

A stylized illustration at the top of the page shows a car and a storm drain in shades of blue and purple. The car is positioned above the drain, and the drain is shown as a circular opening in the ground.

GUIDELINES FOR WASHWATER AND URBAN RUNOFF



STORM DRAIN DISPOSAL

C O N T E N T S

**Transportation-Related
Washing**

1

Surface Cleaning

5

Food-Related Cleaning

9

**Miscellaneous or Other
Non-Point Sources of Runoff**

11

Best Management Practices



A Best Management Practice is defined as any program, process, location criteria, operating method, measure or device which controls, prevents, removes or reduces pollution. In addition to BMP's, there are local ordinances prohibiting water waste.

Please visit our web site at
www.lvstormwater.com
and click on the links for more
information, addresses and
important phone numbers.



T

ransportation-Related Washing

High Impacts

Cleaning/Degreasing Engines and Equipment, Auto and Truck Drive Trains and Airplanes (Including Landing Gear)



With or without soap, no storm drain disposal permitted; requires treatment before allowed to be discharged to the sanitary sewer system; should be cleaned on a wash pad; requires discussion with facility operator.

Because it is likely that pollutants (petroleum products and metals) are concentrated in these washwaters, the local wastewater treatment plant will require some type of treatment before discharge to the sanitary sewer.

Contact the local wastewater treatment plant for requirements and additional information. Contact the facility operator regarding wash pad and treatment equipment available on-site (i.e. oil/water separators, sampling manholes, etc.) or see the yellow pages for distributors of this type of equipment. If a sanitary sewer is not available or treatment of the washwater is not feasible, then contact a company capable of hauling (i.e. tanker truck) the washwater off-site to dispose of at an authorized site.



Cleaning of Unpainted Metal Trucks and Containers Using Acid Detergents



Acid runoff from cleaning unpainted trucks or containers with acid detergents must be neutralized to a pH between 5 and 11 before pumping to sanitary sewer. Contact local wastewater treatment plant for additional information. Never discharge to storm drain.

Truck Trailer and Boat Cleaning (Interior only - Food-Related)



Sweep, collect and dispose of debris. Use dry cleaning methods as much as possible. Food residue must be disposed of as garbage or sent to the sanitary sewer. Avoid hosing down the trailer. Washwater can not be discharged to storm drain; it should be pumped to sanitary sewer. Contact local wastewater treatment plant for more information.

Truck Trailer Cleaning (Interior Only—Where Toxic Substances May be Encountered)

If toxic materials have been shipped in the trailer and there has been a spill: Do not hose down the spill. Take immediate action to prevent spread of material and protect nearby storm drains. Contact the local fire department for guidance.

Moderate Impacts

Charitable Car Washes

Allowing washwater to flow into storm drains (via streets and gutters) should be avoided and minimized to the extent practical. Washwater runoff contains soap and oil residue, which are not acceptable discharges to the storm drains. The following practices should be adhered to:



Remove all trash and debris from car washing area before event. Use only "non-toxic," "phosphate free" or "bio-degradable" soap. No acid-based wheel cleaners should be used. Consider contracting with a professional mobile car washing service or using rented pressure-washing equipment. High pressure/low volume equipment uses less than a 10th of the water conventional techniques do. If using conventional "hose and bucket" methods, minimize runoff by:

- 1.** Shutting off or "kinking" hoses when not in use. Put a shut-off or spray nozzle on the hose.
- 2.** Selecting washing sites where cars can be driven onto grass or gravel for washing, or where runoff will drain to a landscaped area.
- 3.** Using buckets for soapy water to "re-soap" rags and sponges rather than adding soap directly to rags or sponges (this helps avoid contaminating runoff, and saves soap as well). Wring sponges and rags into buckets, not onto ground.
- 4.** Discharging buckets of soapy water to the sanitary sewer. Do not empty buckets onto parking lot, street gutter or into storm drains.

Remember to clean up the site after the event. This helps prevent stormwater contamination, and will make the property owner more willing to allow future fund-raising events.

Boat Cleaning (Where Paint Chips Are Being Removed in Preparation for Painting)



Filtered washwater must be discharged to sanitary sewer. Contact local wastewater treatment plant for further information. Dispose of paint particles appropriately according to paint type (e.g. if paint is lead-based, copper-based, or contains Tributyltin or PCBs, consult a local wastewater treatment plant and local hazardous waste regulators such as Clark County Health or the Nevada Division of Environmental Protection for information on disposal of hazardous waste). If non-hazardous, material may be disposed of as solid waste after filtered paint particles have dried. This BMP is not intended to address the disposal of paint waste.



Fleet Washing (Exterior Only) Removing Mainly Soil— With Soap

No storm drain disposal permitted; must discharge to sanitary sewer/soil. There may be some unavoidable evaporation from paved surfaces. Washwater cannot be discharged to the storm drain for disposal.



Use wash pads that capture the washwater and discharge it to the sanitary sewer. Solids separation required before disposal (ideally, a separate wash area that captures the washwater should be established. Use of temporary wash pads that can be drained to the sanitary sewer is also acceptable).

Seal storm drains. Washwater runoff and excess soapy water must be collected and pumped or otherwise discharged as follows:

- ❖ Sanitary sewer (Pump into sanitary system clean out/sink or into an on-site private sanitary sewer manhole; verify with the facility manager that it is not a storm drain manhole). Solids separation will be required before disposal to prevent clogging system.
- ❖ Landscaped or soil areas (Note: Be aware that soapy washwater may adversely affect landscaping). Discharge should be directed to area sufficient to contain all the water. Discuss this practice with property owner. Acceptable for minimal discharge flows only. Repetitive use of the same area or excessive wash volume to the same area may be illegal.
- ❖ If disposal to the sanitary sewer and/or to a landscaped area is not possible, then contract with a company capable of hauling the washwater off-site to an authorized disposal site.

If a significant amount of washwater runoff evaporates at the site before it can be collected, and the site is routinely used for this purpose, the paved area itself must be cleaned every six months, or at the end of wash service contract (whichever comes first). Any washwater used during this procedure must be collected and discharged to a sanitary sewer system.

Mobile Auto Detailing (Infrequent, Light Cleaning, Rarely at Same Location; Removing Mainly Soil, With Minimum Water Volume)—With Soap



Minimal runoff may remain on paved surfaces to evaporate. If there is sufficient water volume to reach the storm drain, seal the storm drain and pump the water to the sanitary sewer.

Landscaped or soil areas. Discharge should be directed to area sufficient to contain all the water. Discuss this practice with property owner. Acceptable for minimal discharge flows only. Repetitive use of the same area or excessive wash volume to the same area may be illegal.

S

urface Cleaning

High Impacts

Pressure Washing Drive-Throughs, Driveways, Parking Garages, Service Stations with Excessive Oil Deposits (e.g. Those Not Frequently Cleaned)—With or Without Soap

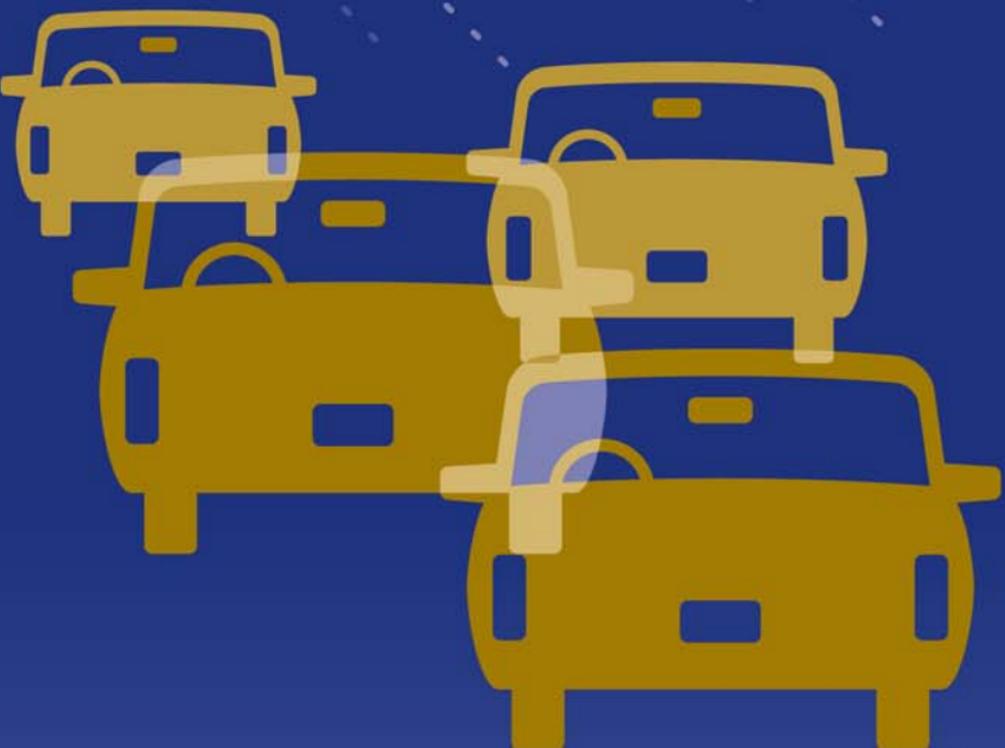


Seal storm drains. Sweep, collect and dispose of debris. Dry clean oil spots with absorbent and dispose of absorbent in a legal manner. Vacuum/pump washwater to the sanitary sewer. Washwater disposal options should be discussed with the facility's operator/site manager. Best to discharge through an oil/water separator. Do not use an oil/water separator intended to capture cooking oil. Although pretreatment may not be required, contact the local wastewater treatment plant for more information. If there has been an oil spill, contact the local Fire Department for guidance.

Washing Painted Buildings (Where Lead-Based or Mercury Additive Paints Are of Concern)—With or Without Soap



Seal storm drains and vacuum/pump washwater to a tank. Water and sludge may need to be disposed of as hazardous waste. Consult the local wastewater treatment plant and local hazardous waste regulators (i.e. Clark County Health District and the Nevada Division of Environmental Protection).



Washing Painted Buildings (To Remove Paint and Clean in Preparation for Painting) - With or Without Soap



Consult local wastewater treatment plant and local hazardous waste regulators (i.e. Clark County Health District or Nevada Division of Environmental Protection). These BMPs do not address the disposal of paint.

Masonry Efflorescence—Using Acid Wash to Remove Mineral Deposits on Masonry



Seal/block storm drains. Rinse treated area with alkaline soap and direct rinse water to a landscaped/soil area.

Collect washwater. Neutralize washwater to a pH between 6 and 11. Pump to a sanitary clean-out at the site, into a sink or a toilet, or contact the local wastewater treatment plant.

Washdown of Restaurant Alleys, Grocery Dumpster Areas (outdoors)

No discharge from this activity is allowed to enter storm drains.



Dry clean only, if possible (e.g. using rags, absorbents and dry sweeping compounds).

Dry clean first. Seal storm drain. Wash area. Vacuum or pump washwater to sanitary sewer. Screen washwater to prevent clogging system.

Moderate Impacts

Washdown of Sidewalks and Plazas—With Soap



Washwater must go to sanitary sewer.

Sweep, collect and dispose of debris and absorbent. The BMPs in this section do not apply if there has been oil or another hazardous material spill on the site. In the case of a spill, contact the local fire department for guidance.

Washdown of Sidewalks, Plazas, Driveways, Drive-Through Window Areas with Light Oil Build Up (e.g. Frequently Cleaned)—Without Soap



Sweep, collect and dispose of debris. Dry clean oil spots with absorbent and dispose of absorbent as garbage. Place oil-absorbent boom around storm drain. Washwater may go to storm drain through an oil-absorbent boom. No oil sheen should be visible on the water flowing into the storm drain.

Washing Building Exteriors and Walls—With Soap

No storm drain disposal permitted; must discharge to sanitary sewer/soil. There may be some unavoidable evaporation from paved surfaces. Washwater can not be discharged to the storm drain for disposal.



Use wash pads that capture the washwater and discharge it to the sanitary sewer. Solids separation required before disposal. (Ideally, a separate wash area that captures the washwater should be established, or use of temporary wash pads that can be drained to the sanitary sewer are acceptable).

Seal storm drains. Washwater runoff and excess soapy water must be collected and pumped or otherwise discharged as follows:

- ❖ Sanitary sewer (pump into sanitary system clean-out/sink or into an on-site private sanitary sewer manhole; verify with the facility manager that it is not a storm drain manhole). Solids separation will be required before disposal to prevent clogging system.
- ❖ Landscaped or soil areas (Note: Be aware that soapy washwater may adversely affect landscaping). Discharge should be directed to area sufficient to contain all the water. Discuss this practice with property owner. Acceptable for minimal discharge flows only. Repetitive use of the same area or excessive wash volume to the same area may be illegal.
- ❖ If disposal to the sanitary sewer and/or to a landscaped area is not possible, then contract with a company capable of hauling the washwater off-site to an authorized disposal site.

Graffiti Removal, Using Wet Sand Blasting Methods



Minimize quantity of water used. Runoff should be directed to landscape or soil area.

Filter runoff through boom to keep sand out of drain. Sweep debris and sand. Dispose of all waste to avoid future runoff contamination.

Graffiti Removal, Using High-Pressure Washing and Cleaning Compound



Direct washwater runoff to soil/landscaped area. No runoff can go to storm drain.

Seal storm drains and vacuum/pump washwater to sanitary sewer. Contact local wastewater treatment plant for guidance, as harsh cleaning compounds may require pretreatment.



Low Impacts

Washing Sidewalks and Plazas (With No Oil Deposits)—Without Soap



Sweep, collect and dispose of debris. Washwater may go to storm drain.

Washing Building Exteriors and Walls—Without Soap



Direct washwater runoff to soil/landscaped areas.

Discharge directly to storm drain. Sealing the drain with a fabric filter is recommended to capture the soil in the washwater.

Washing Painted Buildings (Paint Intact)—Without Soap

Painted after 1978 (i.e. lead content of paint known and of no concern):



Direct washwater runoff to soil/landscaped areas.

Use filter fabrics to prevent paint particles from entering storm drain. Washwater may go to storm drain through the filter fabric—never allow direct discharge. Dispose of collected particles as garbage.

For buildings with paint before 1978, please contact the Clark County Health District for proper washing procedures.

Car Lot Rinsing for Dust Removal—Without Soap



If rinsing dust from exterior surfaces using water only, and no soap/solvent, may discharge runoff to storm drain or to landscaped or soil areas. Prevent contamination of the runoff by not allowing it to run through oil deposits on the pavement or in the gutter.

F

ood-Related Cleaning

High Impacts

Cleaning Restaurant Floor Mats, Exhaust Filters, etc.

Washing restaurant or food industry-related equipment outdoors and allowing the washwater to drain to a storm drain is prohibited.



Clean floor mats, filters, etc. inside building with discharge to sanitary sewer (sink or a floor drain).

Alternative: Clean floor mats, etc., outside in bermed area equipped with a drain that is connected to the sanitary sewer system.

Kitchen Grease—Kitchen Recyclable Oil, Grease and Meat Fat



Save for recycling in tallow bin or other sealed containers. Never pour into a sink, floor drain or storm drain. Do not contaminate recyclable fats with waste grease from an interceptor or trap. See “Grease” and/or “Tallow” in the yellow pages for Recycling/Hauling companies.

Kitchen Waste Grease from Interceptor or Trap



Never dispose of waste grease in the storm drain or storm channel, or into the sanitary sewer system. For waste grease disposal, see “Grease Traps” or “Septic” in the yellow pages.



Moderate Impact

Washing Grocery Carts—With Soap

Washwater must be captured, filtered for particles and pumped to sanitary sewer system.

Washdown of Lunch Wagons/Food Carts

Washwater must be discharged at a commissary equipped to accept and discharge wastewater to the sanitary sewer system. Never discharge any washwater (except melted ice) to gutters or storm drains. Trucks and carts and any equipment should be cleaned on a properly equipped wash pad at the commissary. For a list of licensed commissaries, contact the Clark County Health Department.

Low Impacts

Washing Grocery Carts—Without Soap



Capture washwater, filter for particles and pump to sanitary sewer. If hot water is used, hot/warm water discharge to a storm channel is prohibited.

Washwater may be discharged to storm drain through a filter barrier (e.g. using boom) to filter out debris.

CATEGORY: Miscellaneous or Other Non-Point Sources of Runoff
BMPs for residential cleaning/maintenance activities.

M

iscellaneous or Other Non-Point Sources of Runoff

BMPs for residential cleaning/maintenance activities.

Washing Mobile Homes, Decks, Roofs/Shingles, Awnings, Pool Decks, Patios



Discharge to landscaped or soiled area.

(Note: Be aware that soapy washwater may adversely affect landscaping. Discharge should be directed to an area large enough to contain all the water. Discuss this practice with the property owner).

If washwater doesn't go to soil/landscaping, or if soap is used:

Washwater must go to sanitary sewer.

If no soap is used, washwater may be discharged to storm drain through a filtering apparatus (e.g. boom) to capture debris and particles.

Exception: Treated wood shingles are often treated with a toxic material. Treated shingles should be dry cleaned only. Runoff from cleaning may be toxic to plants in a landscaped area and should never be discharged to the storm drain or sanitary sewer.

Pool water may be discharged to sewer system via an on-site manhole or through a resident's sewer clean-out. Pool draining into the street is against county and city code.

It is also against county and city code for carpet cleaning companies to drain cleaning residue into the street.





Telephone Numbers

Stormwater Quality Management Committee Co-permittees

Clark County Regional Flood Control District	455-3139
City of Las Vegas	229-6541
City of Henderson	565-2329
City of North Las Vegas	633-1290
Clark County, Nevada	455-4181
Nevada Department of Transportation	(775) 888-7013

Other Important Numbers:

Clark County Health District	383-1027
Nevada Division of Environmental Protection (Carson City)	(775) 687-9429
Nevada Division of Environmental Protection (Las Vegas)	486-2850

Industrial waste/pretreatment units:

As required by Federal law, each wastewater agency regulates the types and quantities of pollutants that may be discharged to a sanitary sewer. Requirements for the pretreatment of wastes prior to discharge to the sanitary sewer may apply. Contact the appropriate jurisdiction listed below for further information.

City of Las Vegas	229-6594
City of Henderson	565-2810
Clark County Sanitation District	434-6600
City of North Las Vegas	633-1290

Recycling Services

Nevada Recycling Hotline	(800) 597-5865
Republic Services of Southern Nevada	399-1112

Thank you to the following organizations that assisted in the creation of this brochure:

- City of North Las Vegas
- Southern Nevada Water Authority
- Clark County Regional Flood Control District



600 South Grand Central Parkway
Suite 300
Las Vegas, NV 89106-4511

www.lvstormwater.com
