

Inspecting Onsite Sewage Disposal Systems (OSDS) For Property Transfers in Maryland

The Annotated Code of Maryland, Environment § 9-217.1, requires all individuals performing inspections of onsite sewage disposal systems for property transfers to complete an MDE approved course in the proper inspection of OSDS. MDE recommends and recognizes a standardized procedure for inspecting onsite sewage disposal systems (OSDS) for property transfer. A proper OSDS inspection should include the following four components: a file search, a homeowner/occupant interview, a system inspection/evaluation and reporting of findings. MDE also recommends that an MDE approved course be taken once every five years in the proper inspection procedures.

FILE SEARCH

The purpose of the file search is to determine what, if any, archival information is available about the OSDS on the property. This information may be found at the offices of the local health departments or other local environmental agencies involved in OSDS permitting. A public Information Act (PIA) request letter may be required by some agencies, and there may be a fee associated with this service. A waiting period may also be required for research to be completed. Usually, the more detailed the information that is provided to the record keeping agency regarding a property's address, ownership history, tax map parcel number identifiers, etc., the less time it may take to find and compile the pertinent records. Archival information may not be available for all systems. Useful information to be gleaned from the file search may include system age, type, design and location. Other information that may be in the file would be historical info, soils or percolation test data, outstanding complaints or violations associated with the property. This is a very important step, aiding the inspector in locating components of the system in the field, and showing where evidence of a system malfunction might be expected to be seen.

HOMEOWNER/OCCUPANT INTERVIEW

The homeowner or occupant may have information pertaining to the OSDS's current or past performance that may only be revealed by interviewing them or by having them complete a questionnaire. Key information to gather is the current and past usage of the house. It is very important to note how many occupants of the house there are, if the property is vacant, or if there is, or has been, a commercial use of the property that may influence wastewater strength. It should also be noted if a system is under-utilized or is only seasonally used. The performance of a system can only be assessed based on the existing occupancy of the property. A system that is functioning adequately for two individuals may be inadequate for a fully occupied house consisting of multiple bedrooms. Use of the property owner questionnaire confers responsibility for revealing important information with the property owner (seller).

SITE and SYSTEM EVALUATION/INSPECTION

The primary purpose of the site inspection is to determine the type, size, structural integrity and location of all OSDS field components along with a determination on whether the system is functioning hydraulically (effluent not surfacing or backing up into the house). At a minimum, a detailed inspection form/checklist should be used and contain certain minimum information.

The septic tank, other pretreatment unit including BAT units (Best Available Technology for Nitrogen Reduction) must be structurally sound and operational with required inlet and outlet baffles/tees and or necessary components. Tanks and access riser connections should be watertight and not leak untreated sewage or allow infiltration of surface or groundwater. Liquid levels in the tanks should reflect that the system is functioning according to design. Toilets or drains on the lowest level of the house must flush or drain adequately. There should be no discharge of effluent to the ground surface or to surface waters. If there is ponding of water or effluent on the ground's surface, or if there are discharge pipes on the property, it may also be necessary to dye test the system. However, dye tests used by themselves do not constitute an adequate or proper septic inspection as at best they can only support a conclusion that a system is not functioning.

A proper hydraulic load test should be conducted. This is especially important for questionable systems or underutilized properties. Tanks should never be pumped before an inspection but need to be pumped during a proper inspection by a properly trained and licensed pumper only after careful observation of the liquid levels in the tank(s). Observations should be made of the tank during the pump out to see if effluent or groundwater flows back into the tank as it is evacuated. Once emptied, certain components such as baffles and tees can be clearly observed and only then can the structural integrity of the tank properly evaluated. Some excavation is usually necessary to perform a proper septic inspection as all components of a system may not have ready access.

FINAL REPORT

The final report for an OSDS inspection should include the following minimum information:

The address of the property and date of the site inspection

The type, size, structural integrity and number of system components

Information from current/recent occupants of the house/facility about the system operation & usage

Information obtained from the local health department (or permitting agency) concerning the OSDS.

It should be noted if no information was available or if the information was requested but not received as of the date of the final report.

A sketch of the OSDS layout showing the location of all system components relative to the house and/or other prominent site features (eg., sheds, pools, etc)

A conclusion/comments section that specifies what was observed. At times, it will be necessary to characterize the condition of the system. Suggested terminology could include: system is acceptable, system is acceptable with concerns, further evaluation is needed, or system condition or performance is unacceptable.

8-2014