

### 4.20.3.6 Pump to Drop Box

A pump to drop box system may be used when an area for drainfield placement cannot be reached by standard gravity flow from the wastewater generating structure. Standard drainfields located at higher elevations than the septic tank are not required to be designed as a pressure distribution system unless the square footage of the disposal area exceeds 1,500 ft<sup>2</sup>. When the drainfield is not pressurized, wastewater is conveyed by a pump through a transport (pressure) line to a drop box where effluent pressurization breaks to gravity distribution into the drainfield (Figure 4-20).

1. Pump selection, transport (pressure) line design, dosage, and dosing chamber or in-tank pump design shall follow the procedures in Section 4.20 Pressure Distribution System of the TGM.
2. A drop box should be installed that allows gravity distribution to all drainfield trenches.
3. Upon entry into the drop box, the effluent line should be angled to the bottom of the box with the effluent line terminating above the high water level of the drop box.
  - a. A one-quarter inch hole may need to be drilled in the top of the angle connection to prevent a potential siphon.
4. A complex installer's permit shall be required for installation.
5. Pump and transport pipe design/selection may require engineering based upon the regulatory authority's judgment. Pump design/selection should be performed by an engineer licensed in the State of Idaho when elevation gains of greater than 100 feet or lengths of 500 feet are exceeded in effluent transport.

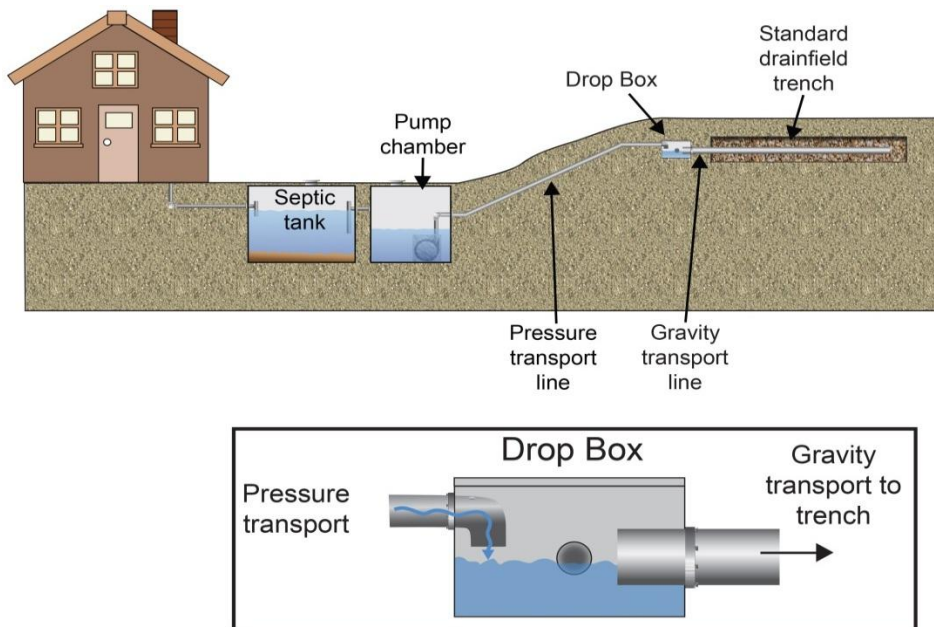


Figure 4-20. Example of pump to drop box installation.