Charity Car Washes

Definition

This best management practice (BMP) applies to addressing the wash water from charity, non-profit car washes in which numerous cars are washed at a single location one time as a fundraising event. This BMP does not apply to commercial operations of any kind, such as do-it-yourself or drive-thru car washes, or the commercial cleaning of cars, trucks or equipment by private contractors--activities which are typically governed by local ordinances or other laws, or require permits. Although this BMP is also not targeted specifically at individual, residential car washing, elements of the BMP may be useful. Consult your municipality for any requirements they may have, and for other ideas or suggestions on reducing the amount of pollution from such activity.

Pollutants Controlled

Sediment in wash water can settle out in lakes, streams, or wetlands, impacting the habitat needed by fish and aquatic insects.

Surfactants in soap and detergents can harm aquatic life, and create nuisance conditions (i.e., negatively affect aesthetics).

Oil, grease, and hydrocarbons can harm aquatic life, and create nuisance conditions (i.e., negatively affect aesthetics).

Companion & Alternate Practices

To minimize the potential environmental impact from charity car washes, consider working with a local commercial car wash operation willing to donate all or a percentage of the profits made during the event. Commercial operators should already have any necessary environmental controls in place.

Depending on the situation, <u>Storm Sewer Inlet Protection</u> may be necessary, as described below.

Consider contacting the nearest MDEQ district office to discuss ways of limiting or preventing pollution from charity car washes. One source of information relevant to charity car washes is the MDEQ document Mobile Power Washing Guidance.

Location

This practice is applicable to any areas where car washes are held for non-profit fundraising purposes. Because location will, to some extent, determine what practices will be necessary to prevent pollution, the specific location types at which charity car washes can be held are described in detail in the following section, and depicted in Figure 1.

General Characteristics

Before the Car Wash

Identify potential charity car wash locations that offer the greatest opportunity for environmental controls, and for preventing the discharge of pollutants. After selecting a location for a proposed car wash, determine where any wash water would drain, and contact the municipality to confirm the drainage path, especially for any locations on or adjacent to pavement. Specifically, have the municipality determine what type of storm sewer (separate or combined) drains the proposed car wash location, because **there's no way of determining the storm sewer type just from outward appearances (i.e., just by looking at the inlets)**. The two types of storm sewer are described in the scenarios below. Also obtain from the municipality all clearances, approvals, or permits, and any requirements (such as controls for containing car wash water or preventing pollution).

Scenarios

The following three general scenarios are the expected conditions under which a charity car wash could be held. The requirements and limitations for each scenario are listed. The three scenarios are also depicted below in Figure 1:

1. Car Washes on Pavement Draining to Combined Sewer

Combined (sanitary/storm) sewers carry both storm water and sanitary wastewater to the wastewater treatment plant (WWTP). Any car wash water that enters a **combined** sewer will eventually be carried to the WWTP, where it will be treated, which is the preferred option. Prior to conducting the car wash, obtain from the municipality permission to release car wash water to the **combined** sewer, and determine whether additional controls are needed, such as Storm Sewer Inlet Protection.

2. Car Washes on Vegetation, Porous Pavement, or Pavement Draining to Vegetation (I.e., Wash Water Infiltrates Into the Ground Only, and Does Not Run Off)

If the car wash is to be held on grass or other vegetation, there can be no runoff; all car wash water must infiltrate into the ground. Check with the municipality to assure that no local ordinances prohibit this activity. Also have the municipality assure that the car wash location is far enough away from any drinking water wells, and outside of any wellhead protection areas.

To ensure that car wash water does not cause erosion, select areas with stable vegetation. Do not conduct car washes on nor allow car wash water to flow onto bare soil.

Do not conduct car washes on <u>Riparian Buffers</u>, which are vegetated areas immediately adjacent to rivers, lakes, wetlands, and other water bodies. Riparian buffers are primarily meant to be undisturbed, to preserve the vegetation so the buffers can perform as designed, to filter any runoff that passes through them.

Do not conduct car washes on vegetation, porous pavement, or regular pavement that drains in close proximity to or with the potential to discharge directly to a river, lake, or stream.

3. Car Washes on Pavement Draining to Separate Storm Sewer

Separate storm sewers carry storm water only, and drain directly to the nearest receiving waters. Thus, if any car wash water were to enter this type of sewer, it would be carried to and discharged directly into the nearest lake, stream, or wetland.

Proper controls must be in place prior to conducting a car wash, to prevent the release of pollutants to a **separate** storm sewer. One such potential control is the car wash kit, consisting of pumps, mats, and catch basin inserts, designed for redirecting car wash water either to a WWTP for treatment, or to a vegetated area for infiltration.

Car wash kits are available for purchase by individuals or groups. Some municipalities also purchase the kits, and loan them out to charity organizations who wish to hold car washes within their jurisdictions. So, when contacting the municipality to obtain permission to hold the car wash, and to determine what controls they require, be sure to ask them if they have car wash kits to loan out.

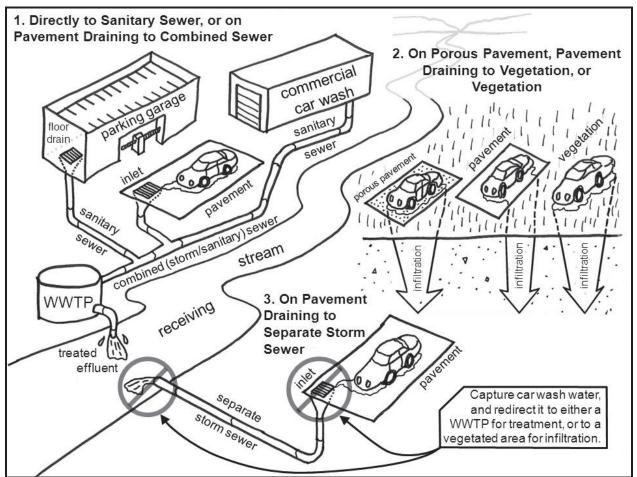


Figure 1. Scenarios for Charity Car Wash Locations

During the Car Wash

Use only biodegradable, phosphorus-free soap or detergent, as sparingly as possible, to limit the amount that runs off. Do not use degreasers, solvents, or tire cleaners.

To preserve water and minimize the amount of car wash water generated, use regular low-pressure garden hoses fitted with shut-off spray nozzles or guns.

Wash car bodies and windows only. To minimize the amount of pollutants generated-especially oil, grease, hydrocarbons, metals, and other organics--do not wash engines, undercarriages, or transmissions.

After the Car Wash

Dispose of any leftover soapy wash water down a sanitary sewer (such as into a sink or toilet); it can also be poured into the inlet of a **combined** (sanitary/storm) sewer (NOT a **separate** storm sewer), if prior permission has been obtained from the municipality.

SOURCE:

Charity Car Washes

https://www.michigan.gov/documents/deq/wrd-nps-charity-car-washes_459714_7.pdf

(Date of website search by Stormwater Coalition - 1/29/2021)



Instructions for charity car wash

The location for the car wash will be behind Service Building A in the paved area. The pavement is porous and the wash water will discharge through the pavement and filter through the sub soils, infiltrating into the ground. The washing of the cars on the porous pavement is in keeping with the Federal Clean Water Act, protecting the environment and not allowing pollutants and soap to enter the waterways and pollute creeks, streams, rivers and lakes.

Students to supply own hose, buckets, etc. for washing the cars

Use only biodegradable, phosphorous-free soap or detergents. Do not use degreasers, solvents, or tire cleaners.

Use water sparingly.

Prior to washing cars, place spill mat on catch basin. The mat can be picked up at Environmental Health and Safety, located in the Chemistry building. Phone # 442-3495. Return mat after car wash event.

Wash car bodies and windows only. To minimize the amount of pollutants generated, especially oils, grease hydrocarbons metals and other organics, do not wash or rinse engines or undercarriage.

Do not wash vehicles that are covered with an excessive amount of dirt on the porous pavement as the washed off dirt will fill the porous material and require it to be cleaned.

Wash water is not to be discharged into the catch basin, including the leftover soapy water in the buckets.

Close the gate when the car wash is concluded.

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