

Sump and Grease Trap Wastes

A primer





Sump Wastes

Sumps divided into two categories:

- Car Wash Sumps
- Other Sumps



Other Sumps

ARM 17.50.814(3) states:

- *“A person may not pump or dispose of wastes from any type of sump other than a car wash sump unless the person has first applied to the department and received its approval....”*











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Other Sumps

So, what does this mean?

You may not pump any sump other than a car wash sump unless the Department has issued you approval specific to that particular sump. The Department will evaluate these “*other sumps*” on a case-by-case basis.



Other Sumps

So, what do you need to submit to obtain approval to pump and dispose of waste from “other sumps”?

- **Contact the Department**



Car Wash Sumps

Car wash sumps further divided by type:

- Automatic
- Attended
- Unattended



Car Wash Sumps

What is an Automatic Car Wash?

ARM 17.50.802(5) defines an Automatic Car Wash as:

“... a place for washing trucks or automobiles that has machinery designed to do the washing without allowing access to the bay during the process.”



Automatic Car Wash

Automatic Car Wash





Car Wash Sumps

Automatic Car Wash Sump Waste Disposal Options

- May be land-applied;
- May be used as clean fill;
- May be used as daily cover at a licensed solid waste landfill **if dewatered first.**
- *Regardless of final disposal option chosen, disposal can only occur at a pre-approved site.*



Car Wash Sumps

What is an Attended Car Wash?

ARM 17.50.802(4) defines an Attended Car Wash Bay as:

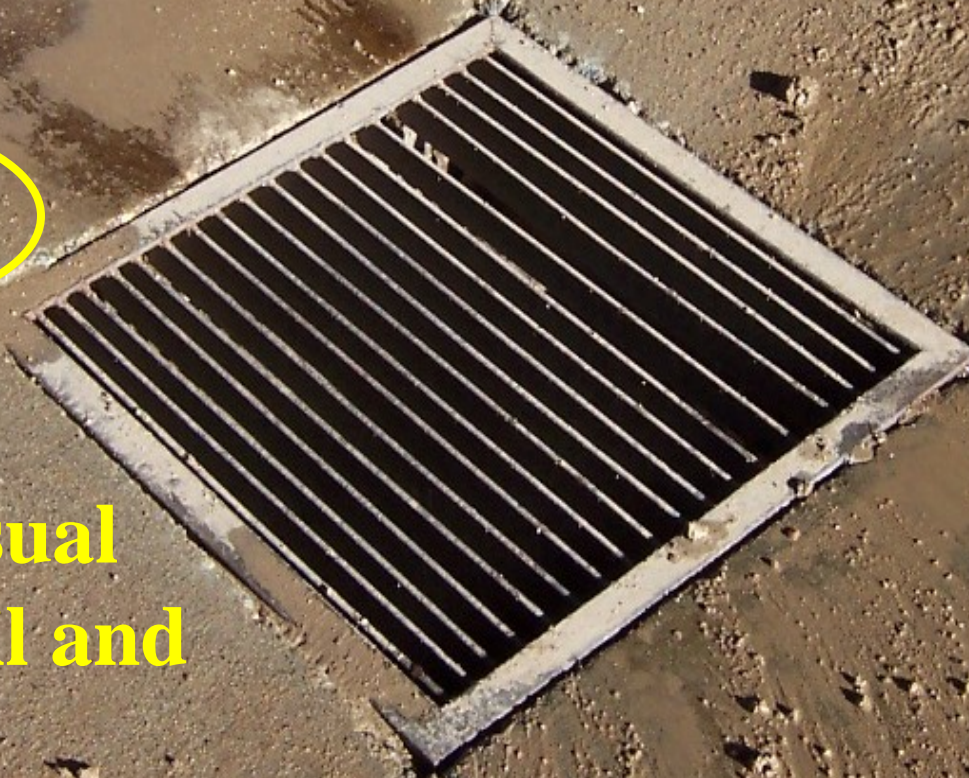
“... a place for washing trucks or automobiles that has an attendant on site while open to the public.” (continuous supervision)

Car Wash Sumps

Attended Car Wash Sump Waste Disposal Options

Step 1

Must first
perform visual
check for oil and
grease





Car Wash Sumps

Option #1

Attended Car Wash Sump Waste Disposal Options

- If the car wash prohibits the use of chlorinated solvents and if the waste contains no visible oil or grease, the waste may then be used as clean fill **ONLY** if the car wash owner provides the pumper a written statement that the material is solvent-free (ARM 17.50.814(5))



Car Wash Sumps

Option #2

Attended Car Wash Sump Waste Disposal Options

- If the car wash prohibits the use of chlorinated solvents **but** the waste contains visible oil or grease, the material may be landfarmed in accordance with the Solid Waste rules, or, if dewatered, the material may be disposed at a licensed Class II landfill with the operator's permission



Car Wash Sumps

Option #3

Attended Car Wash Sump Waste Disposal Options

- If the car wash **does not prohibit** the use of chlorinated solvents, the sump waste must be handled in the same manner as an unattended car wash bay sump



Car Wash Sumps

What is an Unattended Car Wash?

ARM 17.50.802(35) defines an Unattended Car Wash Bay as:

“... a place for washing cars or trucks that is not an automatic car wash bay and does not have continuous supervision while open to the public.”

Unattended Car Wash



Unattended Car Wash



Why?

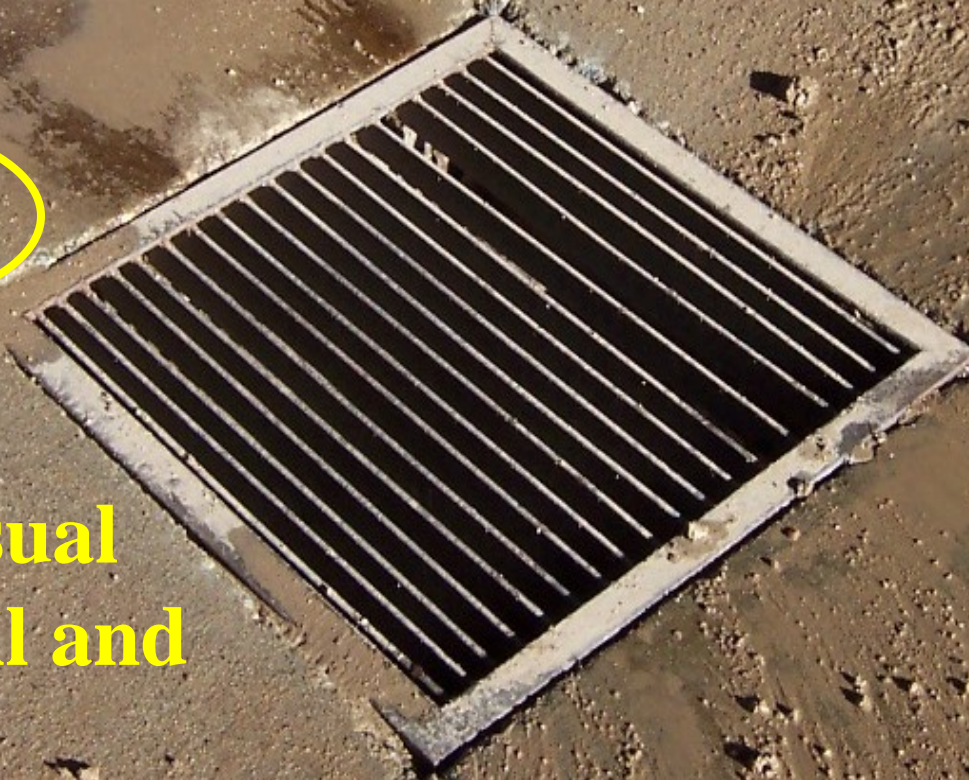
Does not have continuous supervision.
Open to the public 24-hours.

Car Wash Sumps

Unattended Car Wash Sump Waste Disposal Options

Step 1

**Must first
perform visual
check for oil and
grease**





Car Wash Sumps

Step 2

Unattended Car Wash Sump Waste Disposal Options

- Waste must be screened for chlorinated solvents

OR

- The owner must provide the pumper with a statement concerning the solvent-free status of the material



Car Wash Sumps

Option #1

Unattended Car Wash Sump Waste Disposal Options

- If the pumpings do **not** contain visible oil and grease and are known to be free of chlorinated solvents (by testing or knowledge) the material may be used as either clean fill or, if dewatered, as daily or intermediate landfill cover



Car Wash Sumps

Option #2

Unattended Car Wash Sump Waste Disposal Options

- If the pumpings contain visible oil and grease but are known to be free of chlorinated solvents (by testing or knowledge) the material may be either landfarmed or disposed of at a licensed Class II landfill with the operator's permission



**It may be clean fill,
but.....**

A large, dark, wheeled dumpster is the central focus of the image. It is positioned outdoors against a light-colored, tiled wall. To the right of the dumpster is a chain-link fence. The dumpster has a lid that is slightly ajar, and some debris is visible inside. The text "Grease Trap Wastes" is overlaid in white, serif font across the front of the dumpster. The scene is brightly lit, suggesting a sunny day.

Grease Trap Wastes



Grease Trap Wastes

Grease trap waste consists of the oily and greasy residue separated from the wastewater discharge of a food preparation operation and collected in a specialized separation and storage containers.



Grease Trap Wastes

GTW Characteristics:

- Total Solids: 6%
- Total Volatile Solids: 88%
- Fats, Oils, Grease: 1.1%
- pH: 4.4
- Total Nitrogen: 0.0056%
- Total Phosphorus: 0.0029%
- Potassium: 0.0036%

Source: Pumper Magazine, March, 2000



Grease Trap Wastes

GTW disposal options:

- Rendering Facilities

Inferior fat source with high cost to filter into renderable material that yields a low grade product (tallow)

- Landfill

GTW must first be dewatered – tipping fees may be cost prohibitive

- WWTP

Few facilities accept because of high organic loading to system with a difficult to treat material



Grease Trap Wastes

GTW disposal options:

- Land Application

GTW typically contains less than 1% nitrogen

GTW is a source of carbon

GTW is subject to tilling requirements



Grease Trap Wastes

O&M considerations for the Land-Application of GTW

- Liquid fraction (fats) and water disperse
- Water percolates readily
- Fats coat soil particles and percolate more slowly
This makes soil surface water repellent and causes soil-pore blockage
- Mechanical incorporation disperses the fats into the soil, aerates the soil, helps to reduce odors and allows for greater application rates



Grease Trap Wastes

- Limited research – NAWT study
(Pumper magazine, March, 2000)
- Application rate: approximately 16,000 gallons/acre
- GTW application must be documented in your records
- Land applied GTW must be incorporated within 6-hours of application