

Note: The following amendments are to replace existing sections of the Sewerage System Standard Practice Manual dated June 07, 2005. These amendments are effective from Monday September 19<sup>th</sup> 2005.

## **2.10 Repairs and Replacements**

Where a sewerage system constructed prior to May 31, 2005 is in need of repair or replacement and the work cannot be done in accordance with the Sewerage System Standard Practice manual, the authorized person may deviate from the manual only to the degree necessary to repair or replace the system in a manner that will not create a health hazard.

In emergency situations, an authorized person may carry out the works necessary to eliminate health hazard arising from failed or failing systems and to maintain the function of that system until permanent repairs or replacements can be carried out in accordance with the Standard Practice manual.

Where the site constraints in Table 5-1 dictate, a Professional must supervise the repair or replacement of a system.

Existing systems that are subject to repairs or replacement shall be brought into compliance with the Sewerage System Standard Practice manual where practicable.

All regulatory filing provisions apply

### **2.10.1 Component Repair or Replacement**

Authorized Persons will *not* be required to prepare and submit a “filing” document to the Health Authority for the repair or replacement of any minor parts of the system such as:

- 2 liquid level float switch;
- 3 pump of exact same brand and model;
- 4 level of D Box adjustment;
- 5 tank inlet or outlet fittings;
- 6 septic tank effluent filters cleaning or replacing;
- 7 dispersal field lines flushing or vacuuming; or,
- 8 a dispersal field line or pipe section replacement when the pipe is broken or damaged to the point where it is not working or likely to work.

### **2.10.2 System Repair or Replacement**

Authorized Persons *must* prepare and submit a “filing” document to the Health Authority for the repair or replacement of any major item of the system such as adding to or replacing septic/pump tanks, dispersal systems (trenches, beds, mounds), and lagoon cells. Where the existing system has failed due to increases in daily sewage flow rates

the repair or replacement shall be made to accommodate the increase in daily sewage flow.

## **11.2 Gravity Flow Subsurface Distribution**

The Authorized Person will:

- determine total daily flow rate from the facility using table 4-1 or 4-2;
- determine the distribution field size required using hydraulic loading rates table 5-3; and,
- gravity flow must not be used for distribution areas exceeding 152 lineal meters 60 cm wide trench (500 lineal feet/ 2 foot wide trench) or for distribution systems greater than 93 sq/meters (1000 sq/ft)

## **11.7 Low-Pressure Effluent Distribution**

The Authorized Person will:

- Determine total daily flow rate from the facility using table 4-1 or 4-2
- Determine the distribution field size required using hydraulic loading rates table 5-3
- Use pressure systems for distribution areas exceeding 152 lineal meters 60 cm wide trench (500 lineal feet/ 2 foot wide trench) or for distribution systems greater than 93 sq/meters (1000 sq/ft)
- Determine the total dynamic head pressure
- Determine the flow application rate
- Determine the distribution discharge orifice size and spacing
- Provide detailed technical and distribution system layout plans
- Perform a comprehensive test of all components and distribution pressure test to verify that the distribution system is in proper working order prior to final backfilling, grading and placing into operation

### **12.1.3 Bed Sizing**

Bed infiltrative bottom area required = Daily wastewater flow rate divided by hydraulic loading rate:

$$\text{Table 4-1 or 4-2} \div \text{HLR Table 5-3}$$

Infiltrative area = daily sewage flow divided by hydraulic loading rate X 1.35

Length of bed = infiltrative area divided by bed width

### **12.1.2 Construction Criteria**

Pressure distribution criteria recommended for seepage beds.

Bed must be level across its width and length, be constructed perpendicular to the slope and must be as long and narrow as possible. No more than three laterals must be used.

The bed must have not less than 15 cm (6") of aggregate depth between point of discharge and bed bottom infiltration area and must have a 5 cm (2") aggregate cover above distribution pipe.

For monitoring, the bed must be equipped with a minimum of two effluent infiltration monitoring wells located at proximal and distal ends of the bottom lateral run.

The aggregate must be covered with a non-biodegradable, breathable geotextile material or equivalent (building paper) and must have a soil cover of not less than 15 cm (6").

The sites must be graded to provide drainage away from bed surface area.

Seed or sod the site immediately after construction to prevent erosion.

**Table 5-4: Horizontal setback distances**

Distance to		From edge of distribution system <sup>4</sup> (metres/feet)				From watertight subsurface treatment tank (metres/feet)	
		Lagoon	Type 1 <sup>1</sup>	Type 2	Type 3 <sup>1</sup>	Septic <sup>1</sup>	Type 2 – 3 <sup>1</sup>
Property lines		15 m/ 50 ft.	3 m/ 10 ft.		1.5 m/ 5 ft.	1 m/ 3 ft.	1 m/ 3 ft.
Source of drinking water, well or water suction lines		30 m/ 100 ft. <sup>2</sup>				15 m/ 50 ft.	15 m/ 50 ft.
Water lines (pressure)		3 m/ 10 ft.		1.5 m/ 5 ft.		1 m/ 3 ft.	1 m/ 3 ft.
Drainage or building perimeter drain	Up-gradient	3 m/ 10 ft.		1.5 m/ 5 ft.		1 m/ 3 ft.	1 m/ 3 ft.
	Down-gradient	15 m/ 50 ft.		10 m/ 33 ft.		3 m/ 10 ft.	3 m/ 10 ft.
Building non-dwelling		15 m/ 50 ft.	1.5 m/5 ft.		1 m/ 3 ft.	1 m/ 3 ft.	1 m/ 3 ft.
Building dwelling		60 m/ 200 ft.	3 m/10 ft.		2 m/ 6 ft.	1 m/ 3 ft.	1 m/ 3 ft.
With basement	Up-gradient	60 m/ 200 ft.	3 m/ 10 ft.		2 m/ 6 ft.	1 m/ 3 ft.	1 m/ 3 ft.
	Down-gradient	60 m/ 200 ft	9 m/ 30 ft.		6 m/ 20 ft.	3 m/ 10 ft.	3 m/ 10 ft.
Break-out point		15 m/ 50 ft.	15 m/ 50 ft.	7.5 m/ 25 ft.	7.5 m/ 25 ft.	15 m/ 50 ft.	10 m/ 33 ft.
Utility services		1.5 m/ 5 ft.		1 m/ 3 ft.		1 m/ 3 ft.	1 m/ 3 ft.
Fresh water Marine water <sup>3</sup>		60 m/ 200 ft.	30 m/ 100 ft.		15 m/ 50 ft.	10 m/ 33 ft.	10 m/ 33 ft.
		30 m/ 100 ft	15 m/ 50 ft.				