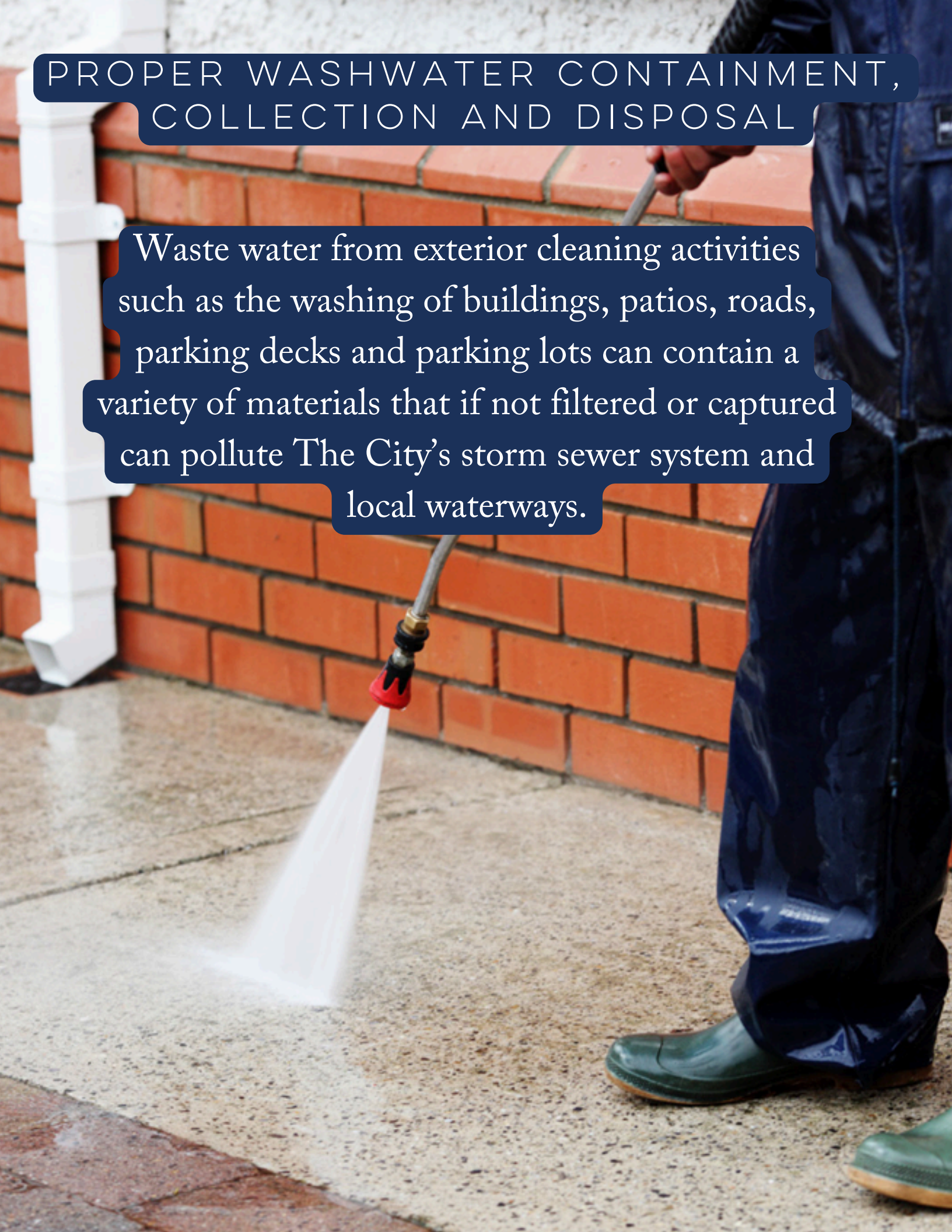
EXTERIOR WASHING

STANDARD OPERATING PROCEDURE

Proper Washwater Containment, Collection and Disposal

KEEP IT CLEAN, HARRISONBURG
STOP POLLUTED RUNOFF

CITY OF HARRISONBURG
PUBLIC WORKS



PROPER WASHWATER CONTAINMENT, COLLECTION AND DISPOSAL

Waste water from exterior cleaning activities such as the washing of buildings, patios, roads, parking decks and parking lots can contain a variety of materials that if not filtered or captured can pollute The City's storm sewer system and local waterways.

CONTAINMENT

The City does not require that you use a specific containment method. However, proper containment should prevent any washwater from entering storm drains or nearby streams. It will also allow you to collect washwater and dispose of it properly.

There are two major approaches to washwater containment.

The first method is to let the washwater flow to a low point and collect it there.

Follow these steps to use this method:

1. Determine where all the storm drains are located.
2. Determine where the high and low spots are on the property to understand where the water will flow.
3. Make sure to block or plug any storm drains in the path of your washwater.

The second method is to contain washwater from smaller jobs at the cleaning site.

This is done by using collapsible pools, containers or trays to capture washwater.

Before buying or building a containment system, make sure it is large enough! It should easily contain washwater and spray from the largest jobs you perform.

COLLECTION

Washwater can be collected from its containment using a wet vacuum, a sump pump or a vacuum pump. It is important to collect your washwater because any pollutants left on the pavement will eventually be carried into a nearby storm drain or stream by rainwater. Washwater that contains soap, detergent, cleaning products, hazardous waste or large amounts of any other pollutant, cannot be left on paved surfaces.

A sump pump or wet vacuum can be used with a flexible berm to collect washwater.

A generator can power your sump pump or wet vacuum. Be mindful to keep power cords out of the water to avoid safety risks

Plastic tanks can be used to temporarily store washwater until it can be disposed of properly

OTHER OPTIONS

There are many options besides those shown in the previous sections. The City does not require any specific method or equipment be used so long as you properly contain, collect and dispose of your washwater.

Existing stormwater BMP's such as bioretention filters or manufactured stormfilters are not to be considered as adequate filters, and must be protected from wastewater.

Other options include rotary cleaners that supply high pressure water and collect dirty wash water in an attached storage tank, vacuum booms or berms that seal to the ground and suck washwater through a hose to also collect in a storage tank, and ride-on surface cleaning vehicles that collect and recycle washwater

DISPOSAL

Once you have contained and collected your washwater, you will need to dispose of it properly. Proper disposal methods include using the sanitary sewer system or using a private treatment company. For any of these methods, you may need to pre-treat your water.

If your washwater:	You will need to pre-treat by:
Is over 150°F	Cooling the washwater to under 150°F
Has a pH less than 6 or greater than 9	Neutralizing the pH to between 6 and 9
Is oily or greasy	Using an oil-water separator
Has dirt, grit or paint chips	Using a filter to remove large particles

If you dispose of your washwater in the sanitary sewer system, you can do so by using an oil and water separator, a sewer clean out, or a sink or floor drain (with the property owner's permission).

You must get approval from the Harrisonburg Rockingham Regional Sewer Authority before disposing of your washwater in the City's sanitary sewer system. You can request approval by contacting them at 540-434-1053.

Do not dump washwater onto the ground or in the storm sewer system.

Never open a sanitary sewer manhole for any reason!

DISPOSAL TO A PLANTED AREA

In special cases, you may be able to dispose of your washwater in a landscaped area with grass or plants. The planted area must be able to absorb all the water you place in it. Discharged washwater must not negatively impact the vegetation. You will need to obtain the property owner's permission before using this disposal method.

WASHWATER THAT CONTAINS ANY OF THE FOLLOWING MAY NOT BE DISPOSED OF IN A PLANTED AREA:

- Grease or oil
- Food wastes or scraps
- Solvents
- Hazardous materials
- Chlorine
- Surfactants/soap*
- Biological wastes
- Petroleum products

Soapy water may only be disposed of on a planted area if it is biodegradable and phosphate free.

Stormwater Protection Equipment and Materials

1. Spill kit and equipment for dry clean up (socks, absorbent pads, kitty litter, broom, and dustpan)
2. Wet vacuum and holding tank
3. Storm drain inlet protection devices (drain covers, wattles, booms, berms)

BEST PRACTICES FOR BUILDINGS

FOR BUILDINGS THAT ARE GLASS, STEEL, UNPAINTED OR PAINTED WITH NO LOOSE PAINT:

- Sweep any hard surfaces your washwater will flow through to remove dirt and litter. Use absorbents to spot treat oil or grease stains. Dispose of collected dirt, litter and absorbents in the trash.

- Wash the building using only water. Keep the washwater out of the storm drains. With the property owner's permission, the washwater can be disposed of in a planted area. Keep in mind that this may stress, damage and potentially even kill plants.

OR

- Wash the area using water and soap (or another cleaner). Contain, collect and then dispose of water in the sanitary sewer after receiving approval from Harrisonburg Rockingham Regional Sewer Authority. You may need to filter the water first.

You should avoid pressure washing any wood treated with chromated copper arsenate (or CCA). Especially avoid using an acid wash or any cleaning products containing chlorine. This will increase the arsenic leaching out of the wood.

BEST PRACTICES FOR BUILDINGS WITH LOOSE PAINT OR GRAFFITI

NOTE: Make sure you know what kind of paint you are removing. If it is toxic (i.e. contains lead, copper, tributyl tin or PCBs) then you will need to dispose of the paint chips as a hazardous waste.

FOR NON-TOXICPAINT:

- You will need to contain and collect your washwater.
- If you are sand blasting the graffiti off, you will need to contain and collect your washwater.
- As much as possible, collect any paint chips by sweeping them up or rinsing the area. This may be easier if you scrape the paint chips off, as much as possible, before you power or pressure wash the remaining paint.
- Before disposing of washwater in the sanitary sewer system, you will need to filter out any paint chips.
- Non-toxic paint chips can be disposed of as normal garbage. Toxic paint chips will need to be handled as a hazardous waste.
- If you are using solvents in you pressure washing, you will need to contain and collect your washwater.
- Call Harrisonburg Public Utilities at 540-434-1053 before disposing of your washwater to ensure the solvent is safe for the sanitary sewer system.

BEST PRACTICES FOR OTHER SURFACES–SIDEWALKS AND PLAZAS

- Sweep the area that you are cleaning and any area your washwater will flow through to remove dirt and litter. Use absorbents to spot treat any oil or grease stains. Since these areas have only foot traffic, there should not be many of these stains.Dispose of collected dirt, litter and absorbents in the trash.

- Wash the area down using only water. Keep the washwater out of the storm drains. With the property owner's permission, the washwater can be disposed of in a planted area. This may stress, damage and potentially even kill plants, especially if any cleaning chemicals were used.

OR

- Wash the area using water and soap (or another cleaner). Contain, collect and then dispose of water in the sanitary sewer system after receiving permission from Harrisonburg Rockingham Regional Sewer Authority. You may need to filter the water first.

BEST PRACTICES FOR OTHER SURFACES – PARKING LOTS, DRIVEWAYS, DRIVE-THRUS, PARKING GARAGES, ETC.

- Sweep the area that you are cleaning and any area washwater will flow through to remove dirt and litter. Use absorbents to spot treat oil or grease stains. Dispose of collected dirt, litter and absorbents in the trash.

- Wash the area using water and soap (or another cleaner). Contain, collect and then dispose of water in the sanitary sewer system. If the washwater is oily or greasy, you will need to dispose of it through an oil/water separator or a grease interceptor. This may be especially true around restaurants and grease disposal areas.

BEST PRACTICES FOR OTHER SURFACES - MASONRY MINERAL DEPOSITS (EFFLORESCENCE)

Wastewater containing concrete and other masonry materials is caustic with a pH of approximately 12 and contains a high concentration of solids. Wastes from concrete, joint compounds, limes, cement, plaster, and other masonry materials may not be allowed to enter storm conveyance systems or waterways. These items have a direct effect on aquatic life, especially benthic macroinvertebrates.

Wastewater must be captured or diverted to a holding area for proper disposal. Wet/dry vacuums can be used for smaller jobs. Larger jobs can be broken into smaller sections with moving containment if necessary.

- Sweep any area your washwater will flow through to remove dirt and litter. Use absorbents to spot treat oil or grease stains. Dispose of collected dirt, litter and absorbents in the trash.
- If you use an acid wash to remove the mineral deposits on the masonry, you will need to contain and collect your washwater.
- Rinse down the acid treated area with an alkaline soap or baking soda solution.
- Collect all of the washwater and neutralize the pH to between 6 and 9. Dispose of washwater in the sanitary sewer system.