shops, and manufacturing equipment such as saws, grinders, and screens.

Potential pollutants include but are not limited to hydrocarbons, metals, nutrients, oil and grease, oxygen demanding substances, PCBs, pH, sediment, and other pollutants.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- Discharge tool and equipment wash water to the sanitary sewer (with approval from the sewer authority) or a holding tank for offsite disposal. The discharge of wash water to the stormwater drain system is not allowed without treatment and an Individual Wastewater Discharge permit from the Washington State Department of Ecology.
- Rinse lawnmowers with water only on a lawn or similar area where grass clippings will not get into the stormwater drainage system or surface waters when it rains.
- Oily, soapy, or otherwise dirty water is not allowed to discharge to any stormwater drainage system or surface water.

Supplemental BMPs

• Recycle your wash water with an enclosed loop system or use self-contained parts washers. Numerous products are commercially available that recycle and contain wash water and cleaning solvents.

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - o <u>A-13: Vehicle Washing and Steam Cleaning</u>
 - o <u>A-18: Vehicle and Equipment Repair and Maintenance</u>
- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets
 - o <u>Containment</u>
 - o <u>Disposal</u>
 - o <u>Oil/Water Separator</u>
 - <u>Water Quality Treatment BMP</u>
- Washington State Department of Ecology's Vehicle and Equipment Washwater Discharges/Best Management Practices Manual <u>https://fortress.wa.gov/ecy/publications/summarypages/95056.html</u>

A-12: Cleaning of Washing of Food Service Areas and Equipment

The following best management practices (BMPs) apply to stationary and mobile operations.

Potential pollutants can include but are not limited to nutrients, oil and grease, oxygen demanding substances, pH, and sediment.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- The cleaning of food service equipment—such as cooking equipment, filter screens, and floor mats—must be done indoors.
- All wash and rinse water (including mop water) must be discharged to the sanitary sewer or the septic system. It may not be discharged outdoors or into the stormwater drainage system.
- Floor mop water must not be poured outside. Instead pour mop water into a mop sink, utility sink or toilet.
- Wash and rinse water containing fats, oils, or grease (FOG) may require pretreatment to remove FOG prior to disposal to the sanitary sewer or septic system. Check with your local sewer authority.
- Do not dispose of wash or rinse waster containing floor stripping or disinfectant chemicals into the septic system as they can seriously inhibit wastewater treatment and cause the system to fail. The wash or rinse water should be collected and hauled offsite for proper disposal (e.g., taken to a wastewater treatment facility).
- The use of "environmentally friendly", "nontoxic" or "biodegradable" soaps and detergents does NOT make it acceptable to discharge to any stormwater drain system or surface waters. All soaps and detergents are harmful to aquatic organisms.

- Contact the local sewer authority for more information on disposal to the sanitary sewer system.
- Interagency Resource for Achieving Cooperation's A Guide to Restaurant Grease Management <u>https://apps.lhwmp.org/IRAC/eDoc.ashx?DocID=Xb9va1HRGBg%3d</u>

A-14: Interior Washing Operations (Including Mobile Contractors)

Potential pollutants can include but are not limited to nutrients, oil and grease, pH, sediment, and other pollutants.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- All wash and rinse water (including floor mop water) must be discharged to the sanitary sewer or septic system. It may not be discharged outdoors or into the stormwater drainage system.
- Do not dispose of wash or rinse waster containing floor stripping or disinfectant chemicals into the septic system as they can seriously inhibit wastewater treatment and cause the system to fail. The wash or rinse water should be collected and hauled offsite for proper disposal (e.g., taken to a wastewater treatment facility).
- The use of "environmentally friendly", "nontoxic" or "biodegradable" soaps and detergents does NOT make it acceptable to discharge to any stormwater drain system or surface waters. All soaps are harmful to aquatic organisms.
- Do not dispose of sludge (thick, wet, viscous mixture; e.g., accumulated food debris cleaned from surface of equipment) outdoors or into the stormwater drainage system.

- *King County Stormwater Pollution Prevention Manual*, Chapter 5: Information Sheets
 - o <u>Disposal</u>
- Contact the local sewer authority for more information on disposal to the sanitary sewer system.

A-15: Washing of Buildings, Rooftops, and Other Large Surfaces

The following best management practices (BMPs) apply to the washing of objects not associated with the operation or storage of automotive equipment or machinery.

For washing of parking lots, driveways, or other areas where automotive fluid (e.g., oil, gasoline) are present, see activity sheet A-31: Parking Lots, Driveways, and Outside Storage Areas. For washing of docks, wharves, piers, floats, and boat ramps, see activity sheet A-30: Marine Activities.

Potential pollutants can include but are not limited to hydrocarbons, metals, nutrients, oil and grease, oxygen demanding substances, pH, sediment, and other pollutants.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- If soaps, detergents, or any other chemicals are used, use a sump pump, wet vacuum or similar device that enables collection of wash water and associated solids so they can be disposed of properly. The wash water must not go to the stormwater drainage system, groundwater, or surface water. This may require temporarily blocking or disconnecting downspouts from the stormwater drainage system in order to prevent illicit discharges.
- Wash water runoff does not have to be collected if:
 - No soaps, detergents, or any other chemical (including pesticides) are used;
 - Only cold water is used. Heated water cannot be discharged to the stormwater drainage system; and
 - the wash water can be diverted to a nearby vegetated area to infiltrate into the ground, or
 - the wash water is filtered through media (e.g., filter fabric) to trap solid materials, prior to entering a stormwater drainage system. The area must be swept prior to washing, in order to remove all fines (e.g., silts and clay) that may otherwise clog or bypass the filtering process.
- Oil stains must be removed with absorbent materials prior to washing
- Wash water is not allowed to flow off-site.
- If the surface being washed has lead or other heavy metal-bearing paint or dust (such as chromium or cadmium), you must use a commercial washing service that will collect, test, and properly dispose of the wash water.

• Block or disconnect all rooftop downspouts when washing roofs. The wash water must be directed to pervious areas such as landscaping or gravel for infiltration, collected and disposed of to the sanitary sewer, or taken off-site for proper disposal.

Additional Information

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - o <u>A-30: Marine Activities</u>
 - <u>A-31: Parking Lots, Driveways and Outside Storage Areas</u>
- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets
 - o <u>Catch Basin Insert</u>
 - o <u>Disposal</u>

Note: Washing of boats in boat yards, marinas, and dry dock areas is covered by a National Pollutant Discharge Elimination System (NPDES) permit, administered by the Washington State Department of Ecology, so the BMPs listed above may not apply to washing in these locations.

A-22: Painting, Finishing, and Coating of Vehicles, Products and Equipment

The following best management practices (BMPs) apply to the painting, finishing, and coating of vehicles, products, and equipment and includes preparation work such as sanding and blasting.

Best management practices for painting buildings are covered in activity sheet A-29: Building Repair, Remodeling and Construction. Painting and other work on vessels is covered in activity sheet A-30: Marine Activities.

Potential pollutants can include but are not limited to hydrocarbons, metals, oil and grease, oxygen demanding substances, pH, sediment, and other pollutants.

BMPs are required by King County Water Quality Code (KCC 9.12). If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- Painting must be done in an enclosed work area and meet the standards of the Puget Sound Clean Air Agency.
- Vehicle painting must be done in paint booths approved and permitted by Puget Sound Clean Air Agency.
- Properly dispose of paint booth filters as required under dangerous and hazardous waste regulations.
- Collect dust and debris from sanding operations using vacuum sanders, ground cloths or similar methods. Do not hose down the area to the stormwater drainage system.
- Use ground cloths and/or drip pans in outdoor locations where paints, finishes, and other liquid materials are mixed and/or applied.

Required Routine Maintenance

- Store and maintain appropriate spill cleanup materials in a location known to all employees.
- Train all employees on the site's spill control plan and/or proper spill cleanup procedures.
- Sweep the area at the end of each day at a minimum. Do not hose down the area to the storm drainage system.

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - o <u>A-29: Building Repair, Remodeling and Construction</u>

- o <u>A-30: Marine Activities</u>
- <u>A-39: Roof Vents and Fugitive Emissions</u>
- Puget Sound Clean Air Agency, 206-343-8800
- Contact King County Local Hazardous Waste Management Program at 206-296-4692 or visit <u>www.hazwastehelp.org</u> for information on the proper disposal of hazardous waste.

A-25: Chemical Applications – Other Than Landscaping

The following best management practices (BMPs) apply to the use of pesticides, herbicides or other chemicals for such purposes as removing or preventing future growth of rooftop moss, killing nuisance rodents, and using fungicides to preserve patio decks.

Application of pesticides for landscaping is covered under activity sheet A-5: Storage and Use of Pesticides and Fertilizers. Best management practices for washing of roofs are in activity sheet A-15: Washing of Buildings, Rooftops and Other Large Surfaces.

The BMPs listed here are intended to complement other regulations. Washington pesticide law requires most businesses that commercially apply pesticides to the property of another to be licensed as a Commercial Applicator from the Washington State Department of Agriculture.

Potential pollutants can include but are not limited to metals, oil and grease, oxygen demanding substances, PCBs, pH, and other pollutants.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- Avoid excessive application of chemicals. Follow manufacturers' application guidelines and label directions.
- Never apply pesticides or other chemicals in the rain.
- Clean up any spilled chemicals immediately. Do not hose down chemicals to the stormwater drainage system.
- Do not spray pesticides within 100 feet of open waters, including wetlands, ponds, and streams, unless approved by local jurisdiction.
- Train employees on proper application and disposal practices

Supplemental BMPs

- Integrated pest management (IPM), a comprehensive approach to the use of pesticides which minimizes application and stresses selection of proper products and tailored application rates, is the most effective BMP measure that can be taken. IPM is applicable to businesses that frequently apply pesticides.
- Use manual pest control strategies such as physically scraping moss from rooftops, high-pressure sprayers to remove moss, and rodent traps.
- Select the least toxic chemical application that can accomplish the job.

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - o <u>A-2: Outdoor Storage of Liquid Materials in Stationary Tanks</u>
 - <u>A-3: Storage of Liquid Materials in Portable Containers</u>
 - o <u>A-5: Storage and Use of Pesticides and Fertilizers</u>
 - o <u>A-15: Washing of Buildings, Rooftops, and Other Large Surfaces</u>
- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets
 - o <u>Containment</u>
 - o <u>Covering</u>
 - o <u>Disposal</u>

A-26: Landscaping Activities, Vegetation Management, and Irrigation

The following best management practices (BMPs) apply to landscaping, vegetation management and irrigation activities which include grading, soil transfer, vegetation planning, and vegetation removal. For storage and use of pesticides and fertilizers see activity sheet A-5: Storage and Use of Pesticides and Fertilizers.

Potential pollutants can include but are not limited to fecal coliform bacteria, metals, nutrients, oil and grease, oxygen demanding substances, PCBs, and sediment.

BMPs are required by King County Water Quality Code (KCC 9.12). If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs – Landscaping and Vegetation Management

- Do not dispose of collected vegetation into surface waters or stormwater drainage systems.
- Do not blow vegetation or other debris into the stormwater drainage system, sidewalks, or street. Dispose of collected vegetation by recycling or composting.
- Use mulch or other erosion control measures when soils are exposed for more than one week during the dry season (May 1 to September 30) or two days during the rainy season (October 1 to April 30).
- Ensure sprinkler systems do not "overspray" vegetated areas resulting in the excess water discharging into the stormwater drainage system.
- Ensure that plants selected for planting are not on the noxious weed list. Remove, bag, and dispose of class A and B noxious weeds in the garbage immediately. Make reasonable attempts to remove and dispose of class C noxious weeds. Do not compost noxious weeds as it may lead to spreading through seed or fragment if the composting process is not hot enough.
- New and expanding golf courses must have a Golf Course Management Plan as described in addressed in the King County Golf Course BMP Manual

Required BMPs - Irrigation

- Ensure sprinkler systems do not overspray vegetated areas resulting in runoff discharging into surface waters or stormwater drainage systems. Adjust watering times and schedules to ensure that the appropriate amount of water is being used to minimize runoff. Consider factors such as soil structure, grade, time of year, and type of plant material in determining the proper amounts of water for a specific area.
- Inspect irrigated areas regularly for signs of erosion and/or discharge.

- Do not irrigate plants during or immediately after fertilizer application. The longer the period between fertilizer application and irrigation, the less fertilizer runoff occurs.
- Do not irrigate plants during or immediately after pesticide application (unless the pesticide label directs such timing).
- Reduce frequency and/or intensity of watering as appropriate for the wet season (October 1 to April 30).

Supplemental BMPs - Landscaping and Vegetation Management

- Select the right plants for the planting location based on proposed use, available maintenance, soil conditions, sun exposure, water availability, height, sight factors, and space available.
- Use native plants in landscaping. Native plants do not require extensive fertilizer or pesticide applications.
- Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas.
- Use at least an eight-inch "topsoil" layer with at least 8 percent organic matter to provide a sufficient vegetation-growing medium.
 - Organic matter is the least water-soluble form of nutrients that can be added to the soil. Composted organic matter generally releases only between 2 and 10 percent of its total nitrogen annually, and this release corresponds closely to the plant growth cycle. Return natural plant debris and mulch to the soil, to continue recycling nutrients indefinitely.
- Select the appropriate turfgrass mixture for the climate and soil type.
 - Certain tall fescues and rye grasses resist insect attack because the symbiotic endophytic fungi found naturally in their tissues repel or kill common leaf and stem-eating lawn insects.
 - The fungus causes no known adverse effects to the host plant or to humans.
 - Tall fescues and rye grass do not repel root-feeding lawn pests such as Crane Fly larvae.
 - Tall fescues and rye grass are toxic to ruminants such as cattle and sheep.
 - Endophytic grasses are commercially available; use them in areas such as parks or golf courses where grazing does not occur.
 - Local agricultural or gardening resources such as Washington State University Extension office can offer advice on which types of grass are best suited to the area and soil type.
- Adjusting the soil properties of the subject site can assist in selection of desired plant species. Consult a soil restoration specialist for site-specific conditions.

- Remove weeds/vegetation in stormwater ditches by hand or other mechanical means and only use chemicals as a last resort. If herbicides are used, refer to activity sheet A-5: Storage and Use of Pesticides and Fertilizers for required BMPs.
- Conduct mulch-mowing whenever practicable.
- Till a topsoil mix or composted organic material into the soil to create a well-mixed transition layer that encourages deeper root systems and drought-resistant plants.
- Apply an annual topdressing application of 3/8" compost. Amending existing landscapes and turf systems by increasing the percent organic matter and depth of topsoil can:
 - Substantially improve the permeability of the soil.
 - Increase the disease and drought resistance of the vegetation.
 - Reduces the demand for fertilizers and pesticides.
- Disinfect gardening tools after pruning diseased plants to prevent the spread of disease.
- Prune trees and shrubs in a manner appropriate for each species.
- If specific plants have a high mortality rate, assess the cause, and replace with another more appropriate species.
- When working around and below mature trees, follow the most current American National Standards Institute (ANSI) ANSI A300 standards, <u>http://www.tcia.org/TCIA/BUSINESS/ANSI A300 Standards /TCIA/BUSINESS/A3</u> <u>00 Standards/A300 Standards.aspx?hkey=202ff566-4364-4686-b7c1-</u> <u>2a365af59669</u>, and International Society of Arboriculture BMPs to the extent practicable (e.g., take care to minimize any damage to tree roots and avoid compaction of soil).
- Monitor tree support systems (stakes, guys, etc.).
 - Repair and adjust as needed to provide support and prevent tree damage.
 - Remove tree supports after one growing season or maximum of 1 year.
 - Backfill stake holes after removal.
- When continued, regular pruning (more than one time during the growing season) is required to maintain visual sight lines for safety or clearance along a walk or drive, consider relocating the plant to a more appropriate location.
- Re-seed bare turf areas until the vegetation fully covers the ground surface.
- Watch for and respond to new occurrences of especially aggressive weeds such as Himalayan blackberry, Japanese knotweed, morning glory, English ivy, and reed canary grass to avoid invasions.
- Aerate lawns regularly in areas of heavy use where the soil tends to become compacted. Con-duct aeration while the grasses in the lawn are growing most vigorously. Remove layers of thatch greater than ³/₄-inch deep.

- Set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing the turf.
 - Mowing is a stress-creating activity for turfgrass.
 - Grass decreases its productivity when mowed too short and there is less growth of roots and rhizomes. The turf becomes less tolerant of environmental stresses, more dis-ease prone and more reliant on outside means such as pesticides, fertilizers, and irrigation to remain healthy.

Supplemental BMPs - Irrigation

- Repair broken or leaking sprinkler nozzles as soon as possible.
- Water deeply, but infrequently, so that the top 6 to 12 inches of the root zone is moist. Appropriately irrigate lawns based on the species planted, the available water holding capacity of the soil, and the efficiency of the irrigation system.
 - The depth from which a plant normally extracts water depends on the rooting depth of the plant. Appropriately irrigated lawn grasses normally root in the top 6 to 12 inches of soil; lawns irrigated on a daily basis often root only in the top 1 inch of soil.
- Irrigate with the minimum amount of water needed. Never water at rates that exceed the infiltration rate of the soil.
- Maintain all irrigation systems so that irrigation water is applied evenly and where it is needed.
- Place sprinkler systems appropriately so that water is not being sprayed on impervious surfaces instead of vegetation.
- Place irrigation systems to ensure that plants receive water where they need it. For example, do not place irrigation systems downgradient of plant's root zones on hillsides.
- Use soaker hoses or spot water with a shower type wand when an irrigation system is not present.
 - Pulse water to enhance soil absorption, when feasible.
 - Pre-moisten soil to break surface tension of dry or hydrophobic soils/mulch, followed by several more passes. With this method, each pass increases soil absorption and allows more water to infiltrate prior to runoff.
- Add a tree bag or slow-release watering device (e.g., bucket with a perforated bottom) for watering newly installed trees when irrigation system is not present.
- Identify trigger mechanisms for drought-stress (e.g., leaf wilt, leaf senescence, etc.) of different species and water immediately after initial signs of stress appear.
- Water during drought conditions or more often if necessary, to maintain plant cover.
- Adjust irrigation frequency / intensity as appropriate after plant establishment.
- Annually inspect irrigation systems to ensure:

- That there are no blockages of sprayer nozzles.
- Sprayer nozzles are rotating as appropriate.
- Sprayer systems are still aligned with the plant locations and root zones.
- Consult with the local water utility, King Conservation District, or Cooperative Extension office to help determine optimum irrigation practices.
- Do not use chemigation and fertigation in irrigation systems. This will help avoid over application of pesticides and fertilizers.

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - <u>A-5: Storage and Use of Pesticides and Fertilizers</u>
- Natural Yard Care Program: <u>http://your.kingcounty.gov/solidwaste/naturalyardcare/watering.asp</u>
- The King County Best Management Practices for Golf Course Development and Operation <u>https://your.kingcounty.gov/dnrp/library/water-and-land/stormwater/stormwater-pollution-prevention-manual/Best%20Manangement%20Practices%20for%20Golf%20Course.pdf</u>
- The King County Noxious Weed List can be found at <u>https://www.kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/laws.aspx</u>. Additional information on the Washington State Noxious Weed List can be found at <u>https://www.nwcb.wa.gov/printable-noxious-weed-list</u>
- The King County Noxious Weed Control Program provides best management practices for the removal of typical noxious weeds such as blackberry and purple loosestrife. Call 206-296-0290 or see: <u>http://www.kingcounty.gov/environment/animalsandplants/noxious-</u> weeds/weed-control-practices.aspx for more information

A-27: Clearing and Grading of Land for Small Construction Projects

Potential pollutants can include but are not limited to hydrocarbons, metals, nutrients, oil and grease, oxygen demanding substances, PCBs, and sediment.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- The City coordinates the clearing, grading, and erosion control requirements on individual sites. Contact the City prior to clearing, grading, and preparation activities for construction-sites greater than 2,000 square feet.
- Even if your site does not require a permit, erosion control measures are still required to prevent turbid water from entering stormwater drainage systems or surface waters.
- Follow the procedures for construction-site erosion and sediment control outlined in the *King County Surface Water Design Manual*:
 - Appendix C: Small Project Drainage Requirements
 - Appendix D: Erosion and Sediment Control Standards

Additional Information

• King County Surface Water Design Manual

A-32: Sidewalk Maintenance

Potential pollutants can include but are not limited to fecal coliform bacteria, hydrocarbons, metals, oil and grease, oxygen demanding substances, PCBs, pH, and sediment.

If the BMPs included here are not enough to prevent contamination of surface water and stormwater, you will be required to take additional measures.

Required BMPs

- Sweep sidewalks as needed to collect loose dirt and debris rather than blowing or pushing it into the street or gutter or hosing it down. Collected materials must be disposed of as solid waste.
- Clean individual stains instead of washing the entire sidewalk, if possible.
- Collect wash water and dispose of into the sanitary sewer or take off-site for appropriate disposal if soaps or other cleaners are used. If only water is used, then install a catch basin insert or filter cloth in order to collect all solids and debris.
- Use a minimum amount of sand or deicing salts and sweep up any remaining granules when the snow and ice have melted.

- *King County Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - <u>A-3: Storage of Liquid Materials in Portable Containers</u>
 - o <u>A-15: Washing of Buildings, Rooftops, and Other Large Surfaces</u>
 - o <u>A-31: Parking Lots, Driveways and Outside Storage Areas</u>
- *King County Stormwater Pollution Prevention Manual*, Chapter 5: Information Sheets
 - o <u>Containment</u>
 - o <u>Disposal</u>
A-33: Swimming Pool and Spa Cleaning and Maintenance

The following best management practices (BMPs) apply to pools, spas, hot tubs, and fountains that use chemicals and/or that are heated.

Potential pollutants can include but are not limited to fecal coliform bacteria, nutrients, oxygen demanding substances, pH, and sediment.

If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required Operational BMPs

- Clean the pool, spa, hot tub, or fountain regularly, maintain proper chlorine levels and maintain water filtration and circulation. Doing so will limit the need to drain the facility.
- Manage pH and water hardness to reduce copper pipe corrosion that can stain the facility and pollute receiving waters.
- Before using copper algaecides, try less toxic alternatives. Only use copper algaecides if the other alternatives do not work. Ask a pool/spa/hot tub/fountain maintenance service or store for help resolving persistent algae problems without using copper algaecides.
- Develop and regularly update a facility maintenance plan that follows all discharge requirements.
- Dispose of unwanted chemicals properly. Many of them are hazardous wastes when discarded.
- Store pool chemicals under cover and in enclosed containers.

Required Water Disposal BMPs

- All pools and spas must be connected to the sanitary sewer for draining pool water, pool wash water and filter backwash. If the pool or spa does not have a permanent drain connection, then water must be pumped or drained to the sanitary sewer or meet the following BMPs.
- Discharging pool and spa water if sanitary sewer is not available:
 - Non-saltwater and saltwater pool and spa water
 - Have it hauled off-site for disposal at an approved location; or
 - Infiltrate to ground if all 9 conditions below are met. Saltwater pool and spa water must not be allowed to flow off-site, nor may it enter stormwater drainage systems or surface waters. Saltwater discharges can elevate salt concentrations in your soil and damage vegetation.
 - Non-saltwater pools and spas only

- Drain to the stormwater drainage system if all 9 conditions listed below are met
- Conditions for draining to ground (non-saltwater and saltwater pools and spas) or to a stormwater drainage system (non-saltwater pools and spas only):

1. No copper-based algaecides were used;

2. The water must be tested to determine chlorine levels and pH;

3. The water is dechlorinated to 0.10 ppm Chlorine or less, using neutralizing chemicals or by letting the pool or spa "sit" long enough to reduce the chlorine level to the allowable limit. The pool or spa must not be used during this period;

- 4. The pH is neutral (6-8);
- 5. Free of any coloration, dirt, suds, or algae;
- 6. Free of any filter media;
- 7. Free of acid cleaning wastes;

8. Released at a rate that does not cause erosion either onsite or in the drainage system; and

9. At ambient temperature.

- Saltwater pool and spa water must not be discharged to the stormwater drainage system. Either infiltrate to ground if all 9 conditions above are met or hire a professional pool-draining service to collect all water for off-site disposal at an approved location.
- Diatomaceous earth (commonly used as a filtering agent) and water from back flushing filter systems cannot be discharged to surface waters, storm drainage systems, septic systems, or the ground. Dispose of diatomaceous earth filter material as solid waste.
- Do not discharge pool or spa water to a septic system, as it is prohibited and may cause the system to fail.
- The discharge of pool and spa filter backwash or cleaning water to the ground, surface waters or the storm drainage system is not allowed.

Additional Information

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - <u>A-3: Storage of Liquid Materials in Portable Containers</u>
 - o <u>A-11: Cleaning or Washing of Tools and Equipment</u>
 - o <u>A-15: Washing of Buildings, Rooftops, and Other Large Surfaces</u>

A-39: Roof Vents and Fugitive Emissions

The following best management practices (BMPs) apply to processes that vent emissions to a roof and/or the accumulation of pollutants on a roof. Processes of special concern are stone cutting, metal grinding, spray painting, paint stripping, galvanizing, and electroplating. Pollutants from these processes may build up on roofs and may contaminate stormwater roof runoff.

Contact Puget Sound Clean Air Agency and/or the Washington State Department of Ecology for air pollution control regulations. If your activities are permitted by either of these agencies, then these requirements are supplemental.

Potential pollutants can include but are not limited to metals, oil and grease, pH, sediment, and other pollutants.

BMPs are required by King County Water Quality Code (KCC 9.12). If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required BMPs

- Identify processes that are vented to the roof and may contribute pollutants. Pollutants of concern include and are not limited to:
 - metal dust
 - grease from food preparation
 - o solvents
 - hydrocarbons
 - o fines
 - stone dust
- Inspect around vents, pipes, and other surfaces for pollutant deposition. Properly clean up any deposited pollutants, ensuring they are not disposed of into the stormwater drainage system.
- Install appropriate source control measures such as air pollution control equipment (filters, scrubbers, and other treatment) and/or institute operational or process changes.
- If proper installation and maintenance of air pollution control equipment does not prevent pollutant fallout on your roof, additional treatment of the roof runoff may be necessary. Install/provide appropriate devices for roof runoff before it is discharged off-site. This may include approved water quality treatment BMPs or structural stormwater treatment systems.
- Consider instituting operational or process changes to reduce pollution.

Required Routine Maintenance

- Maintain air filters and pollution control equipment on a regular basis to ensure they are working properly. If you smell odors from outside the building, the pollution control equipment may need maintenance or evaluation.
- When cleaning deposited pollutants from roof tops, first clean using dry methods such as sweeping or vacuuming before using water.
- Collect the wash water and loose materials using a sump pump, wet vacuum, or similar device. Discharge the collected runoff to the sanitary sewer after obtaining permission from the local sewer authority or have a waste disposal company remove it.

Additional Information

- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets
 - o <u>Disposal</u>
 - <u>Water Quality Treatment BMPs</u>

For more information or assistance contact the King County Stormwater Services at 206–477–4811 and visit kingcounty.gov/stormwater.

A-48: Mobile Fueling of Vehicles and Heavy Equipment

The following best management practices apply to mobile fueling, also known as fleet fueling, wet fueling, or wet hosing. Mobile fueling is the practice of filling fuel tanks of vehicles or equipment by fuel tank trucks, tank trailers, and trucks with accessory fueling tanks that are driven to the yards or sites where the vehicles to be fueled are located.

Potential pollutants can include but are not limited to hydrocarbons, metals, oil and grease, and oxygen demanding substances.

BMPs are required by King County Water Quality Code (KCC 9.12). If the BMPs included here are not enough to prevent contamination of stormwater, you will be required to take additional measures.

Required Operational BMPs

- Obtain approval from the local fire department. Comply with local and Washington State fire codes.
- The driver/operator must be present and constantly observe all fuel transfer operations to ensure the implementation of the following procedures at all fuel transfer locations:
 - To the extent practical, locate the point of fueling at least 25 feet from the nearest storm drain or drainage ditch, or inside an impervious containment with a volumetric holding capacity equal to or greater than 110 percent of the fueling tank volume, or covering the catch basin to prevent discharge of spilled or leaked fuel. Covers are not required for storm drains that convey the inflow to a spill control separator approved by the local jurisdiction and the fire department;
 - Place a leak-proof drip pan or an absorbent pad under each fueling location prior to and during all dispensing operations. The pan or the absorbent pad must have a capacity of at least 5 gallons. There is no need to report spills retained in the drip pan or the pad;
 - Manage the handling and operation of fuel transfer hoses and nozzle, drip pan(s), and absorbent pads as needed to prevent spills/leaks of fuel from reaching the ground, storm drains, or surface waters;
 - Do not extend fueling hoses across a traffic lane without fluorescent traffic cones, or equivalent devices, conspicuously placed to block all traffic from crossing the fuel hose;
 - Remove the fill nozzle and cease filling the tank when the automatic shut-off valve engages. Do not lock automatic shutoff fueling nozzles in the open position;
 - Do not "top off" the fuel tanks; and
 - Do not use dispersants or soap to clean up spills or sheens.

- Develop and follow a mobile fueling plan that includes the required operational BMPs and spill response procedures.
- The responsible manager shall:
 - Sign and date the mobile fueling plan;
 - Distribute mobile fueling procedures to all operators; and
 - Update and retain the mobile fueling plan in the organization files.
- Immediately notify the local fire department (911) and Washington State Department of Ecology in the event of any spill entering surface or ground waters. Establish a "call down list" to ensure the rapid and proper notification of management and government officials should any significant amount of product be lost off-site. Keep the list in a protected but readily accessible location in the mobile fueling truck. The "call down list" should also pre-identify spill response contractors available in the area to ensure the rapid removal of significant product spillage into the environment.
- Train the driver/operator upon hiring, and annually thereafter, on proper fueling procedures, spill prevention, cleanup measures, and emergency procedures. Make all employees are aware of the significant liability associated with fuel spills.
- The driver/operator of the fueling vehicle must have:
 - A current copy of the mobile fueling plan;
 - Adequate flashlights or other mobile lighting to view fuel fill openings with poor accessibility; and
 - Two-way communication with the operator's home base.
- Maintain a minimum of the following spill clean-up materials in all fueling vehicles, that are readily available for use:
 - Non-water absorbents capable of absorbing at least 15 gallons of diesel fuel;
 - A catch basin plug or cover kit;
 - Two, five-gallon buckets with lids or sealable disposal bags;
 - A non-spark generating shovel; and
 - For fuel tankers and trailers with fueling tanks greater than 100 gallons, a non-water absorbent containment boom, minimum 10 feet in length with a 12-gallon minimum absorbent capacity.
- Use automatic shutoff nozzles for dispensing the fuel. Replace automatic shut-off nozzles as recommended by the manufacturer.
- Maintain fueling equipment, particularly hoses and nozzles.

Additional Information

- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
 - <u>A-3: Storage of Liquid Materials in Portable Containers</u>
- Stormwater Pollution Prevention Manual, Chapter 5: Information Sheets

- <u>Controlling and Collecting Contaminated Runoff</u>
- Spill Response and Clean-up Plan

For more information or assistance contact the King County Stormwater Services at 206–477–4811 and visit kingcounty.gov/stormwater.

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BMPs from Tacoma 2021 Stormwater Management Manual



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2.8 Vegetation Maintenance

2.8.1 BMP S143: Landscaping and Lawn/Vegetation Management

2.8.1.1 Applicability

This BMP applies to all properties and areas of the ROW that have landscaping and/or lawn areas. Landscaping can include grading, soil transfer, vegetation removal, pesticide and fertilizer application, and watering. Stormwater contaminants include toxic organic compounds, heavy metals, oils, total suspended solids, coliform bacteria, fertilizers, and pesticides.

Lawn and vegetation management can include control of objectionable weeds, insects, mold, bacteria, and other pests with chemical pesticides and is conducted commercially at commercial, industrial, and residential sites. Examples include weed control on golf course lawns, access roads, and utility corridors and during landscaping; sap stain and insect control on lumber and logs; rooftop moss removal; killing nuisance rodents; fungicide application to patio decks; and residential lawn/plant care. Toxic pesticides such as pentachlorophenol, carbamates, and organometallics can be released to the environment by leaching and dripping from treated parts, container leaks, product misuse, and outside storage of pesticide contaminated materials and equipment. Poor management of the vegetation, poor application of pesticides or fertilizers, and non-targeted irrigation water or overwatering can cause appreciable stormwater contamination.

2.8.1.2 Required BMPs

- Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas. Apply BMP L613: Post-Construction Soil Quality and Depth BMPs as required per Minimum Requirement #5: Onsite Stormwater Management.
- Do not dispose of collected vegetation into wetlands, waterways or the stormwater system.
- Select the right plants for the planting location based on proposed use, available maintenance, soil conditions, sun exposure, water availability, height, site factors, and space available.
- Ensure that plants selected for planting are not on the noxious weed list. The Washington State Noxious Weed List can be found at: <u>https://www.nwcb.wa.gov/printable-noxious-weed-list</u>
- Do not blow vegetation or other debris into the stormwater system.
- Dispose of collected vegetation such as grass clippings, leaves, and sticks by composting or recycling.
- Use manual and/or mechanical methods of vegetation removal (pincer-type weeding tools, flame weeders, or hot water weeders as appropriate) rather than applying herbicides, where practical.
- Use at least an 8" topsoil layer with at least 8% organic matter to provide a sufficient vegetation-growing medium.
 - Organic material is at the least water-soluble form of nutrients that can be added to the soil. Composted organic matter generally releases only between 2 and 10 percent of its total nitrogen annually, and this release corresponds closely to the plant

growth cycle. Return natural plant debris and mulch to the soil, to continue recycling nutrients indefinitely.

- Select the appropriate turfgrass mixture for the climate and soil type.
 - Certain tall fescues and rye grasses resist insect attack because the symbiotic endophytic fungi found naturally in their tissues repel or kill common leaf and stemeating lawn insects.
 - The fungus causes no known adverse effects to the host plant or to humans.
 - Tall fescues and rye grasses do not repel root-feeding lawn pests such as Crane Fly larvae.
 - Tall fescues and rye grasses are toxic to ruminants such as cattle and sheep.
 - Endophytic grasses are commercially available; use them in areas such as parks or golf courses where grazing does not occur.
 - Local agricultural or gardening resources such as the Washington State University Extension office can offer advice on which types of grass are best suited to the area and soil type.
- Use the following seeding and planting BMPs, or equivalent BMPs, to obtain information on grass mixtures, temporary and permanent seeding procedures, maintenance of a recently planted area, and fertilizer application rates: BMP C120: Temporary and Permanent Seeding, BMP C121: Mulching, BMP C123: Plastic Covering, and BMP C124: Sodding.
- Adjusting the soil properties of the subject site can assist in selection of desired plant species. Consult a soil restoration specialist for site-specific conditions.

2.8.1.3 Recommended Additional BMPs

- Conduct mulch-mowing whenever practicable.
- Use native plants in landscaping. Native plants do not require extensive fertilizer or pesticide applications. Native plants may also require less water.
- Till a topsoil mix or composted organic material into the soil to create a well-mixed transition layer that encourages deeper root systems and drought-resistant plants.
- Apply an annual topdressing application of 3/8" compost. Amending existing landscapes and turf systems by increasing the percent organic matter and depth of topsoil can:
 - Substantially improve the permeability of the soil.
 - Increase the disease and drought resistance of the vegetation.
 - Reduce the demand for fertilizers and pesticides.
- Disinfect gardening tools after pruning diseased plants to prevent the spread of disease.
- Prune trees and shrubs in a manner appropriate for each species.
- If specific plants have a high mortality rate, assess the cause and replace with another more appropriate species.

- When working around and below mature trees, follow the most current American National Standards Institute (ANSI) ANSI A300 standards and InternationI Society of Arboriculture BMPs to the extent practicable.
- Monitor tree support systems (stakes, guys, etc.).
 - Repair and adjust as needed to provide support and prevent tree damage.
 - Remove tree supports after one growing season or maximum of 1 year.
 - Backfill stake holes after removal.
- When continued, regular pruning (more than one time during the growing season) is required to maintain visual sight lines for safety or clearance along a walk or dive, consider relocating the plant to a more appropriate location.
- Make reasonable attempts to remove and dispose of Class C noxious weeds.
- Reseed bare turf areas until the vegetation fully covers the ground surface.
- Watch for and respond to new occurrences of especially aggressive weeds such as Himalayan blackberry, Japanese knotweed, morning glory, English ivy, and red canary grass to avoid invasion.
- Plant and protect trees.
- Aerate lawns regularly in areas of heavy use where the soil tends to become compacted. Conduct aeration while the grasses in the lawn are growing most vigorously. Remove layers of thatch greater than ³/₄" deep.
- Set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing turf.
 - Mowing is a stress-creating activity for turfgrass.
 - Grass decreases its productivity when mowed too short and there is less growth of roots and rhizomes. The turf becomes less tolerant of environmental stresses, more disease prone and more reliant on outside means such as pesticides, fertilizers, and irrigation.

2.1.3 BMP S110: Cleaning or Washing of Cooking Equipment

2.1.3.1 Applicability

This activity applies to businesses that clean cooking equipment such as grills, vent filters, exhaust hoods, grease traps, floors and floor mats.

Pollutants of concern consist of pH, oil and grease, nutrients, suspended solids, and biochemical oxygen demand (BOD).

2.1.3.2 Required BMPs

- Clean and wash cooking equipment indoors whenever possible.
- If washing cannot occur indoors, washing must take place on a designated wash pad.
- All washwater shall be discharged to the wastewater system.
 - Washwater may be used in a closed loop recycle system before ultimate disposal in the wastewater system.
 - Washwater can be temporarily stored before it is ultimately discharged to the wastewater system.
- Washwater shall not discharge to the stormwater system.
- Remove and properly dispose of greasy buildup on cooking equipment prior to washing.

2.1.3.3 Recommended Additional BMPs

- Discharge greasy washwater to the building's grease interceptor if one is available.
- Install grease protection if none is available.
- If washing must take place outdoors, provide a cover over the designated wash pad.

2.8.2 BMP S144: Pesticides and Integrated Pest Management

2.8.2.1 Applicability

This BMP applies to any property or ROW that may be required to use pesticides. Pesticides include herbicides, rodenticides, insecticides, and fungicides. Pesticides are used for weed control, insect control, rodent control, and moss removal among other things. Pesticides can be a source of pentachorophenol, carbamates, organometallics, and sediment.

2.8.2.2 Required BMPs

- Train employees on proper application of pesticides and disposal practices.
- Follow manufacturers' application guidelines and label requirements.
- Do not apply pesticides in quantities that exceed the limits on the product's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label. Avoid excessive application of chemical.
- Conduct spray applications during weather conditions as specified in the label requirements and applicable local and state regulations. Do not apply during rain or immediately before expected rain (unless the label directs such timing).
- Clean up any spilled pesticides immediately. Do not hose into the street, into a stormwater system or into a receiving waterbody.
- Remove weeds/vegetation in conveyance ditches, stormwater facilities, and other components of the stormwater system by hand or other mechanical means and only use pesticides as a last resort.
- Flag all sensitive areas including wells, creeks, and wetlands prior to spraying.
- Post notices and delineate the spray area prior to the application, as required by the local jurisdiction, or by Ecology.
- Refer to BMP S143: Landscaping and Lawn/Vegetation Management and use pesticides only as a last resort.
- Conduct any pest control activity at the life stage when the pest is most vulnerable. For example, if it is necessary to use a Bacillus thuringiens application to control tent caterpillars, apply it to the material before the caterpillars cocoon or it will be ineffective. Any method used should be site-specific and not used wholesale over a wide area.
- Mix pesticides and clean the application equipment under cover in an area where accidental spills will not enter surface water or groundwater, and will not contaminate the soil.
- The pesticide application equipment must be capable of immediate shutoff in the event of an emergency.
- Implement a pesticide-use plan and include at a minimum:
 - A list of selected pesticides and their specific uses.
 - Brands and formulations of the pesticides.
 - Application methods and quantities to be used.
 - Equipment use and maintenance procedures.
 - Safety, storage, and disposal methods.
 - Monitoring, record keeping, and public notice procedures. All procedures shall conform to the requirements of Chapter 17.21 RCW and Chapter 16-228 WAC.

- Develop and implement an Integrated Pest Management (IPM) program if pests are present. The following steps are adapted from (Daar, 1992).
 - Step One: Correctly identify problem pests and understand their life cycle.
 - Learn more about the pest.
 - Observe it and pay attention to any damage that may be occurring.
 - Learn about the life cycle.
 - Many pests are only a problem during certain seasons, or can only be treated effectively in certain phases of the life cycle.
 - Step Two: Establish tolerance thresholds for pests.
 - Decide on the level of infestation that must be exceeded before treatment needs to be considered. Pest populations under this threshold should be monitored but don't need treatment.
 - Step Three: Monitor to detect and prevent pest problems.
 - Monitor regularly to anticipate and prevent major pest outbreaks.
 - Conduct a visual evaluation of the lawn or landscape's condition. Take a few minutes before mowing to walk around and look for problems.
 - Keep a notebook, record when and where a problem occurs, then monitor for it at about the same time in future years.
 - Specific monitoring techniques can be used in the appropriate season for some potential problem pests, such as European crane fly.
 - Step Four: Modify the maintenance program to promote healthy plants and discourage pests.
 - Review your landscape maintenance practices to see if they can be modified to prevent or reduce the problem.
 - A healthy landscape is resistant to most pest problems. Lawn aeration and overseeding along with proper mowing height, fertilization, and irrigation will help the grass out-compete weeds.
 - Correcting drainage problems and letting soil dry out between waterings in the summer may reduce the number of crane-fly larvae that survive.
 - Step Five: If pests exceed the tolerance thresholds:
 - Consider the most effective management options concurrent with reducing impacts to the environment. This may mean chemical pesticides are the best option in some circumstances.
 - Consider the use of physical, mechanical, or biological controls.
 - Study to determine what products are available and choose a product that is the least toxic and has the least non-target impact.
 - Step Six: Evaluate and record the effectiveness of the control, and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.

- Keep records!
- Note when, where, and what symptoms occurred, or when monitoring revealed a potential pest problem.
- Note what controls were applied and when, and the effectiveness of the control.
- Monitor next year for the same problems.

2.8.2.3 Recommended Additional BMPs

- Choose the least toxic pesticide available that is capable of reducing the infestation to acceptable levels. The pesticide should readily degrade in the environment and/or have properties that strongly bind it to the soil.
- Choose pesticides categorized by EPA as reduced risk. For example, the herbicide imazamox.
- When possible, apply pesticides during the dry season so that the pesticide residue is degraded prior to the next rain event.
- If possible, do not spray pesticides within 100 feet of waterbodies. Spraying pesticides within 100 feet of receiving waterbodies including any portions of the stormwater system that lead to receiving waterbodies may have additional regulatory requirements beyond just following the pesticide product label. Additional requirements may include:
 - Obtaining a permit from the Washington State Department of Ecology <u>https://</u> <u>ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits</u>.
 - Obtaining Washington State Department of Agriculture Applicator's License <u>https://agr.wa.gov/services/licenses-permits-and-certificates/pesticide-license-and-recertification</u>.
 - Using an aquatic labeled pesticide and adjuvant.
- Use manual pest control strategies such as physically scraping moss from rooftops, highpressure sprayers to remove moss, and rodent traps.
- Consider alternatives to the use of pesticides such as covering or harvesting weeds, substitute vegetative growth, and manual weed control/moss removal.
- Consider the use of soil amendments, such as compost, that are known to control some common diseases in plants, such as Pythium root rot, ashy stem blight, and parasitic nematodes.
- Once a pesticide is applied, evaluate its effectiveness for possible improvement. Records should be kept showing the effectiveness of the pesticides applied.
- Follow the FIFRA label requirements for disposal. If the FIFRA label does not have disposal requirements the rinseate from equipment cleaning and/or triple-rinsing of pesticide containers should be used as product or recycled into product.
- Develop an adaptive management plan and annual evaluation procedure including: (adapted from (Daar, 1992))
 - A review of the effectiveness of pesticide applications.
 - Impact on buffers and sensitive areas, including potable wells. If individual or public potable wells are located in the proximity of commercial pesticide applications, contact the regional Ecology hydrogeologist to determine if additional pesticide application control measures are necessary.

- Public concerns.
- Recent toxicological information on pesticides used/proposed for use.

2.8.2.4 Additional Information

- For more information, refer to the Pesticide Information Center Online (PICOL) Databases at <u>https://picol.cahnrs.wsu.edu/</u>.
- Washington pesticide law requires most businesses that commercially apply pesticides to the property of another to be licensed as a Commercial Applicator from the Washington State Department of Agriculture.

2.12 Structural BMPs

2.12.1 BMP S164: Cover the Activity with a Roof or Awning

In many cases, a simple roof or awning will protect the activity from coming into contact with stormwater, and usually at a lower cost than a complete building. These structures may require building permits to construct. Visit <u>tacomapermits.org</u> for additional information.

The area of the roof cover shall be sufficient to prevent any precipitation from reaching the covered materials. Provisions shall be made to prevent stormwater run-on into the covered area. The installation of sumps or drains to the wastewater system may also be necessary. Roof drains shall discharge outside and be directed away from the covered area. Examples of these types of structures are shown in Figure 6 - 11: Examples of Covered Activities.



Figure 6 - 11: Examples of Covered Activities

2.12.2 BMP S165: Cover the Activity with an Anchored Tarp or Plastic Sheet

Some activities, such as stockpiling of small amounts raw materials, can be effectively covered with a sturdy tarp or heavy plastic sheet made of impermeable material. Weights such as bricks, tires, or sandbags should be used to anchor the cover in place. Run-on shall be prevented from reaching the activity or material. Stormwater run-off from the cover shall be directed away from the stockpile and work zone, and if uncontaminated, directed to the stormwater collection system. The tarp must be inspected daily to ensure that no holes or gaps are present in the tarp coverage. An example of this type of cover is shown in Figure 6 - 12: Tarp Covering.



Figure 6 - 12: Tarp Covering

2.12.4 BMP S167: Surround the Activity Area with a Curb, Dike, or Berm or Elevate the Activity

This set of BMP options can be an effective means for prevention of stormwater run-on to an activity area. In addition, a curb, berm, or dike can be used for containment of spills in the activity area, or for containment of contaminated water. Generally, a containment BMP is most applicable to spill control situations; that is, sites where runoff is relatively clean, but occasional spills may occur.

If a curb, berm, or dike is used for runoff containment, and other containment sizing regulations (such as fire codes, Environmental Protection Agency, Department of Ecology or Tacoma-Pierce County Health Department restrictions) do not apply, the containment volume shall be 100% of the volume of the largest tank within the containment area is contained or 110% of the volume of the largest tank, whichever is greater.

Impervious containment may consist of membrane lined soil enclosures, containment pallets, plastic pools, mortar mixing tubs, and water troughs. See Figure 6 - 14: Containment Types.

Regular inspections of the containment area and proper management of any collected stormwater is required.

Development of a spill plan may be necessary for storage of liquids.



Figure 6 - 14: Containment Types

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Figure 6 - 14: Containment Types

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BMPs from Ecology 2019 Stormwater Management Manual for Western Washington



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S455 BMPs for Spill Prevention and Cleanup

Description of Pollutant Sources: Spills and leaks can damage public infrastructure, interfere with sewage treatment, and cause a threat to human health or the environment. Spills are often preventable if appropriate chemical and waste handling techniques are practiced effectively and the spill response plan is immediately implemented. Additional spill control requirements may be required based on the specific activity occurring on site.

Applicable BMPs:

Spill Prevention

- Clearly label or mark all containers that contain potential pollutants.
- Store and transport liquid materials in appropriate containers with tight-fitting lids.
- Place drip pans underneath all containers, fittings, valves, and where materials are likely to spill or leak.
- Use tarpaulins, ground cloths, or drip pans in areas where materials are mixed, carried, and applied to capture any spilled materials.
- Train employees on the safe techniques for handling materials used on the site and to check for leaks and spills.

<u>Spill Plan</u>

- Develop and implement a spill plan and update it annually or whenever there is a change in activities or staff responsible for spill cleanup. Post a written summary of the plan at areas with a high potential for spills, such as loading docks, product storage areas, waste storage areas, and near a phone. The spill plan may need to be posted at multiple locations. Describe the facility, including the owner's name, address, and telephone number; the nature of the facility activity; and the general types of chemicals used at the facility.
- Designate spill response employees to be on-site during business activities.
 Provide a current list of the names and telephone numbers (home and office) of designated spill response employees who are responsible for implementing the spill plan.

- Provide a site plan showing the locations of storage areas for chemicals, inlets/catch basins, spill kits and other relevant infrastructure or materials information.
- Describe the emergency cleanup and disposal procedures. Note the location of all spill kits in the spill plan.
- List the names and telephone numbers of public agencies to contact in the event of a spill.

Spill Cleanup Kits

 Store all cleanup kits near areas with a high potential for spills so that they are easily accessible in the event of a spill. The contents of the spill kit must be appropriate to the types and quantities of materials stored or otherwise used at the facility, and refilled when the materials are used. Spill kits must be located within 25 feet of all fueling/fuel transfer areas, including on-board mobile fuel trucks.

Note: Ecology recommends that the kit(s) include salvage drums or containers, such as high density polyethylene, polypropylene or polyethylene sheet-lined steel; polyethylene or equivalent disposal bags; an emergency response guidebook; safety gloves/clothes/equipment; shovels or other soil removal equipment; and oil containment booms and absorbent pads; all stored in an impervious container.

Spill Cleanup and Proper Disposal of Waste

- Stop, contain, and clean up all spills immediately upon discovery.
- Implement the spill plan immediately.
- Contact the designated spill response employees.
- Block off and seal nearby inlets/catch basins to prevent materials from entering the drainage system or combined sewer.
- Use the appropriate material to clean up the spill.
- Do not use emulsifiers or dispersants such as liquid detergents or degreasers unless disposed of proplerly. Emulsifiers and dispersants are not allowed to be used on surface water, or in a place where they may enter storm drains, surface waters, treatments systems, or sanitary sewers.

- Immediately notify Ecology and the local jurisdiction if a spill has reached or may reach a sanitary or storm sewer, ground water, or surface water. Notification must comply with state and federal spill reporting requirements.
- Do not wash absorbent material into interior floor drains or inlets/catch basins.
- Place used spill control materials in appropriate containers and dispose of according to regulations.

S431 BMPs for Washing and Steam Cleaning Vehicles / Equipment / Building Structures

Description of Pollutant Sources: Pollutant sources include the commercial cleaning of vehicles, aircraft, vessels, and other transportation, restaurant kitchens, carpets, and industrial equipment, and large buildings with low- or high-pressure water or steam. This includes "charity" car washes at gas stations and commercial parking lots. The cleaning can include hand washing, scrubbing, sanding, etc. Washwater from cleaning activities can contain oil and grease, suspended solids, heavy metals, soluble organics, soaps, and detergents that can contaminate stormwater.

Permitting Requirements: Obtain all necessary permits for installing, altering, or repairing onsite drainage and side sewers. Restrictions on certain types of discharges may require pretreatment before they enter the sanitary sewer.

Pollutant Control Approach: The preferred approach is to cover and/or contain the cleaning activity, or conduct the activity inside a building, to separate the uncontaminated stormwater from the washwater sources. Convey washwater to a sanitary sewer after approval by the local sewer authority. Provide temporary storage before proper disposal, or recycling. Under this preferred approach, no discharge to the ground, to a storm drain, or to surface water should occur.

The Industrial Stormwater General Permit prohibits the discharge of process wastewater (e.g., vehicle washing wastewater) to ground water or surface water. Stormwater that commingles with process wastewater is considered process wastewater.

Facilities not covered under the Industrial Stormwater General Permit that are unable to follow one of the preferred approaches listed above may discharge washwater to the ground only after proper treatment in accordance with *Vehicle and Equipment Washwater Discharges Best Management Practices Manual* (Ecology, 2012).

The quality of any discharge to the ground after proper treatment must comply with Ecology's Ground Water Quality Standards, <u>Chapter 173-200 WAC</u>.

Facilities not covered under the Industrial Stormwater General Permit that are unable to comply with one of the preferred approaches and want to discharge to storm sewer, must meet their local stormwater requirements. Local authorities may require treatment prior to discharge.

Contact the local Ecology Regional Office to discuss permitting options for discharge of washwater to surface water or to a storm drain after on-site treatment.

Applicable Structural Source Control BMPs:

Conduct vehicle/equipment washing in one of the following locations:

- At a commercial washing facility in which the washing occurs in an enclosure and drains to the sanitary sewer, or
- In a building constructed specifically for washing of vehicles and equipment, which drains to a sanitary sewer.

Conduct outside washing operations in a designated wash area with the following features:

- In a paved area, construct a spill containment pad to prevent the run-on of stormwater from adjacent areas. Slope the spill containment area to collect washwater in a containment pad drain system with perimeter drains, trench drains or catchment drains. Size the containment pad to extend out a minimum of four feet on all sides of the washed vehicles and/or equipment.
- Convey the washwater to a sump (like a grit separator) and then to a sanitary sewer (if allowed by the local Sewer Authority), or other appropriate wastewater treatment or recycle system. The containment sump must have a positive control outlet valve for spill control with live containment volume, and oil/water separation. Size the minimum live storage volume to contain the maximum expected daily washwater flow plus the sludge storage volume below the outlet pipe. Shut the outlet valve during the washing cycle to collect the washwater in the sump. The valve should remain shut for at least two hours following the washing operation to allow the oil and solids to separate before discharge to a sanitary sewer.
- Use a two way valve for discharges from the containment pad. This valve should be normally switched to direct water to treatment, but may be switched to the

drainage system after that pad is clean to handle stormwater runoff. The stormwater can then drain into the conveyance/discharge system outside of the wash pad (essentially bypassing the sanitary sewer or recycle system). Post signs to inform people of the operation and purpose of the valve. Clean the concrete pad thoroughly until there is no foam or visible sheen in the washwater prior to closing the inlet valve and allowing uncontaminated stormwater to overflow and drain off the pad.

Note that the purpose of the valve is to convey only washwater and contaminated stormwater to a treatment system.

- Collect the washwater from building structures and convey it to appropriate treatment such as a sanitary sewer system if it contains oils, soaps, or detergents. If the washwater does not contain oils, soaps, or detergents (in this case only a low pressure, clean, cold water rinse is allowed) then it could drain to soils that have sufficient natural attenuation capacity for dust and sediment.
- Sweep surfaces prior to cleaning/washing to remove excess sediment and other pollutants.
- If roof equipment or hood vents are cleaned, ensure that no washwater or process water is discharged to the roof drains or drainage systems.
- Label all mobile cleaning equipment as follows: "Properly dispose of all wastewater. Do not discharge to an inlet/catch basin, ditch, stream, or on the ground."

Recommended Additional BMPs:

- Mark the wash area at gas stations, multifamily residences and any other business where non-employees wash vehicles.
- Operators may use a manually operated positive control valve for uncovered wash pads, but a pneumatic or electric valve system is preferable. The valve may be on a timer circuit and opened upon completion of a wash cycle. After draining the sump or separator, the timer would then close the valve.
- Minimize use of water and detergents in washing operations when practicable.
- Use phosphate-free biodegradable detergents when practicable.
- Use the least hazardous cleaning products available.
- Consider recycling the washwater.

Operators may use soluble/emulsifiable detergents in the wash medium and should use it with care and the appropriate treatment. Carefully consider the selection of soaps and detergents and treatment BMPs. Oil/water separators are ineffective in removing emulsified or water soluble detergents. Another treatment appropriate for emulsified and water soluble detergents may be required.

Exceptions:

- At gas stations (for charity car washes) or commercial parking lots, where it is not possible to discharge the washwater to a sanitary sewer, a temporary plug or a temporary sump pump can be used at the storm drain to collect the washwater for off-site disposal such as to a nearby sanitary sewer.
- New and used car dealerships may wash vehicles in the parking stalls as long as employees use a temporary plug system to collect the washwater for disposal as stated above, or an approved treatment system for the washwater is in place.

At industrial sites, contact Ecology for NPDES Permit requirements even when not using soaps, detergents, and/or other chemical cleaners in washing trucks.

S429 BMPs for Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products

Description of Pollutant Sources: Some pollutant sources stored outside in large piles, stacks, etc. at commercial or industrial establishments include:

- Solid raw materials
- Byproducts
- Gravel
- Sand
- Salts
- Topsoil
- Compost
- Logs
- Sawdust
- Wood chips
- Lumber
- Concrete
- Metal products

Contact between outside bulk materials and stormwater can cause leachate, and erosion of the stored materials. Contaminants may include TSS, BOD, organics, and dissolved salts (sodium, calcium, and magnesium chloride, etc.).

Pollutant Control Approach: Provide impervious containment with berms, dikes, etc. and/or cover to prevent run-on and discharge of leachate pollutant(s) and TSS.

Applicable Operational BMPs:

- Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain, or to a receiving water.
- Maintain drainage areas in and around storage of solid materials with a minimum slope of 1.5 percent to prevent pooling and minimize leachate formation. Areas should be sloped to drain stormwater to the perimeter for collection or to internal drainage "alleyways" where no stockpiled material exists.

- Sweep paved storage areas regularly for collection and disposal of loose solid materials.
- If and when feasible, collect and recycle water-soluble materials (leachates).
- Stock cleanup materials, such as brooms, dustpans, and vacuum sweepers near the storage area.

Applicable Structural BMPs:

For stockpiles less than 5 cubic yards, place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material as shown in <u>Figure IV-5.7</u>: <u>Material Covered with Plastic Sheeting</u>.

The source control BMP options listed below are applicable to:

- Stockpiles greater than 5 cubic yards of erodible or water soluble materials such as:
 - o Soil
 - Road deicing salts
 - Compost
 - Unwashed sand and gravel
 - o Sawdust
- Outside storage areas for solid materials such as:
 - o Logs
 - o Bark
 - Lumber
 - Metal products

Choose one or more of the following Source Control BMPs:

- Store in a building or paved and bermed covered area as shown in <u>Figure IV-5.6</u>: <u>Covered Storage Area for Bulk Solids</u>.
- Place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material as shown in <u>Figure IV-5.7: Material Covered with</u> <u>Plastic Sheeting</u>.

- Pave the area and install a drainage system. Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.
- For large uncovered stockpiles, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material off-site or to a storm drain. Ensure that no direct discharge of contaminated stormwater to catch basins exists without conveying runoff through an appropriate treatment BMP.


Figure IV-5.6: Covered Storage Area for Bulk Solids



Figure IV-5.7: Material Covered with Plastic Sheeting

S426 BMPs for Spills of Oil and Hazardous Substances

Description of Pollutant Sources: Washington Administrative Code requires owners or operators of facilities engaged in drilling, producing, gathering, storing, processing, transferring, distributing, refining, or consuming oil and/or oil products to have a Spill Prevention and Emergency Cleanup Plan (SPECP). The SPECP is required if the above ground storage capacity of the facility is 1,320 gallons or more of oil. Additionally, the SPECP is required if the facility, due to its location, could reasonably be expected to discharge oil in harmful quantities, as defined in 40 CFR Part 110, into or upon the navigable waters of the United States or adjoining shorelines {40 CFR 112.1 (b)}. Onshore and offshore facilities, which, due to their location, could not reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines are exempt from these regulations {40 CFR 112.1(d)(1)(i)}. State Law requires owners of businesses that produce dangerous wastes to have a SPECP. These businesses should refer to Washington State/Federal Emergency Spill Cleanup Requirements (see I-2.15 Other Requirements). The federal definition of oil is oil of any kind or any form, including, but not limited to petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Pollutant Control Approach: Maintain, update, and implement a Spill Prevention and Emergency Cleanup Plan.

Applicable Operational BMPs:

The businesses and public agencies identified in <u>Appendix IV-A: Urban Land Uses and</u> <u>Pollutant Generating Sources</u> required to prepare and implement a Spill Prevention and Emergency Cleanup Plan shall implement the following:

- Prepare a Spill Prevention and Emergency Cleanup Plan (SPECP), which includes:
 - A description of the facility including the owner's name and address.
 - The nature of the activity at the facility.
 - The general types of chemicals used or stored at the facility.
 - A site plan showing the location of storage areas for chemicals, the locations of storm drains, the areas draining to them, and the location and

description of any devices to stop spills from leaving the site such as positive control valves.

- Cleanup procedures.
- Notification procedures used in the event of a spill, such as notifying key personnel. Agencies such as Ecology, local fire department(s), Washington State Patrol, and the local Sewer Authority, shall be notified.
- The name of the designated person with overall spill cleanup and notification responsibility.
- Train key personnel in the implementation of the SPECP. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to contact in the event of a spill.
- Update the SPECP regularly.
- Immediately notify Ecology, the local jurisdiction, and the local Sewer Authority if a spill may reach sanitary or storm sewers, ground water, or surface water, in accordance with federal and Ecology spill reporting requirements.
- Immediately clean up spills. Do not use emulsifiers for cleanup unless there is an appropriate disposal method for the resulting oily wastewater. Do not wash absorbent material down a floor drain or into a storm sewer.
- Locate emergency spill containment and cleanup kit(s) in high-potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

Recommended Additional Operational BMP:

Spill kits should include appropriately lined drums, absorbent pads, and granular or powdered materials for neutralizing acids or alkaline liquids where applicable. In fueling areas: Package absorbent material in small bags for easy use and make available small drums for storage of absorbent and/or used absorbent. Deploy spill kits in a manner that allows rapid access and use by employees.

S414 BMPs for Maintenance and Repair of Vehicles and Equipment

Description of Pollutant Sources: Pollutant sources include parts/vehicle cleaning, spills/leaks of fuel and other liquids, replacement of liquids, outdoor storage of batteries/liquids/parts, and vehicle parking.

Pollutant Control Approach: Control of leaks and spills of fluids using good housekeeping and cover and containment BMPs.

Applicable Operational BMPs:

- Inspect all incoming vehicles, parts, and equipment stored temporarily outside for leaks.
- Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids. Inspect drip pans regularly to prevent accumulation of stormwater or other liquids, and dispose of any accumulated liquid appropriately.
- Remove batteries and liquids from vehicles and equipment in designated areas designed to prevent stormwater contamination. Store cracked batteries in a covered non-leaking secondary containment system.
- Remove liquids from vehicles retired for scrap.
- Empty oil and fuel filters before disposal. Provide for proper disposal of used oil and fuel.
- Do not pour/convey washwater, liquid waste, or other pollutants into storm drains or to surface water. Check with the local sanitary sewer authority for approval to convey water to a sanitary sewer.
- Do not connect maintenance and repair shop floor drains to storm drains or to surface water.
- To allow for snowmelt during the winter, install a drainage trench with a sump for particulate collection. Use the drainage trench for draining the snowmelt only. Do not discharge any vehicular or shop pollutants to the trench drain.

Applicable Structural Source Control BMPs:

- Conduct all maintenance and repair of vehicles and equipment in a building, or other covered impervious containment area that is sloped to prevent run-on of uncontaminated stormwater and runoff of contaminated water.
- Operators may conduct maintenance of refrigeration engines in refrigerated trailers in the parking area. Exercise due caution to avoid the release of engine or refrigeration fluids to storm drains or surface water.
- Park large mobile equipment, such as log stackers, in a designated contained area.

Applicable Treatment BMPs:

Convey contaminated stormwater runoff from vehicle staging and maintenance areas to a sanitary sewer, if allowed by the local sewer authority, or to an API or CP oil and water separator followed by a Basic Treatment BMP (See <u>Volume V</u>), applicable filter, or other equivalent oil treatment system.

Note this applicable treatment BMP for contaminated stormwater.

Recommended Additional Operational BMPs:

- Store damaged vehicles inside a building or other covered containment, until successfully removing all liquids.
- Clean parts with aqueous detergent based solutions or non-chlorinated solvents such as kerosene or high flash mineral spirits, and/or use wire brushing or sand blasting whenever practicable. Avoid using toxic liquid cleaners such as methylene chloride, 1,1,1-trichloroethane, trichloroethylene or similar chlorinated solvents. Choose cleaning agents that can be recycled.
- Inspect all BMPs regularly, particularly after a significant storm. Identify and correct deficiencies to ensure that the BMPs are functioning as intended.
- Avoid hosing down work areas. Use dry methods for cleaning leaked fluids.
- Recycle greases, used oil, oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic fluids, transmission fluids, and engine oils. Contact Ecology's Hazardous Waste & Toxics Reduction Program for recommendations on recycling or disposal of waste materials. (<u>https://ecology.wa.gov/About-us/Get-toknow-us/Our-Programs/Hazardous-Waste-Toxics-Reduction</u>)
- Do not mix dissimilar or incompatible waste liquids stored for recycling.