

Indiana Interpretation of *410 IAC 6-8.3*: Tanks Fitted with Aeration Units for Aerobic Digestion

[*410 IAC 6-8.3, Residential On-Site Sewage Disposal Systems*](#), allows for the use of tanks fitted with aeration units for aerobic digestion of sewage in residential on-site systems; these units are commonly referred to as aerobic treatment units (ATU). The use of this technology is addressed in *Section 60(h)* as described below. *Section 52(h)* 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 52(b)* requires that the design, construction, installation, location, maintenance and operation of all residential on-site systems comply with the provisions of [*410 IAC 6-8.3*](#).
- B. An ATU must:
 1. Conform to NSF/ANSI *Standard 40 Residential Wastewater Treatment Systems, for Class I plants* or to standards of an equivalent third party product testing laboratory acceptable to the department that meet or exceed the NSF/ANSI standards [*Section 60(h)(1)*];
 2. Provide a minimum treatment capacity of 150 gallons per bedroom per day [*Section*];
 3. Be preceded by a septic tank [*Section 60(h)(4)*] which meets all of the requirements of *Sections 60 and 61*; 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 6-8.3*](#), including the size of the SAF. A SAF may not be reduced in size when an ATU is included in the design of a residential on-site system [*Section 60(h)(5)*].

II. Requirements for repair/replacement

- A. The provisions of [*410 IAC 6-83*](#) 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 53(i)*].
- B. It is the determination of the department that a LHD may not apply best judgment [*Section 53(i)*] to waive the requirement of *Section 60(h)(1)* (that tanks fitted with aeration units for aerobic digestion conform to NSF/ANSI *Standard 40, Residential Wastewater Treatment Systems for Class I plants* or to the standards of an equivalent third party product testing laboratory acceptable to the department that meet or exceed the NSF/ANSI standards).
- 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 6-8.3*](#) and the 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 6-8.3-52(h)*, and 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 on-site 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 *NSF/ANSI 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.**

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