

A D V A N C E D

ENVIROSEPTIC<sup>MD</sup>



## **Enviro-Septic® System**

### *Installation Summary*

**Residential Systems**

**Province of Ontario**

**September 2018**

[Make-Way Environmental Technologies Inc.](http://www.make-way.com)

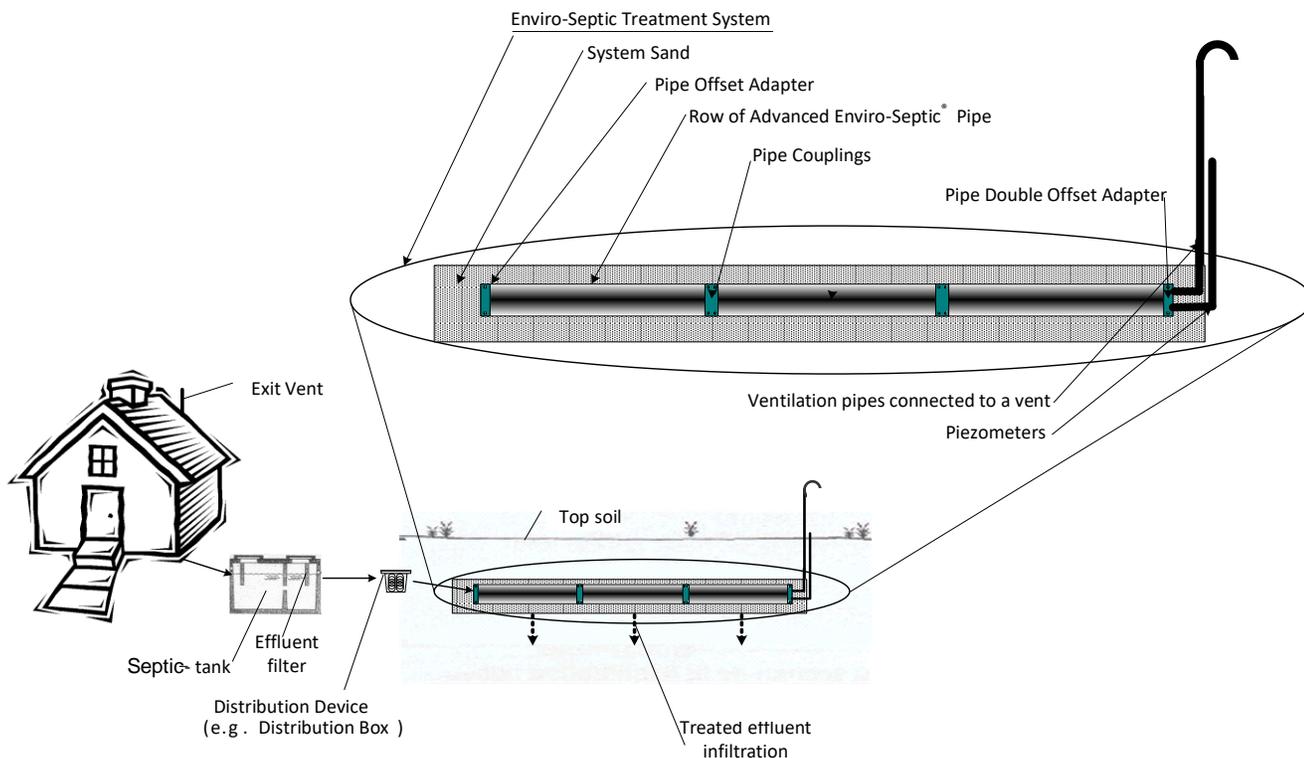
## Introduction

The Enviro-Septic® System needs to be installed in conformity with the Enviro-Septic® BMEC Authorization, the Enviro-Septic® Design and Installation Manual and the OBC regulations.

This summary is a guideline on how to install the Enviro-Septic System. For more details please refer to the Ontario Design and Installation Manual or contact Make-Way Environmental Technologies Inc. 1-866-625-3929.

## Diagram of Installation

The following diagram shows the components that must be installed to complete the Enviro-Septic® System. The order of installation of the different components may vary depending on site constraints.



*Installation summary*

1. Obtain installation drawings and the necessary permits. Once the drawings and permits are in place begin to gather all necessary materials.

2. Install the septic tank and effluent filter in accordance with manufacturer's recommendations and OBC regulations.



3. Identify the surface area to be excavated and excavate the native soil as required. The installation will depend on whether it is an in ground, partially raised or fully raised system. Scarify the receiving soil surface with a scarifying bucket.



4. Install the sample port and the drainage pipe as shown in the drawing.



5. Install the sample tray, the sample tray's drainage pipe and the PVC coupling. Make sure the sample tray's drainage pipe stays on the bottom of the sample tray as shown. The sample tray will be located under the first pipe of any row.



6. Add System sand to the outside of the sample tray first to support the side walls, then add system sand inside covering the drainage pipe.



7. Add a layer of 0.30 m of system sand / imported sand throughout the excavated area. Make sure that system sand is under the rows of Advanced Enviro-Septic pipe as per our design manual. Once the sand is in place level it lengthwise.



8. Install the Advanced Enviro-Septic® pipes on the system sand keeping with the spacing shown on the drawings. The seam of the geotextile fabric that covers the pipes must always face up. Connect the pipes together using the couplings supplied. Once the couplings are connected make sure to pull the geotextile membrane over the edges of the couplings.



9. Install the offset adapters at both ends of the rows of pipe. Once they are in place pull the geotextile membrane over the edges.



10. Check the spacing between the rows of pipes, make sure that the seams are upward and that all rows of pipe are leveled.



11. Stabilize the rows of Advanced Enviro-Septic® Pipes and add system sand / imported sand. Begin by covering the couplings and go to half of the height of Advanced Enviro-Septic® Pipe.



12. Push down the system sand by walking on both sides of the Advanced Enviro-Septic® pipes to fill any gaps that may have been created under the pipes.



13. Install the piezometers making sure that the horizontal pipe is level.



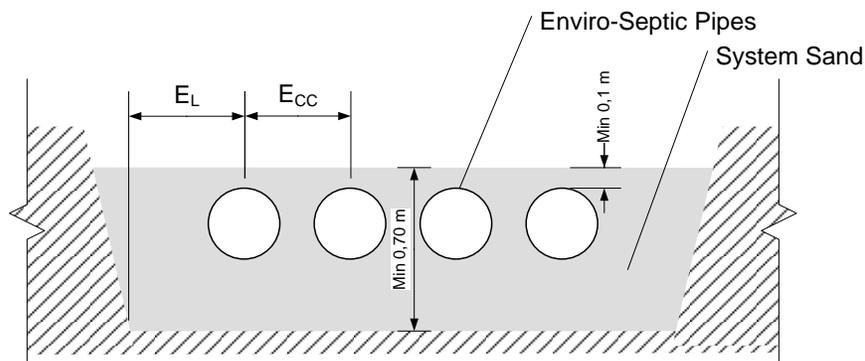
14. Install the ventilation manifold and the entry vent, keeping a 1% slope toward the Advanced Enviro-Septic® Pipes.



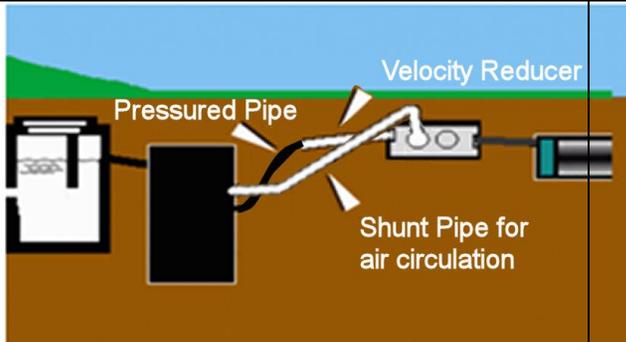
15. Install the distribution box and make sure it is levelled. Install the feeder pipes maintaining a 1% slope toward the Advanced Enviro-Septic® Pipes



16. Pour water into the distribution box and adjust the equalizers levels using the adjustment knobs.

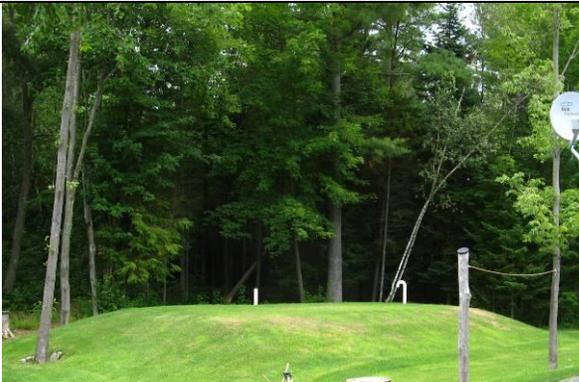


17. Completely cover the pipes with system sand making sure that at a minimum there is 100 mm on top of the pipes. The gaps between the pipes may be covered with imported sand.



18. When using a pump station, install a bypass pipe between the D-Box and pump station for air circulation. As an option you may connect a secondary vent at the D-Box but it must be 3 meters higher than the entry vent.

19. When using a pump, a velocity reducer must be used to connect the force main to the D-Box. The velocity reducer is a 4" PVC pipe that is 3 meters in length.



20. After the system sand / imported sand is in place cover the Enviro-Septic® System with a minimum of 200 mm of top soil permeable to air. Most system will be in ground but in the event the system is partially or fully raised make sure that there is a proper slope as per the OBC. Also crown the final grade to shed the rainwater.



21. Fill the septic tank with fresh water if required by the tank manufacturer or local regulations and perform a simple smoke test to make sure the air flows into the Advanced Enviro-Septic® pipes between the entry and exit vents.

22. When using a pump have a certified electrician make the necessary connections.

23. Fill out the Service Inspection Agreement send it to Make-Way Environmental Technologies Inc. Give the Owner the Ontario Home Owner's User Guide.

## HAVE A GOOD INSTALLATION

*Enviro-Septic® ...We reinvent the way to treat wastewater!*