

Chapter ILHR 83

PRIVATE SEWAGE SYSTEMS

ILHR 83.01	Purpose (p. 259)	ILHR 83.12	Sizing soil absorption systems (p. 284)
ILHR 83.02	Definitions (p. 260)	ILHR 83.13	Installation—conventional soil absorption systems (p. 286)
ILHR 83.03	Approvals and limitations (p. 266)	ILHR 83.14	Pressure distribution systems (p. 288)
ILHR 83.04	Specific limitations (p. 266)	ILHR 83.15	Septic tanks and other treatment tanks (p. 298)
ILHR 83.05	Local filing requirements (p. 268)	ILHR 83.16	Maintenance and sludge disposal (p. 303)
ILHR 83.055	Issuance of building permits (p. 269)	ILHR 83.17	Chemical restoration (p. 303)
ILHR 83.056	Petitions for variances for existing systems (p. 270-3)	ILHR 83.18	Holding tanks (p. 303)
ILHR 83.06	County administration (p. 270-3)	ILHR 83.19	Inspection and tests (p. 306)
ILHR 83.07	Plan review—department (p. 271)	ILHR 83.20	Materials (p. 306)
ILHR 83.08	Examination of plans and specifications (p. 272)	ILHR 83.21	Building sewers and drains (p. 312)
ILHR 83.09	Site evaluation (p. 273)	ILHR 83.22	Alternative private sewage systems (p. 312)
ILHR 83.10	Site requirements (p. 280)	ILHR 83.23	Mound systems (p. 315)
ILHR 83.11	Initial adverse determination (p. 283)		Appendix (p. 340)

Note: Chapter H 63 was created as an emergency rule effective 6-21-80; chapter H 63 as it existed on June 30, 1983 was renumbered to chapter ILHR 83.

**ILHR 83.01 Purpose.** (1) **GENERAL.** The underlying principles of this chapter as authorized in s. 145.02 (2), Stats., are basic goals in environmental health and safety accomplished by proper siting, design, installation, inspection, and maintenance of private sewage systems. The prerequisites necessary for the essential protection of the health of the public and the environment are the same everywhere. As unforeseen situations arise which are not specifically covered in this chapter the basic principles enumerated in this section shall serve to define intent.

(2) **BASIC PRINCIPLES.** (a) *Need.* Every building intended for human habitation or occupancy shall be provided with a properly functioning system for treatment and disposal of domestic waste.

(b) *Public sewers.* Every building intended for human habitation or occupancy on land abutting a street, right-of-way, or easement in which there is a public sewer, or on land deemed accessible to public sewer, shall have an individual connection to the public sewer and the private sewage system serving such building shall be properly abandoned.

(c) *Discharges prohibited.* Every private sewage system shall be designed, located and constructed to prevent any discharge of sewage or partially treated sewage into drain tiles, onto the ground surface, into the structure served, into the surface waters of the state or into the groundwater of the state including zones of seasonal soil saturation.

(d) *Maintenance.* Every private sewage system shall be adequately maintained.

(e) *Nuisance.* Every private sewage system shall be designed, located and constructed so as not to create a nuisance.

(f) *Sizing*. Every private sewage system shall be designed and constructed to adequately dispose of all the wastewater generated in the structure or facility it is serving.

History: Cr. Register, December, 1980, No. 300, eff. 1-1-81; renum. from H 63.01, Register, June, 1983, No. 330, eff. 7-1-83.

**ILHR 83.02 Definitions.** For the purpose of this chapter, the following definitions shall apply. The dictionary meaning shall apply for all other words.

(1) "Aggregate" means washed graded hard rock that has been washed with water under pressure over a screen during or after grading to remove fine material and with a hardness value of 3 or greater on Moh's Scale of Hardness. Aggregate that can scratch a copper penny without leaving any residual rock material on the coin would have a harness of 3 or more on Moh's Scale of Hardness.

(2) "Alternative private sewage system" means a system as defined in s. 145.022 (1) (a), Stats. The alternative private sewage systems included in this chapter, but not limited by enumeration, are mound systems and shallow sub-surface pressure distribution systems used on sites not meeting the soil criteria for conventional private sewage systems.

(3) "Approved" means approved or accepted by the department.

(4) "Bedrock" means the rocks that underly soil material or are at the earth's surface. Bedrock is encountered when the weathered in-place consolidated material, larger than 2 mm in size, is greater than 50% by volume.

(5) "Building" means a structure having walls and a roof erected or set upon an individual foundation or slab-constructed base designed or used for the housing, shelter, enclosure or support of persons, animals or property of any kind. A mobile home is included in this definition. Each structure abutting another structure which does not have an ingress-egress doorway through the basement foundation walls, or structures with separate exterior or exterior abutting walls, or public use structures separated by an unpierced firewall, shall be considered as a separate or individual building.

(6) "Cesspool" means a covered excavation in the ground which receives sewage or other organic wastes from a drainage system, and so designed as to retain the organic matter and solids, permitting the liquids to seep into the soil cavities.

(7) "Cleanout" means a plug or cover made of material approved by the department joined by means of a screw thread to an opening in a pipe, which can be removed for the purpose of cleaning or examining the interior of the pipe.

(8) "Clear water wastes" means cooling water and condensate drainage from refrigeration compressors and air-conditioning equipment, water used for equipment chilling purposes, liquid having no impurities or where impurities have been reduced below a minimum concentration considered harmful, and cooled condensate from steam heating systems or other equipment.

(9) "Color" means the moist color of the soil based on Munsell soil color charts.

(5) **ACCEPTANCE.** No private sewage system shall be used until the proper sanitary permit, inspection and a revised plan, if required, has been accepted and filed by the county authority.

(6) **PLAN FILING.** The county shall establish a filing system which provides a system of retrieval of sanitary permits and plans and may set by ordinance a filing fee. The county may require that additional information be included on the plan to aid in filing, indexing or retrieving permits and plans.

History: Cr. Register, December, 1980, No. 300, eff. 1-1-81; renum. from H 63.05, Register, June, 1983, No. 330, eff. 7-1-83.

**ILHR 83.055 Issuance of building permits.** Pursuant to s. 66.036, Stats., building permits issued by a county, city, village or town for construction of any structure not served by a public sewer and requiring connection to a private sewage system shall be issued in accordance with the procedures of this section.

(1) **NEW CONSTRUCTION.** A county, city, village or town may not issue a building permit for construction of a new structure which requires the installation of a private sewage system unless a sanitary permit for the installation of the private sewage system has been obtained by the owner.

Note: Section ILHR 83.06 outlines the procedures for the issuance of sanitary permits. Section 145.19, Stats., mandates that no private sewage system may be installed unless the owner of the property holds a valid sanitary permit.

(2) **RECONNECTIONS.** (a) A county, city, village or town may not issue a building permit for the following conditions unless the owner provides the information specified in par. (b):

1. Construction of a structure to be connected to an existing private sewage system;
2. Disconnection of a structure from an existing private sewage system and connection of another structure to the system; or
3. Reconstruction of a structure that is connected to a private sewage system and that has become uninhabitable due to damage resulting from fire, wind or other manmade or natural disasters.

(b) Documentation shall be provided to verify:

1. That the existing private sewage system is not a failing system and has sufficient size and soil conditions to accommodate the wastewater load as specified in sub. (3); and
2. That the structure meets the set back requirements as specified in sub. (4).

(c) Determinations of approved documentation shall be in the form of a sanitary permit or in writing.

(3) **CONSTRUCTION INVOLVING AN INCREASE OF WASTEWATER LOAD.** (a) *General.* A county, city, village or town may not issue a building permit for construction of any structure connected to a private sewage system which will increase the wastewater load to an existing private sewage system or interfere with a functioning system as specified in this subsection, unless the owner of the proposed structure:

1. Possesses a sanitary permit to either modify the existing private sewage system or construct a new private sewage system to accommodate the increased wastewater load; or

2. Provides written documentation from the department or county verifying that the existing private sewage system has sufficient size and soil conditions to accommodate the increased wastewater load.

(b) *Determination of increased wastewater load.* For the purpose of this section:

1. Increased wastewater load in public buildings and places of employment results from any change in use of the structure from the original use that results in an increased volume of wastewater above that for which the system was originally designed.

2. Increased wastewater load in dwellings results from an increase in the number of bedrooms or from construction of any addition or remodeling which exceeds 25% of the total gross area of the existing dwelling unit. Increased wastewater load in dwellings does not result from construction of decks, patios, garages, porches, reroofing, painting, wiring, residing, window replacements or replacement of equipment or appliances.

3. Counties may establish additional criteria for determining increased wastewater load by ordinance.

(c) *Documentation.* Documentation to verify whether the size of the existing private sewage system can accommodate the increased wastewater load and to verify whether the system is installed in suitable soils shall include all of the following:

1. Information on the soil conditions of the soil absorption system. The information may consist of a valid existing soil report or new soil evaluation report for the system, prepared by a certified soil tester showing conformance with the minimum 3-foot vertical separation above bedrock and groundwater specified in s. ILHR 83.10 (2);

2. Information provided by a licensed master plumber or master plumber-restricted sewer, a certified soil tester, or plumbing inspector II for:

a. Sizing of the system relative to the existing usage, replacement area, and the proposed construction usage and the type of system; or

b. A copy of an affidavit signed by the owner and recorded with the register of deeds indicating that the existing private sewage system capacity serving a one- or 2-family dwelling is undersized and indicating whether a replacement area is available.

3. A plan prepared by a licensed master plumber or master plumber-restricted sewer, certified soil tester or plumbing inspector II setting forth the dimensions of the existing soil absorption area, tank location and related setbacks;

4. Information provided by a licensed master plumber or master plumber-restricted sewer, septic hauler or plumbing inspector II relative to the condition, capacities, baffles, and manhole covers for the existing treatment tanks, and the capacity of any additional treatment tanks required to accommodate the increased wastewater load; and

5. Information provided by a certified soil tester, a licensed master plumber, master plumber-restricted sewer, or plumbing inspector II showing that the system is not causing backup of sewage into the structure served, or discharge of sewage to the surface of the ground or to a drain tile, or discharge of sewage to any surface waters of the state.

(d) *On-site inspection.* If it cannot be determined from the information provided that an existing private sewage system can accommodate the increased wastewater load, the department or county may require additional information to be submitted to make the determination or the department or county shall inspect the system for:

1. The failure to accept sewage discharges and the backup of sewage into the structure served by the private sewage system;
2. The discharge of sewage to the surface waters of the ground or to a drain tile;
3. The discharge of sewage to any surface waters of the state; and
4. Conformance with the minimum 3-foot vertical separation above bedrock and groundwater specified in s. ILHR 83.10 (2)

(e) *Determinations by department or county.* 1. Determination of whether an existing private sewage system is of an adequate capacity to accommodate additional wastewater loads involving one- and 2-family dwellings shall be made by the county. A county may make determinations of whether an existing private sewage system is of an adequate capacity to accommodate additional wastewater loads generated by construction other than one- and 2-family dwellings involving less than 3,000 gallons per day of wastewater load.

2. Determination of whether an existing private sewage system is of an adequate capacity to accommodate additional wastewater loads generated by construction involving structures other than one- and 2-family dwellings and 3,000 gallons or more per day of wastewater load shall be made by the department.

(f) *Determination on soil conditions.* 1. If the existing private sewage system is a failing system, the system shall be ordered replaced.

2. If the existing private sewage system is installed in mottled soils, the owner may request a variance to use the existing system and perform groundwater monitoring to verify seasonal saturation conditions under s. ILHR 83.09 (7).

3. If the construction affects the only soil replacement area, written notice shall be provided to the owner indicating future wastewater options the owner may have available.

(g) *Determination on tanks.* 1. If the tanks are leaking, the tanks shall be ordered replaced.

2. If the baffles in the tank are deteriorated or missing, the baffles shall be ordered replaced.

3. If the exposed tank cover has no cover or is not locked or labeled, the cover shall be ordered replaced, locked and labeled.

4. If the tank capacity services a one- and 2-family dwelling and is:

a. Less than 500 gallons, the tank shall be ordered replaced or additional tank capacity shall be ordered added;

b. At least 750 gallons, the existing tank may be used provided no more than one additional bedroom is added;

c. At least 750 gallons and 2 or more bedrooms are being added, additional tank capacity shall be ordered added.

5. If the tank serves any structure other than a one and 2-family dwelling, additional tank capacity shall be ordered.

(h) *Determinations on setbacks.* All determinations on setbacks involving an increase in wastewater loads shall conform to sub. (4) (c) and (d).

(4) CONSTRUCTION NOT INCREASING WASTEWATER LOADS. (a) A county, city, village or town may issue a building permit for construction of:

1. Any structure on a property containing a private sewage system if the construction does not increase the wastewater load as specified in sub. (3); or

2. An accessory structure not connected to a private sewage system.

3. The completed construction shall conform to the setback limitations specified in ss. ILHR 83.10 (1), 83.15 (4) (a) or 83.18 (7) (a).

(b) Documentation shall be provided by the owner, licensed master plumber or master plumber-restricted sewer, certified soil tester or plumbing inspector II showing the location and setback distances for the proposed construction of any structure relative to the components of the private sewage system.

(c) Determinations of whether the location and setback distances of a proposed construction will interfere with an existing private sewage system shall be made by the department or the county. On-site inspections may be made to verify the location and setback distances. Determinations shall be made in writing and provided to the agency responsible for issuing the building permit.

(d) No sanitary permit shall be required for construction that conforms to the setback requirements and that does not involve an increase in wastewater load.

(e) No building permit may be issued where setback requirements cannot be met unless:

1. A petition for variance is obtained from the department; or

2. The owner agrees in writing to correct any deficiencies discovered during construction for a system that cannot be located.

(f) Any variance submitted under this section shall be reviewed by the county prior to submitting to the department. The county may submit any information relative to the variance.

(5) FEES. The department or county may assess and collect a fee to defray the cost of administering this section.

History: Emerg. cr. 12-1-88; Cr. Register, August, 1989, No. 404, eff. 9-1-89.  
Register, August, 1989, No. 404

ILHR 83.056 Petitions for variances for existing systems. Pursuant to s. 145.24, Stats., an owner may petition the department for a variance to replace a private sewage system that serves an existing structure and is located in soils that do not meet the criteria specified in s. ILHR 83.23 for mound systems.

(1) DEFINITIONS. For the purpose of this section:

(a) "A horizons" means mineral horizons that formed at the surface and are characterized by an accumulation of humidified organic matter intimately mixed with the mineral fraction.

(b) "B horizons" means horizons that formed below A or E horizons and are dominated by illuvial concentrations of silicate clay, iron, aluminum, gypsum or silica.

(c) "E horizons" means mineral horizons in which the main feature is the loss of silicate clay, iron, aluminum, or a combination of these leaving a concentration of sand and silt particles of quartz or other resistant minerals.

(2) SOIL INVESTIGATIONS. Detailed soil investigations shall be performed in accordance with s. ILHR 83.09 (4).

(3) FILING REQUEST. The owner shall file a petition for variance and provide information to the department necessary to evaluate the request.

(4) VERIFICATION. On-site inspections shall be performed by the department or county to verify the soil conditions reported. A detailed profile description shall be prepared and submitted with the variance.

(5) DETERMINATIONS. The department will not approve variances for replacement mound systems:

(a) In soils:

1. With less than 24 inches to bedrock; or

2. That contain mottles or are gleyed in the E or B horizon within four inches of the bottom of the A horizon.

(b) To replace holding tanks serving structures constructed after the effective date of this section.

History: Cr. Register, August, 1989, No. 404, eff. 9-1-89.

ILHR 83.06 County administration. (1) PRIVATE SEWAGE SYSTEM ORDINANCE. (a) *Adoption of ordinance.* Every county shall adopt an ordinance governing private sewage systems which conforms with this chapter. The ordinance shall apply to the entire area of the county. (Ref. s. 59.065 (1), Stats.)

(b) *Enforcement.* The county shall administer the private sewage system ordinance in accordance with s. 145.20, Stats., and this chapter.

(2) SANITARY PERMITS. (a) *General.* The county shall establish administrative procedures for the approval, disapproval or issuance of state sanitary permits in accord with s. 145.135, and s. 145.19, Stats., and this chapter.

(b) *Application.* The application for a sanitary permit shall be made on forms furnished by the department. Before a private sewage system is installed a licensed master plumber or master restricted plumber (sewer) shall sign the application for permit and assume responsibility for installation of the system. (Ref. ss. 145.06 and 145.135, Stats.)

(c) *Permit transfer.* When there is a change of ownership, building use or master plumber, a permit transfer form furnished by the department shall be submitted to the county for approval prior to the installation of a private sewage system. Failure to submit transfer forms to the county shall invalidate the sanitary permit in accord with s. 145.135 (1), Stats. The county may charge a fee for the transfer of a sanitary permit.

(d) *Posting.* The sanitary permit shall be issued by the county on forms furnished by the department. The sanitary permit shall be displayed conspicuously so as to be visible from the road fronting the lot during construction.

(3) COUNTY ORGANIZATION AND PERSONNEL. (a) *Assignment of duties.* The county board may assign the duties of administering the private sewage system program to any county office, department, committee, board, commission, position or employe.

(b) *Certified soil tester.* The county shall obtain the services of a certified soil tester, either as a county employe or under contract, to review and verify certified soil tester reports.

(4) COUNTY RESPONSIBILITIES. (a) *Review of soil test reports.* The county shall review certified soil tester reports for proposed private sewage systems and verify the report at the proposed site, if necessary.

(b) *Review of applications for sanitary permits.* The county shall approve or disapprove applications for sanitary permits and assist applicants in preparing an approvable application. (See s. ILHR 83.11.)

(c) *Written notice.* The county shall issue written notice to each applicant whose sanitary permit application is disapproved. Each notice shall state the specific reasons for disapproval and amendments to the application, if any, which render the application approvable. Each notice shall also give notice of the applicant's right to appeal and the procedures for conducting an appeal under ch. 68, Stats.

(d) *Inspections.* The county shall inspect all private sewage systems after construction but before backfilling no later than the end of the next workday, excluding Saturdays, Sundays and holidays, after receiving notice from the plumber in charge. Inspections shall be reported on forms furnished by the department.

(e) *Reports and surveys.* The county shall file reports and conduct surveys and inspections as required by the county or the department.

(f) *Investigate violations.* The county shall investigate violations of the private sewage system ordinance and s. 146.13, Stats., issue orders to abate the violations and submit orders to the district attorney, corporation counsel or attorney general for enforcement.

(g) *Other duties.* The county shall perform other duties regarding private sewage systems as considered appropriate by the county or as required by the rules of the department.

(5) DEPARTMENT RESPONSIBILITIES. (a) *Department approval.* The department may specify categories of private sewage systems for which approval by the department is required prior to issuance of sanitary permits by the county.

(b) *Department audit.* The department shall review the private sewage system program in each county to ascertain compliance with s. 145.20 (2), Stats., and with rules promulgated by the department. This review shall include a random audit of sanitary permits, including verification by on-site inspection.

(c) *Compliance.* If a county board does not adopt a private sewage system ordinance meeting the requirements of s. 59.065, Stats., or if the county does not appoint personnel meeting the requirements of s. 145.20 (1), Stats., or if the county does not comply with the requirements of s. 145.20 (2), Stats., the department may conduct hearings in the county seat upon 30 days notice to the county clerk. As soon as practicable after the public hearing, the department shall issue a written decision regarding compliance with s. 59.065 or 145.20 (1) and (2), Stats. If the department determines that there is a violation of these provisions, the county may not issue a sanitary permit for the installation of a private sewage system until the violation is corrected.

(d) *Training.* The department shall conduct training and informational programs for county officials and employes and persons licensed under this chapter and s. 146.20, Stats., to improve the delivery of service under the county private sewage system program. The department

Next page is numbered 271