

Table 5-12 Maintenance standards for closed treatment systems (tanks/vaults).

| Maintenance Component | Defect or Problem | Condition When Maintenance is Needed | Results Expected When Maintenance is Performed |
|-----------------------|--|---|---|
| Storage area | Plugged air vents | One-half of the cross section of a vent is blocked at any point or the vent is damaged. | Vents are open and functioning. |
| | Debris and sediment | Accumulated sediment depth exceeds 10% of the diameter of the storage area for ½ length of storage vault or any point depth exceeds 15% of diameter. (Example: 72-inch storage tank requires cleaning when sediment reaches depth of 7 inches for more than ½ the length of the tank.) | All sediment and debris are removed from storage area. |
| | Joints between tank/pipe section | Openings or voids allow material to be transported into facility. (Will require engineering analysis to determine structural stability.) | All joints between tank/pipe sections are sealed. |
| | Tank/pipe bent out of shape | Any part of tank/pipe is bent out of shape for more than 10% of its design shape. (Review required by engineer to determine structural stability.) | Tank/pipe is repaired or replaced to design specifications. |
| | Vault structure: includes cracks in walls or bottom, damage to frame or top slab | Cracks are wider than ½ inch and there is evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determine that the vault is not structurally sound. | Vault is replaced or repaired to design specifications and is structurally sound. |
| | | Cracks are wider than ½ inch at the joint of any inlet/outlet pipe, or there is evidence of soil particles entering the vault through the walls. | No cracks are more than ¼-inch wide at the joint of the inlet/outlet pipe. |
| Manhole | Cover not in place | Cover is missing or only partially in place. Any open manhole requires maintenance. | Manhole is closed. |
| | Locking mechanism not working | Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than ½ inch of thread (may not apply to self-locking lids). | Mechanism opens with proper tools. |
| | Cover difficult to remove | One maintenance person cannot remove lid after applying normal lifting pressure. <i>Intent: To prevent cover from sealing off access to maintenance.</i> | Cover can be removed and reinstalled by one maintenance person. |
| | Ladder unsafe | Ladder is unsafe due to missing rungs, misalignment, unsecure attachment to structure wall, rust, or cracks. | Ladder meets design standards. Allows maintenance person safe access. |
| Catch basins | See Table 5-15 (catch basins). | See Table 5-15 (catch basins). | See Table 5-15 (catch basins). |