

# STREET SWEEPINGS/STORMWATER BASINS AND CAR WASH PIT DISPOSAL



## KEEPING STORMWATER BASINS AND SANITARY SEWERS FREE OF DEBRIS

Many locations have devices designed to collect debris and dirt before it enters a sanitary sewer system or stormwater basin. Some examples of these devices



range from simple trench drains in a work bay floor to large concrete basins in wash bays that collect sand and grit. Sweeping streets and cleaning catch basins to remove accumulated sediments, trash and debris reduces the amount of pollutants entering Iowa's waterways. Regularly cleaning catch basins also reduces the threat of local flooding. The one thing all of these types of structures have in common is that they periodically require cleaning that generates a waste.



**Street sweepings** are materials such as sand, salt, leaves, debris and trash removed from city streets, parking lots and sidewalks to prevent these materials from being washed into storm sewers and improve

the appearance of public roadways. Street sweepings are not as clean as virgin earth materials and should be handled with a certain degree of care. Street sweepings usually contain low levels of chemical compounds associated with stormwater runoff which can be confirmed with laboratory testing. Street sweepings can often be successfully reused in the following ways:

- Mix with new salt/sand mixture for winter application to roads, parking lots or sidewalks. If used in this way, trash and debris will need to be removed. It can be screened using a smaller mesh for the final

screening to ensure the larger debris has been removed (half-inch screen or smaller).

- Use as daily cover material at a permitted landfill.
- Use as aggregate in concrete or asphalt, and other uses.

## Catch basin cleanings

are the materials such as sand, silt, leaves and debris that accumulate and are removed from catch basins. Materials that are removed

from other drainage structures such as swirl concentrators, separators, and detention and retention basins are often similar to catch basin cleanings and generally should be handled in a similar manner. They are usually wet and have higher organic content from decomposing wet leaves than do street sweepings. Catch basin cleanings generally have higher levels of pollutants than street sweepings, and are also more likely to have been affected by spills and polluted runoff than street sweepings. Landfilling is the best option for this type of waste. Workers conducting a field evaluation or engaged in cleaning such basins should be aware of sediment in catch basins with obvious contamination such as unusual color, staining, corrosion, unusual odors, fumes and oily sheen.

If public works staff or a contractor believes that a spill has occurred, they should contact their DNR field office for guidance. If it is a major spill, it must be reported at

Total metals	Standard for reuse
Antimony	31
Arsenic	17
Barium	15,000
Beryllium	110
Boron	16,000
Cadmium	70
Chromium VI	210
Copper	15,000
Lead	400
Manganese	10,000
Mercury	23
Molybdenum	390
Nickel	1,500
Selenium	390
Silver	370
Thallium	0.78
Vanadium	350
Zinc	23,000

## Considerations

It is illegal to dispose hazardous waste on your property without a permit and may subject the facility to fines or penalties.

# STREET SWEEPINGS/STORMWATER BASINS AND CAR WASH PIT DISPOSAL



515-281-8694. More information on reporting can be found at [www.iowadnr.gov/spills/files/hazcontractors.pdf](http://www.iowadnr.gov/spills/files/hazcontractors.pdf)

Field office locations and contact information:		
Field office #1	Manchester	563-927-2640
Field office #2	Mason City	641-424-4073
Field office #3	Spencer	712-262-4177
Field office #4	Atlantic	712-243-1934
Field office #5	Des Moines	515-725-0268
Field office #6	Washington	319-653-2135

Once the emergency conditions have been addressed, any remaining material in the catch basin should be segregated until tested for all probable contaminants, then cleaned up separately from non-contaminated basins.

## Sump, pit, trench and trap wastes

Rules require a person who generates a solid waste to determine if that waste is a hazardous waste (40 CFR 262.11). Owners or operators of facilities where collection sumps are in operation must be able to demonstrate they have adequately determined if the contents of the sump(s) are hazardous waste prior to disposal. How often you test your sump waste will depend on factors such as use, access, design, hazardous materials in use, etc. For example, If you clean herbicide application machinery like tractors, then you should test for 2,4-D, or other common pesticides listed in 40 CFR 261.24. Furthermore, if you routinely wash the underside of vehicles, there is a reasonable expectation that metals such as chromium, cadmium or lead could be present in the sump waste. If gasoline might be present you should test for benzene.



## Testing

Preliminary screening tests (i.e., total metals rather than the Toxicity Characteristic Leaching Procedure, or TCLP, metals), may be able to be used as part of the determination. If, however, the results reveal elevated concentrations of total metals (exceeding 20 x rule), additional samples and analyses for the TCLP level of the specific metal(s) involved might be necessary to conclusively determine if the sump waste is hazardous. The 20x rule states that if the totals testing in mg/kg is less than 20 times the TCLP regulatory limit of that constituent, then the sample could not possibly leach enough of the chemical to fail the TCLP limit.

## Disposal

- Non-hazardous sump waste may be disposed at a municipal solid waste landfill.
- No free liquids are allowed to be accepted at landfills. If your non-hazardous sump waste has free liquid, it should be dried or de-watered prior to disposal. The test to determine if your non-hazardous sump waste has free liquid is called the “paint filter test” (SW-846 method 9095). Most landfills will require this test if there is any question about your waste containing liquid.

## Common sump, pit, trench, trap waste contaminants

Contaminant	Landfill disposal (TCLP)
Arsenic	5.0 mg/L
Barium	100.0 mg/L
Cadmium	1.0 mg/L
Chromium	5.0 mg/L
Lead	5.0 mg/L
Mercury	0.2 mg/L
Selenium	1.0 mg/L
Silver	5.0 mg/L
2,4-D	10.0 mg/L
2,4,5-TP (Silvex)	1.0 mg/L
Benzene	0.5 mg/L