

Emergency Telephone Numbers for Spill Plan
24 Hour Hotline 1-800-943-0003

	Address	Telephone Number
Company Name:		
Driver's Name:		
Physician/Ambulance:		
Fire		
Police/Sheriff		
Mutual Agreement Pumpers		
Emergency Government (state) Duty Officer System (Answered 24 hrs/day)	Madison	(608)266-3232
Emergency Government (County)		
DNR		
County Government (when the county has been delegated septage regulation by the DNR)		

I. Septage Spill Response Plan

As septage does not have the same potential for critical environmental damage or hazard to humans as many chemical or waste chemical products, oil or gasoline, the response and clean up techniques will not be as extreme as in the case of a so-called hazardous materials/hazardous waste spill. However, any spillage must be cleaned up and the area restored to render it harmless to humans and animals. Each vehicle used for hauling must carry a written procedure for spill and accident clean up and a copy of ch. NR 113. Spills of 50 gallons or greater shall be reported within 24 hours, to the department or the county, if the county has been delegated septage regulation by the Department.

A. Holding Tank Wastewater Spill

Holding tank wastewater is generally liquid (99.5% water 1.05% solids). In the event of a spill of holding tank wastewater, a response such as the following will probably be required:

1. Massive Spill (Greater than 250 gallons):
 - a. Check for injury to operator or bystanders.
 - b. Determine likely directions of flow, destination and actions to reduce effects of spill.
 - c. Notify sheriff, police, fire department, company office, DNR, mutual agreement pumpers.
 - 1) If the spill can be contained, pump the holding tank wastewater into mutual agreement pumper's truck. Have fire department flush area with water if the area is grassy or vegetated. Do not use disinfectant which is likely to kill vegetation. Substitute water, a detergent and flush until it is clean.
 - 2) If the spill is on a hard surface, pump holding tank wastewater with mutual agreement pumper's truck while flushing with fire hose and disinfect with bleach or other disinfectant.
2. Minor Spill (50 to 250 gallons):
 - a. Check for injury to operator or bystanders.
 - b. Determine likely directions of flow, destination and actions to reduce effects of spill.
 - c. Notify sheriff, police, fire department, company office, DNR, mutual agreement pumpers.
 - d. If spiller's equipment is not incapacitated:
 - 1) Clean up spilled area immediately. Flush with garden hose if possible.
 - 2) If spiller is not a vac truck, call appropriate vac truck from mutual agreement pumpers to clean the area.

B. Septage Spill

As septage is likely to consist of anywhere from 3% to 15% solids, it is more likely to stay put than HTWW.

1. Massive Septage Spill (Greater than 250 gallons):
 - a. Check for injury to operator or bystanders.
 - b. Determine likely directions of flow, destination and actions to reduce effects of spill.
 - c. Notify sheriff, police, fire department, company office, DNR, mutual agreement pumpers.
 - 1) Clean up spilled area immediately. Flush with garden hose if possible.
 - 2) If the truck responsible for the spill is not a vac truck, call an appropriate vac truck from mutual agreement pumpers to clean.
2. Minor Septage Spill (50 to 250 gallons):
 - a. If spiller's equipment is not incapacitated:
 - 1) Clean up spilled area immediately. Flush with garden hose if possible.
 - 2) If the truck responsible for the spill is not a vac truck, call an appropriate vac truck from mutual agreement pumpers to clean.

C. Spill Abatement and Clean Up Tools

1. Hand Tools:
 - a. Spades and flat shovels.
 - b. Squeegee with curved ends.
 - c. Flat suction wands for vac truck hose.
 - d. Garden hose, fire hose.
 - e. Boots, waders, gloves and rain suits.
2. Supplies:
 - a. Bleach or disinfectant.
 - b. Soap or detergent.
3. Equipment:

Agreement with available high performance vac trucks.
4. Agreements:
 - a. Have agreement with backhoe/dump truck companies to respond with a load(s) of sand or ground to dump quickly into a ditch or waterway to make a dam so septage doesn't flow into waterway or stream.
 - b. Agreement with as many area pumpers to mutually respond to each others spill mishaps.

II. Training

A. Be Prepared for a Spill

1. Drivers and equipment operators trained how to prevent spills and what emergency procedures to implement in case of a spill.
2. Have a mutual agreement of cooperation with other pumpers if an emergency arises.
3. The notification of local authorities when an emergency exists.
 - a. DNR Who

- b. Police Where
- c. Department of Emergency Government What
- d. Highway department When
- e. Fire department How

B. Cause of Spill (Accident—Equipment Failure—Operator Mishap)

1. Crack in tank shell
2. Tank ruptured
3. Tank discharge valve(s) leaking or malfunction
4. Transfer hose or fittings leakage or rupture
5. Pump leakage or malfunction
6. Over fill tank

C. Clean Up Procedures

1. Initiate effort to stop or reduce additional spillage
2. Vacuum up spilled material immediately, if possible
3. Determine potential migration of spilled material
4. Initiate effort to prevent or reduce migration of spilled material by constructing dikes of earth or sand and gravel
5. Initiate effort for assistance
6. Contact local authorities, if applicable.
7. Flush area of spillage with water and detergent if necessary and vacuum all material.
8. Disinfect area as needed
9. File a complete report of the spill and the clean up to the local DNR or governing agency.

III. Potential Circumstances for Spills and Characteristics

A. Potential Equipment Problems

1. Vacuum Truck

Leaks or spills potentially occurring during:

a. Loading:

- 1) Loose coupling causes hose disconnection due to hose whipping when suction breaks air at bottom of tank being pumped.
- 2) Truck tank fills to maximum, closing primary vacuum shut off, leaving hose full of septage.
- 3) Failure of valve to shut off flow when hose is disconnected prior to capping suction valve.

b. Transport

- 1) Failure to cap suction and discharge valves and valves works its way open due to bouncing or jolting vibrations while driving.
- 2) Valve stem packing leaking.
- 3) Truck tank with rear door opening gasket leaks.
- 4) Vehicle is involved in accident, causing rupture of tank valve or appurtenances.

c. Unloading at Wastewater Treatment Plant:

- 1) Discharge hose falls to stay in place during unloading.

d. Unloading at Land Application

- 1) Valve failure causing liquid to squirt past gate valve when

discharge/suction opening cap is removed causing spillage before discharge hose can be connected.

2) Discharge hose leaks at connections or through a hole in the hose.

3) Improper discharge (spreading) during land application causing septage migration off-site to drainageways, etc.

2. Tank Truck with Centrifugal Pump

Leaks or spills potentially occurring:

a. Loading:

1) Overfilling tank causing spillage of septage through the tank manhole or vent into the ground.

2) Spilling while disconnecting loading (suction) hose from pump due to backflow from pump or the hose being full of septage.

3) Improper capping of suction and discharge openings.

4) Leaking valve stem gaskets.

b. Transport:

1) Failure to cap suction and discharge openings.

2) Valve stem packing leaks.

3) Manhole not secure, surging load splashes out of the manhole.

4) Vehicle accident causes truck upset and/or rupture of the tank or appurtenances.

c. Unloading:

1) Valve failure causing liquid to squirt past the gate valve when discharge/suction opening cap is removed causing spillage before discharge hose can be connected.

2) Discharge hose leaks at connections or through a hole in the hose.

3) Discharge hose fails to stay in place during unloading.

3. Diaphragm Pump Truck

Leaks or spills potentially occurring during:

a. Loading:

1) Overfilling the tank causing spillage of septage through the tank manhole or vent into the ground.

2) Spilling while disconnecting loading (suction) hose from pump due to backflow from pump or the hose being full of septage.

3) Improper capping of suction and discharge openings.

4) Leaking valve stem gaskets.

b. Transport:

1) Failure to cap suction and discharge openings.

2) Valve stem packing leaks.

3) Manhole not secure, surging load splashes out of the manhole.

4) Vehicle accident causes truck upset and/or rupture of the tank or appurtenances.

c. Unloading:

1) Valve failure causing liquid to squirt past the gate valve when discharge/suction opening cap is removed causing spillage before discharge hose can be connected.

2) Discharge hose leaks at connections or through a hole in the hose.

3) Discharge hose fails to stay in place during unloading.

Note: Due to slow pumping speed, diaphragm pumps are not generally used to pump holding tanks.

B. Spill Site Characteristics

1. Loading Situations

a. Residential:

A truck parked on a driveway splashes septage on the driveway, walks or lawn. In some cases the truck may be parked on the street with resultant spill on the street or into the ditch.

b. Commercial:

Spill is likely to be onto a parking lot, restricted drive or street.

2. Transporting Situations

Site characteristics that are likely to be encountered if a spill occurs when transporting. Curb and gutter with storm drains. Paved and unpaved highways, roads and streets, all of which have some type of drainage system such as parallel ditches, culverts, bridges, ultimately associated with intermittent streams or creeks and rivers.

3. Unloading

Site characteristics that are likely to be encountered if a spill occurs when unloading at:

a. Wastewater Treatment Plant:

A manhole or influent channel ahead of bar screen and grit chamber with paved or gravel drives, sidewalks and mowed or uncut grass and usually some surface drainage is involved with the site.

b. Land Application Site:

Farm land or field site, usually quite remote from dwellings and people, mostly vegetated land, tilled fields.

4. Spill Prevention

a. Considerations to Prevent Spills While Loading:

- 1) The use of maintenance valves for good sealing.
- 2) Maintenance of hose couplers.
- 3) Using care when coupling and uncoupling.
- 4) Rinsing off the interior and exterior suction hose when finished pumping prior to replacing on the truck hose rack.
- 5) Carrying an extra supply of hose gaskets.
- 6) Carrying an extra 5 gallon plastic waste pail.

b. Considerations to Prevent Spills While Transporting:

- 1) Partially loaded liquid tank trucks are especially susceptible to upset due to center of gravity shifts when making quick maneuvers; therefore, the driver should:
adjust speed (drive slower) for partial loads, keep greater intervals, be alert for changing conditions, anticipate other traffic or pedestrian action or inaction.
- 2) Have tank manhole tightly closed.
- 3) Have all valve levers positively closed.

- 4) All valve openings tightly capped.
- c. Considerations to Prevent Spills While Unloading:
- 1) Similar to Loading:
 - 2) Always be attentive when coupling and uncoupling hoses.
 - 3) During surface spreading operations use:
 - a) Spreader or splash plate.
 - b) Remote overrated valve (i.e.: air cylinder operated, hydraulic cylinder operated, Morse cable or other manual operated remote).
 - c) Always have the truck moving in forward motion when opening the discharge valve.