



# Guidelines for Installation of Pre-Treatment Devices for Failed On-Site Wastewater Systems in Washtenaw County

October 28, 2003

The design of any system that utilizes a pre-treatment device shall be developed and submitted by a Professional Engineer or Registered Sanitarian in private practice experienced in the design of alternative on-site sewage systems. Any design for a specific site must include the following information:

## **I. Installation And System Applicability To Site**

- A. The Engineer/Designer shall provide a narrative on why the system is appropriate for the site in question and what alternatives have been considered
- B. If the manufacturer requires installer certification, installers must have proof of valid certification with the expiration date shown
- C. If the manufacturer does not require installer certification, a manufacturer representative shall be on site to supervise installation
- D. Automation, process control and remote offsite monitoring capability should be demonstrated and are highly recommended

## **II. System Operation And Maintenance**

- A. Standardized O & M forms developed by the manufacturer must be reviewed and approved by the Washtenaw County Environmental Health Regulations Department (WCEHRD) before use by certified operator.
- B. An **operation and maintenance agreement is required** to assure that proper operation and maintenance will be provided throughout the life of the system, in accordance with manufacturer's and designer's requirements. Additionally, the agreement must:
  - Provide for the contracting of a person or firm competent in providing services consistent with the system's specifications and the operation and maintenance requirements specified by the designer and those specified by the manufacturer
  - Contain procedures for notification to WCEHRD within five (5) days of a system failure
  - Provide the name of the certified operator (if required), along with a copy of the certification as issued by the manufacturer
  - Require the owner of the system to properly operate and maintain the system per manufacturer recommendations and standards; either a certified operator or a certified owner can accomplish this
  - Provide a written notification in the event the operator of system changes. This notification shall be supplied within seven (7) days

### **III. Reporting And Monitoring Requirements**

Effluent parameters shall be capable of meeting the ANSI/NSF STANDARD 40 Class I effluent limits, as indicated below, and be monitored quarterly for the first year of operation and annually thereafter. After one year of monitoring and reporting, and at the written request of the owner, the WCEHRD may reduce or increase the monitoring and reporting requirements. Effluent samples shall be collected and analyzed for the following parameters:

- BOD<sub>5</sub>
- TSS
- Total N
- Fecal Coliform

### **IV. Final Disposal Area Requirements:**

Final disposal area shall at a minimum:

- A. Utilize the best soils available on site
- B. Be situated in an area where minimum established isolation distances can be met
- C. Be sized in accordance with sand filter design criteria if trenches are to be used. For bed systems on clay soils, the soil-loading rate shall be no greater than 0.12 gallon per square foot per day
- D. Located in area not subject to flooding

### **V. Permitting Requirements**

Appropriate permit(s) must be obtained from the WCEHRD before commencement of construction. A permit will be released when the following are submitted and approved by staff:

- A. Engineering plans
- B. A Recorded Property Deed Restriction
- C. An operation and maintenance agreement
- D. Survey and legal description of property