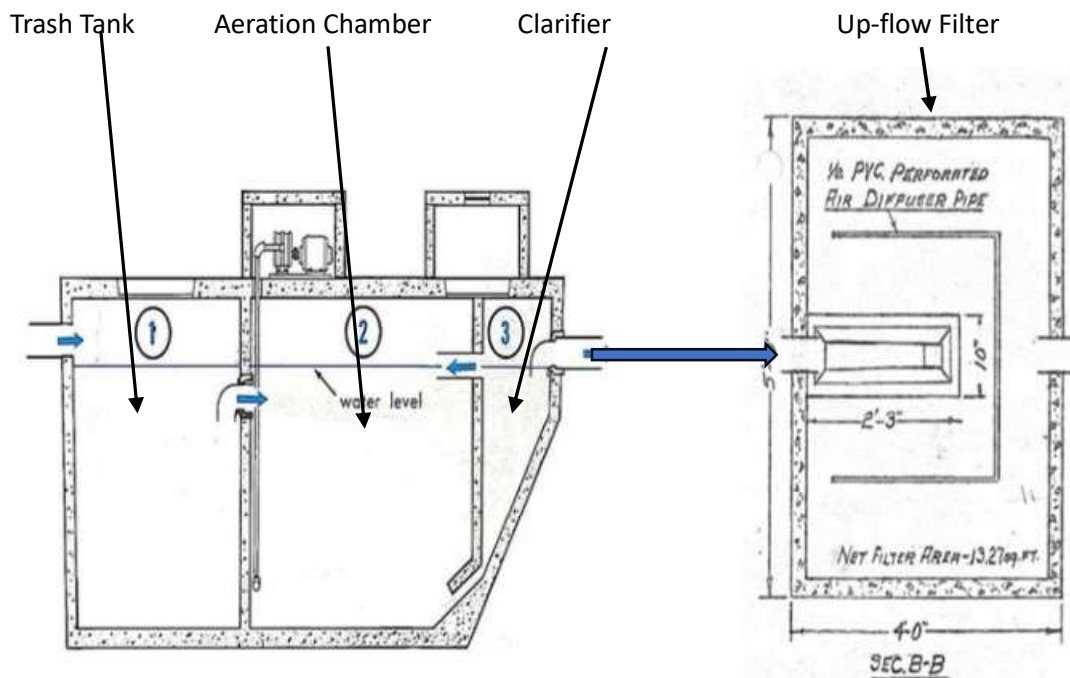


Oldham Aeration - Operation and Maintenance

1. Aeration sewage treatment systems are issued an annual permit.
2. A service contract with a registered service contractor or the health department is required.
3. An annual inspection is required by a registered service contractor or a trained homeowner. Submit a copy of the inspection report to the health department within sixty days of the inspection.
4. The permit requires the tank to be pumped every eight years, at a minimum. Some tanks may benefit from more frequent pumping, based on the size of the tank and the number of people.
5. The timer should be set to run 10-15 minutes "on" for every 30-minute cycle. Old timers should be set for 18 hours total running time.





6. Trash tank: 400-gallon capacity, receives the raw sewage from the house. All foreign matter and heavier solids settle in the compartment. The solids, which will decompose in water, together with the liquid waste, then pass through the elbow into the second compartment.
7. Aeration chamber: The capacity of this compartment is 600 gallons. Air is supplied by a positive displacement type pump located in a concrete riser on the top of the tank and discharged into the contents of the compartment near the inlet wall and bottom of the tank. The discharge of air at this point causes the liquid in the compartment to circulate or roll with sufficient force that all of the solids in the sewage are maintained in suspension in the liquid. Oxygen in the solution creates an environment favorable to the growth of aerobic bacteria that digest the solids in the sewage. The liquid waste then passes into the third compartment.
8. The third compartment is the clarifier. When the contents of the aeration compartment enter the clarifier, the treated solids, no longer subjected to the rapid circulation of the aeration compartment, settle to the bottom of the clarifier and return to the aeration compartment by gravity through a slot at the bottom of the tank, where they are further digested. The lighter solids, which will float, are returned to the aeration compartment by means of a skimming device located at the surface of the liquid. Clear liquid is discharged from the clarifier from a point 2" below the surface of the liquid to the up-flow filter.
9. The up-flow filter is a separate tank. Here, clarified sewage is directed to the tank bottom via a PVC pipe. From there, it flows upward through filter gravel for final treatment before leaving the tank via a discharge weir.