

4.21 Recreational Vehicle Dump Station

Revision: ~~October 13, 2004~~ January 17, 2013

4.21.1 Description

Recreational vehicle (RV) dump stations are sealed septic tanks for the disposal of RV generated wastewater. RV dump tanks (station) pose a unique problem for subsurface sewage disposal systems because the recirculating fluid used in RV tanks contains formaldehyde and/or paraformaldehyde. The presence of these chemicals inhibits bacterial action inside of a septic tank, which leads to solids carry over and premature failure of the drainfield. Compounding the problem is that RV units recirculate the fluid several times before it is dumped. The fluid disposed in the dump station then is both strong and preserved. Because of these issues with RV generated wastewater RV dump stations should not be connected to subsurface sewage disposal systems.

~~4.21.2 Disposal Systems Options for Recreational Vehicle Dump Stations~~

- ~~1. —Municipal treatment plant: This is the preferred option, if available. Research indicates that RV dump stations do not cause any problems for disposal in municipal treatment plants because of the dilution. Furthermore, formaldehyde is quite volatile and dissipates rapidly when exposed to an aerobic treatment process.~~
- ~~2. —Community drainfield system: To date, there is no research available about the effects of RV dump station wastes on community drainfield systems. It is logical to assume that at some point the RV waste would be diluted sufficiently so that it should not pose a problem to a drainfield system, but what dilution would be acceptable is not now known. Until further research is completed, it is recommended that not more than 5% of the waste flow to a community septic system be generated by an RV dump station.~~
- ~~3. —Holding tanks: If the tanks are pumped and disposed of at a municipal treatment plant, this should be an acceptable option. The holding tanks should have a high alarm system. The alarm float should be set to allow for a 1 day flow after the high alarm is reached.~~

4.21.2 Conditions for Approval

1. A management entity or arrangement to provide maintenance and pumping of the tank by a permitted septic tank pumper should be provided prior to permit issuance.
2. An RV dump tank shall not have wastewater conveyed to it through a collection system.
 - a. RV wastewater shall be discharged into the dump station vault directly from the RV's wastewater holding tanks.
3. If the RV dump tank is a modified septic tank the inlet and outlet openings shall be sealed.
4. Sites may not be subject to flooding.
5. The RV dump tank lid shall be sloped to the dump point and have a wastewater spill containment rim.

6. A source for dump station wash-down water shall be provided to the RV dump location.
 - a. The water source shall meet the same separation distances from the RV dump as required by IDAPA 58.01.03.007.17.

4.21.3 Requirements

1. The RV dump tank must meet the distance limitations of a septic tank (IDAPA 58.01.03.007.17).
2. The RV dump tank must meet the septic tank design and construction standards as described in IDAPA 58.01.03.007.
 - a. Requirements of IDAPA 58.01.03.007.07, 58.01.03.007.08, 58.01.03.007.09-10, 58.01.03.007.19, and 58.01.03.007.22 are exempt.
3. If the RV dump tank is a modified septic tank the inlet and outlet opening shall be sealed.
4. A manhole extension shall be brought to finished grade that allows pumping access to the RV dump tank.
5. An emergency warning system shall be required to be installed to indicate when the RV dump tank is two-thirds full.
6. The RV dump tank shall meet the volume requirements of a septic tank, except that no RV dump tank shall be less than 1,500 gallons.
7. Any permit issued for a subsurface sewage disposal system serving RV spaces should include a requirement to install an RV dump tank that allows RVs to discharge their preserved waste prior to discharging of waste to the subsurface sewage disposal system.

4.21.4 Recreational Vehicle Dump Station Waste Disposal

1. RV dump tank waste shall be pumped and removed by a permitted septic tank pumper.
 - a. Wastewater from an RV dump may be disposed of at the following locations:
 - i. Municipal treatment plant
 - ii. Approved septage land application site
 - iii. Approved discharge to public sewer