



OOWA's Best Practices Series: How to Decommission an Existing Onsite Sewage System

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BP 4: How to Decommission an Existing Onsite Sewage System

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Decommissioning Existing Onsite Sewage Systems

Decommissioning existing onsite sewage systems is an important part of our industry. When existing systems are repaired, upgraded or replaced, some or all components of an existing system may require decommissioning. It is important that onsite sewage system components are decommissioned properly in order to protect the safety of property owners and their visitors, as well as the ensure continued protection of the environment. Unfortunately, there are no provincial guidelines or regulations for this practice. OOWA has developed the following recommendations based on best practices currently used by industry members.

Tanks and Chambers

Existing tanks and chambers should be properly decommissioned in order to prevent future collapse, which could pose a significant safety risk. To decommission concrete tanks and chambers, the contents of the tank should be pumped out by a licensed sewage hauler, the inlet and outlet pipes should be disconnected and one of the following methods may be used:

- a. Backfill the tank with clean sand or granular material. Ensure that inlets and outlets are plugged to prevent water from pooling in the tank; **or**
- b. Crush the tank in place and backfill with native material or clean fill. Ensure during crushing that the bottom of the tank is broken to prevent water pooling; **or**
- c. Remove the tank and dispose of the material according to local regulations. Backfill the excavation with native material or clean fill.

If option 1a) is preferred consideration may be given to pressure washing the tank and having the washwater removed by the hauler, prior to backfilling. Any backfilled areas should be compacted suitably to prevent future settling. Plastic access risers or lids should be removed prior to backfilling/crushing and disposed of in accordance with local bylaws.

For pump chambers or chambers with electrical components the power supply must be disconnected, and electrical devices should be removed and disposed of in accordance with local regulations. Devices containing mercury must be removed and disposed of at approved hazardous waste receiving facilities.

Leaching Beds

Leaching beds may be decommissioned in one of two ways, depending on the intended future use of the leaching bed area. If the area of the leaching bed is not required for the construction of a replacement system, or any other type of building or structure then the leaching bed may be abandoned in place, as follows:

1. Disconnect and plug at both ends any underground sewer piping leading to the leaching bed, for example the discharge pipe from the septic tank to the header pipe or distribution box. Sewer piping may be plugged with grout or another sealant, or capped. Sewer pipe may also be removed and disposed of according to local regulations.
2. If a distribution box is present, it should be removed or decommissioned according to the steps outlined above for tanks and chambers.
3. If inspection ports are present, the ports should be removed and backfilled. Any piping should be cut off and plugged prior to backfill.
4. Once all connections have been disconnected the remainder of the bed may be abandoned in place.
5. If any part of the leaching bed has failed at the surface material should be removed and replaced with at least 300 mm of clean soil to avoid human contact.

If the area of the leaching bed is to be used for another purpose (i.e. construction of a building, etc.), the leaching bed should be removed. All stone and pipe, as well as any underlying soil showing signs of biomat contamination. i.e. black clogging material should be excavated and removed. Material removed should be disposed of in accordance with local regulations. The area may be backfilled with clean sand or granular material suitable for future construction. If a replacement leaching bed is proposed in the same area, care must be taken to ensure that all clogging material is removed and underlying receiving soils are well scarified prior to the placement of any fill material.