

MOUND SYSTEM OWTS OM&M MAINTENANCE REQUIREMENTS

Yolo County

Dept. of Community Services ~ Environmental Health Division

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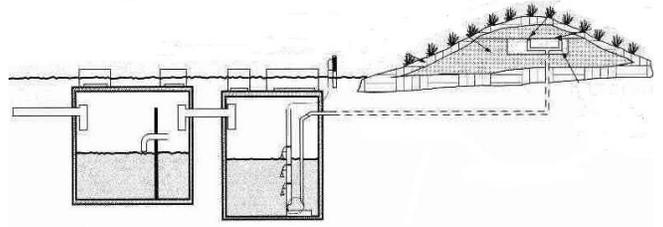


Illustration courtesy of the United States Environmental Protection Agency.

What is a Mound System OWTS/Septic System?

A Mound System consists on an elevated sand bed with a gravel distribution bed covered by soil fill. It is intended to raise the soil absorption system above grade and provide further treatment (sand filtration) of effluent before it reaches native soils. It uses the shallow surface soils for broad distribution of effluent and is used to mitigate high water table and shallow soil conditions on flat or gently sloping terrain. Monitoring is the responsibility of the system owner and must be performed by a Qualified Service Provider. Mound Systems may require an Operating Permit if determined by YCEH.

Mound System OWTS Management Requirements:

	Work <i>Monitoring is the responsibility of the system owner and must be performed by a Qualified Service Provider.</i>	Frequency <i>Unless operating under an annual Operating Permit, these frequencies are mostly recommended</i>
Inspection	<ul style="list-style-type: none"> • Conduct routine visual observations of mound and downslope area and surroundings for wet areas, pipe leaks or damage, soil erosion, drainage issues, abnormal vegetation, gophers or other problems. • Perform all inspections of pump and appurtenances (per Section 9 of the YCEH OWTS Manual). • Record observations. 	According to Permit conditions, typically: <ul style="list-style-type: none"> • First 3 months (required), and • Once every 3 years or after a major storm event or earthquake (recommended).
Maintenance	<ul style="list-style-type: none"> • Purge laterals, squirt and balance. • Exercise valves to ensure functionality. • Perform all maintenance work as recommended by equipment manufacturer for any special valves or other components. • Maintain mound area landscape vegetation, as required. • Investigate and repair erosion, drainage or other disposal field problems, as needed. • Investigate and perform distribution system corrective work, as required. • Record work done. 	<ul style="list-style-type: none"> • Typically, at least once every three years (recommended). • Distribution maintenance as recommended by the equipment manufacturer or System Designer (recommended).
Water Monitoring & Sampling	<ul style="list-style-type: none"> • Measure and record water levels in monitoring ports in distribution bed, sand fill and around mound perimeter. • Obtain and analyze water samples from monitoring wells, as applicable, per Permit requirements. 	<ul style="list-style-type: none"> • Measure Mound System water levels at least once every three years. • Effluent monitoring not required unless System utilizes Supplemental Treatment.
Reporting	<ul style="list-style-type: none"> • Report findings to YCEH per Permit requirements. • Standard report to include dates, monitoring port and monitoring port readings and other data collected, work performed, corrective actions taken, and performance summary. • Report public health/water quality emergency to YCEH immediately. 	<ul style="list-style-type: none"> • Typically, none required unless required by YCEH.

Annual Operating Permit Report Minimum Requirements, if necessary:

1. Septic Tank:
 - a. Inspection frequency should be once every 3-7 years.
 - b. Scum and sludge measurements (pumped by registered septage pumper, as needed).
 - c. Water intrusion (*dissolved oxygen measured by the service provider only, if needed*).
 - d. Integrity of tank, including observation for: cracks or indications of structural deterioration; condition of inlet and outlet T's; condition of lids and risers; indication of leaks in risers.
 - e. Presence and condition of effluent filter.
2. Pump and Dosing Chamber:
 - a. Scum and sludge measurements, pumping as needed.
 - b. Indication of water intrusion (dissolved oxygen measured by the service provider only).
 - c. Integrity of tank, including observation for: cracks or indications of structural deterioration; condition of inlet and outlet T's; condition of lids and risers; indication of leaks in risers.
 - d. Condition of and correct operation of all floats.
 - e. Orderly wrap of float cords.
 - f. Condition of pump intake screen.
 - g. Verification of pump cycle.
 - h. Siphon sitter functioning, if applicable.
3. Control panel in good working order based on checking the following components:
 - a. Timer and digital counter readings recorded by the service provider during the inspection. For control panels that record pump activity electronically, manual recordings are not necessary.
 - b. Pump cycle counter operation verified by the service provider in the field by manual operation of the pump. For control panels that record pump activity electronically, counter operation can be verified remotely.
 - c. Audible and visual alarms functioning.
 - d. Run time appropriate, if demand dose.
 - e. Electrical box free from moisture and secure connections.
4. Dispersal/Leach Field (see table):
 - a. Indication of effluent breakout or discharge to surface of the ground.
 - b. Upkeep and accessibility of observation port and inspection ports.
 - c. Area verified as free from road, structures, vehicular traffic, surface water drainage with downspouts and landscape drainage properly diverted
 - d. Results of hydraulic loading test, if test is needed.