4.20 Recreational Vehicle Dump Station

Revision: June 9, 2022
Installer registration permit: Property owner or standard and basic
Licensed professional engineer required: No

4.20.1 Description

Recreational vehicle (RV) dump stations are sealed septic tanks for the disposal of RV-generated wastewater. RV dump stations pose a unique problem for subsurface sewage disposal systems because the recirculating fluid used in RV wastewater storage 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.

4.20.2 Approval Conditions

1. An arrangement to provide maintenance and pumping of the dump station tank by a permitted septic tank pumper should be provided to the health district prior to permit issuance.
2. An RV dump station tank shall not have wastewater conveyed to it through a collection system.
3. RV dump stations may not be located in a floodway.
4. The RV dump station tank lid shall be sloped to the dump point and have a wastewater spill containment rim.
5. A source for dump station wash-down water shall be provided to the RV dump station location.
6. If the proposed wastewater flows are greater than or equal to 2,500 GPD, a full-sized LSAS must be installed to serve all wastewater flows generated by the project. Any proposed RV dump station will not be considered as a factor when sizing the LSAS. For more information, please refer to the DEQ memorandum titled “RV Park On-Site Wastewater Disposal Systems.”

4.20.3 Requirements

1. The RV dump station tank must meet the minimum separation distances of a septic tank (IDAPA 58.01.03.007).
2. The RV dump station tank must meet the septic tank design and construction standards as described in IDAPA 58.01.03.007. 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.

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3. If the RV dump station tank is a modified septic tank, the inlet and outlet opening shall be sealed. If more than one tank is used in series, only the initial inlet and final outlet opening shall be sealed.
4. A manhole extension shall be brought to finished grade that allows pumping access to the RV dump station tank.
5. An emergency warning system shall be required to be installed to indicate when the RV dump station tank is two-thirds full.
6. No RV dump station tank shall have a liquid capacity less than 1,500 gallons, unless tanks are used in series. If multiple tanks are used in series, the initial tank shall not be less than 1,500 gallons and subsequent tanks in the series may be less than 1,500 gallons but must conform to IDAPA 58.01.03.007.16.
7. Any permit issued for a subsurface sewage disposal system serving RV spaces should include a recommendation to install an RV dump station tank that allows RVs to discharge their preserved waste prior to discharging of waste to the subsurface sewage disposal system.

4.20.4 Recreational Vehicle Dump Station Waste Disposal

1. RV dump station tank waste shall be pumped and removed by a permitted septic tank pumper.
2. Wastewater from an RV dump station must be disposed of in conformance with IDAPA 58.01.03.050.03.

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