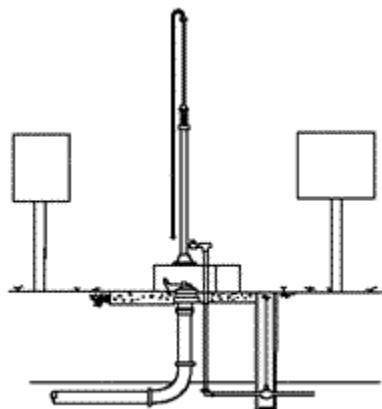


Design plans for building a RV dump station



We have done a search of the internet and found the following RV dump station design information that will help you get started with designing/building an RV dump station.

- Washington State Department of Transportation (WSDOT): Safety Rest Areas and Traveler Services: Typical RV Dump Station Layout (page 4) <http://www.wsdot.wa.gov/publications/manuals/fulltext/M22-01/1710.pdf>
- Sanitary Dumping Stations https://www.in.gov/isdh/files/sanitary_dumping_stations.pdf

If you are aware of other information that would help an organization build an RV sani dump, please send a email to sanidumps.com and we will update this page.

Please notify us if the links are broken or if the documents are no longer available.

Other information we have found about a RV dump station design:

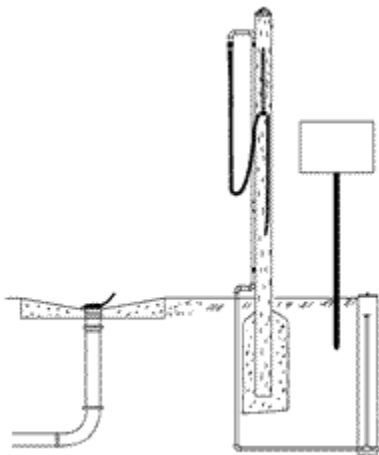
Ancillary Requirements. A sanitary dump station shall be provided with the following:

1. A concrete pad sloped at least one inch per 10 feet to a drain. This pad shall extend at least 2 feet in every direction from the drain, and shall have at least a 2 inch high curb around the outside perimeter of the pad.
2. A foot-operated, self-closing cap which forms a tight seal with the drain shall be provided.
3. The sewer line from the drain to the tank shall be at least 4 inches in diameter and constructed of approved material. It shall be installed to maintain at least a

10 foot horizontal separation between the water and sewer line, and the water line and the tank.

4. A water supply distribution tap for flushing the pad shall be provided. The water supply line to the tap shall be of materials, location, and construction in accordance with the Plumbing Code, and shall be provided with approved, properly installed back siphonage protection. No "stop and waste" valves will be allowed on this tap. This water tap shall be posted, "Not for Human Consumption. Use for Flushing and Cleaning Purposes Only."

And more RV dump station design information:



The licensee of a recreational vehicle park, a recreation camp, a combined park-camp or a temporary park-camp shall ensure that the park or camp meets the following dump station requirements:

RV Dump stations shall be provided in a ratio of one station for each one hundred park or camp sites. Where recreational vehicles or portable camping units with holding tanks are segregated in a combined park-camp, the number of dump stations required shall apply only to those segregated sites.

Each dump station shall have an available water supply for the flushing of dump station areas.

If connected to a potable water supply each dump station shall be constructed and operated so as to protect the water supply and all other water outlets within the park or camp from contamination due to backflow in accordance with the following requirements:

For dump stations with tower washing equipment a backflow prevention device is required. Backflow prevention devices shall meet the following requirements:

1. Devices installed to operate under continuous pressure shall be an pressure vacuum breaker assembly or equivalent device. Installation shall be at least twelve inches higher than the highest point of use on downstream piping;
2. A device installed that is not subject to back-pressure or continuous pressure shall be an pipe applied atmospheric vacuum breaker device or equivalent device. Installation shall be at least six inches higher than the highest point of use on downstream piping.

For dump stations equipped with a threaded faucet and hose, an reduced pressure principle backflow prevention assembly or equivalent device shall be installed prior to the threaded faucet.

All pressure vacuum breaker assembly devices and reduced pressure principle backflow prevention assemblies, or equivalent devices, shall be annually inspected and tested by a person certified by the department of commerce to make such inspections. The devices shall be labeled to show compliance with this requirement. Written verification of such inspections shall be maintained on file at the park or camp for review by the licensor.

Each dump station shall have a holding tank which is of water-tight design and capable of holding a minimum volume of one thousand gallons or shall be connected to a sewage collection system.

Each dump station shall be equipped with a concrete pad surrounding the drain. The concrete pad shall meet all of the following requirements:

1. It shall be a minimum of four feet by six feet in size;
2. It shall be a minimum of four inches in thickness;
3. It shall have a drain opening which is at least four inches in diameter with a self-closing, weighted cover. The drain opening shall be located at one end of the pad;
4. It shall have four-inch curbing bordering the drain end of the pad;
5. The surface of the pad shall slope two inches from the edge to the drain;
6. Our-inch piping shall run from the drain to the holding tank or sanitary sewer. The piping shall be provided with a trap;
7. It shall have a separate opening for the purposes of determining the level of the tank's contents and pumping out the tank;

8. Hoses used for flushing the dump station pad shall not exceed the length necessary to reach the entire pad.

Each dump station shall be designed to be easily accessible to the entrance and exit area of the park or camp and have safe, all weather access.

Each dump station shall be properly sealed to prevent nuisances.

Each dump station shall be posted with signs that are clearly and indelibly labeled stating instructions for use and that the water supply is to be used for flushing and cleaning purposes only, and that the water shall not be used for human consumption.

Each dump station shall be maintained in a clean and functional manner by the licensee.

Each dump station shall be located such that any water source or service outlet used for filling water tanks or other uses for human consumption is at least fifty feet away from the dump station facility. Under no circumstances shall the licensee permit a hose that is long enough to reach a water outlet that is used for human consumption to be connected to a water service outlet at a dump station. The licensee also shall not permit a hose that is long enough to reach the dump station area to be connected to a water service outlet that is used for human consumption.

RV Dump Site Images



Sani dump with rinse water - not drinkable water



Close up of sani dump drain, notice the slop towards the drain



Drinking water sign, the rinse water at a dump station is not for drinking, always get your potable water from a reliable water source



Drinking Water, at this dump station site the rinse water is painted red and the potable water is painted blue