



Sewage Holding Tank Construction Permit Policy 5.1

Appendix A

SEWAGE HOLDING TANK PERMITTING AND CONSTRUCTION GUIDELINES

1. Local Government Bylaws

Applications to construct a holding tank must be considered whether there are or are not existing local government pump and haul bylaws regulating tank servicing.

2. Design

As a minimum, the following design guidelines should be included in either the applicant's design or as a permit condition.

Material:

- Pre-cast concrete to a septic tank standard (B66-00 CSA approved) or poured in place concrete to the construction permit size specifications.
- The tank must be watertight such that no effluent can flow out. And a test for water tightness should be conducted prior to the tanks use.
- Fibreglass or other resin type materials are generally not approved. This is due to floatation problems in high water table areas and potential for damage during installation and frequent pumping. Engineered designs to prevent damage, floatation or collapse may be considered.
- Metal tanks of any form **are not acceptable.**

Volume:

- Minimum liquid storage capacity should be at least ten days of daily design sewage flow or 9100 litres (2000 imp gallons) as calculated using standard practice. This may vary depending on local servicing conditions and the structure(s) being served. For example a

holding tank serving only a single handwashing sink could be provided with a much smaller tank than that needed for a three bedroom home.

Alarms:

- Two types of alarm systems are required. One alarm when capacity reaches 75% and another when capacity reaches 90% full. Alternatively, two separate alarms installed at the 75% level could be considered. Both warning devices should be located in a conspicuous location inside or outside the dwelling. Both alarms should be connected to separate electrical circuits. Hard wiring of alarms into the electrical circuit should be required while plugs into wall receptacles should be discouraged. If electric power is not available, mechanical alarms would be acceptable.

Location:

- The holding tank must be located in an area that is easily accessible for the pump out vehicle. Setback distances from property lines, buildings, water lines etc. should conform to septic tank siting requirements of the BC Sewerage System Regulations Standard Practice Manual. Note the following minimum setback requirements:
 - 1 meter (3ft.) from a parcel boundary or a building;
 - 15 metres (50 ft.) from a drinking water suction line,
 - 3 meters (10 ft.) from a drinking water suction line, sleeved,
 - 3 meters (10 ft.) from a drinking water line under pressure,
 - 3 meters (10 ft.) from an intermittent fresh water body,
 - 15 metres (50 ft.) from a source of domestic water,
 - 10 meters (30 ft.) from a fresh water body,
 - 7.5 metres (15 ft.) from a marine water body
 - 15 metres (50 ft.) from a well as per SSR section 3.1
- To prevent intrusion of water into the holding tank, all-possible ground water entries should be located 0.3 meters (1 foot) above the twenty-year flood level. For areas that have a controlled flood area, the designated Flood Control Level would apply.
- Where a tank must be installed below the Flood Control Level, the tank and all fittings must be water tested and proven to not leak prior to authorization for use. Installation of the tank must also be designed to prevent floating of the tank as a result of high ground water.

Connections:

- All wastewater (grey and black) discharged from the building must be connected to the holding tank. This could exclude wastewater from composting toilets where their

installation and use is authorized by local government. This could also exclude wastewater that is being discharged to a sewerage system under the Sewerage System Regulation or wastewater being discharged into a system approved under another enactment.

3. Metering

- Water meters should be installed on the domestic water supply line prior to the domestic water line entering the building. Irrigation and outdoor water should be separated from this metering. Recording the buildings water use should be entered in the maintenance logbook.

4. Maintenance Plan and Maintenance Records

- Maintenance records should include the requirement for a logbook that must be made available to an EHO upon request. It should include; volume of wastewater pumped, volume of domestic water used, date of service, company that provided the service, final disposal site and the name of the recorder.
- A maintenance plan must be included with the application and reviewed by the EHO as part of the EHO's determination in being satisfied that use of the holding tank will not cause a health hazard.

5. Authorization

- The EHO should conduct a final inspection prior to authorizing the holding tank's use.
- Even though the application to construct includes an expiry date the issuing official may include an expiry date as a condition in writing. The written condition may be, "This permit to construct a sewage holding tank expires two years after the date of issuance. If construction of the sewage holding tank is not completed within two years of the permit issue date construction of the sewage holding tank must cease and any further construction of the sewage holding tank can only commence once a new permit has been issued by an Environmental Health Officer."