Indiana State Department of Health

Environmental Public Health
2 North Meridian Street, 5-E
Indianapolis, IN 46204

Indiana Interpretation of *410 IAC 6-8.2*: Tanks Fitted with Aeration Units for Aerobic Digestion

410 IAC 6-8.2, Residential Sewage Disposal Systems, allows for the use of tanks fitted with aeration units for aerobic digestion of sewage in residential onsite systems; these units are commonly referred to as aerobic treatment units (ATU). The use of this technology is addressed in *Sections 58(e)* as described below. *Section 50(g)* allows the Indiana State Department of Health (department) to permit the use of new or more efficient sewage treatment processes; the use of secondary treatment systems (STS) is addressed in the *Indiana Standards for Secondary Treatment Systems*.

I. Requirements for new construction

A. *Section 50(b)* requires that the design, construction, installation, location, maintenance and operation of all residential onsite systems comply with the provisions of *410 IAC 6-8.2*.

B. An ATU must:

1. Conform to ANSI/NSF *Standard 40 Residential Wastewater Treatment Systems, for Class I plants* or to the standards of an equivalent testing laboratory [*Section 58(e)*];
2. Provide a minimum treatment capacity of 150 gallons per bedroom per day or 500 gallons, whichever is greater [*Section 58(e)*];
3. Be preceded by a septic tank [*Section 50(d)*] which meets all of the requirements of *Sections 58 through 60*; and
4. Discharge:
   a. To a soil absorption field (SAF); or
   b. Other treatment system approved by the department [*Section 58(e)*].

C. A SAF that receives effluent from an ATU must meet all of the requirements of *410 IAC 6-8.2*, including size of the SAF. A SAF may not be reduced in size when an ATU is included in the design of a residential onsite system [*Section 50(b)*].

II. Requirements for repair/replacement

A. The provisions of *410 IAC 6-8.2* relating to system design and installation do not apply where repair/replacement is necessary due to system defect, failure or malfunction. The local board of health may use its best judgment on the design and installation of a repair/replacement system [*Section 52(b)*].

B. It is the determination of the department that a LHD may not apply best judgment [*Section 52(b)*] to waive the requirement of *Section 58(e)* (that tanks fitted with aeration units for aerobic digestion conform to *ANSI/NSF Standard 40, Residential Wastewater Treatment Systems* for Class I plants or to the standards of an equivalent testing laboratory).

C. A LHD must also comply with the requirements of *Indiana Standards for Secondary Treatment Systems*, *Section VII*.C, which requires:

1. All new components; or
2. Documentation that each component proposed for reuse:

a. Is watertight and in good condition (using test procedures that comply with requirements of the department); and
b. Complies with size and product requirements in applicable sections of *410 IAC 6-8.2* and *standards* of the department.

III. Provision for SAF size reduction with a secondary treatment system (STS)

The department approves secondary treatment systems (STS) for use in Indiana, under the provisions of *410 IAC 6-8.2-50(g)*, in the *Indiana Standards for Secondary Treatment Systems*. These standards allow for a reduction in the size of the SAF when an STS is included in the onsite system.

IV. Inspection and operation and maintenance (O&M)

A treatment unit allowed for in this interpretation, and a STS, require ongoing O&M to function properly. One of the requirements of *ANSI/NSF Standard 40* for Class I plants is that the manufacturer of the treatment unit, or its authorized representative, include a 2-year initial service policy in the original purchase price of the treatment unit. Nonetheless, **it is important that LHDs have in-place local ordinances, policies and procedures for enforcement of O&M requirements so that necessary O&M takes place regularly over the lifetime of the treatment unit**.

Approved: June 1, 2009
Effective: June 1, 2009
Revised: January 14, 2011

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