

THE UPPER PENINSULA ENVIRONMENTAL HEALTH CODE

Western Upper Peninsula Health Department
Serving Baraga, Gogebic, Houghton, Keweenaw, and
Ontonagon County, Michigan

Effective

~~3/1/2023~~4/15/2023

Table of Contents

Article I – Title, Purpose, Authority, Jurisdiction, and Administration	1
1-1 Title.....	1
1-2 Purpose	1
1-3 Authority	1
1-4 Jurisdiction	1
1-5 Inspections and Investigations.....	1
1-6 Interference with Notice.....	2
1-7 Severability.....	2
1-8 Other Laws and Regulations	2
1-9 Fees	2
1-10 Approval and Effective Date	2
1-11 Repeal of Previous Regulations.....	2
1-12 Policy and Guidelines	3
1-13 Amendments.....	3
Article II – General Definitions	3
2-1 Interpretation.....	3
2-2 Definitions	3
Article III – On-site Sewage Treatment and Disposal	5
3-1 Applicability.....	5
3-2 Licensure	5
3-3 Technical Definitions - On-site Sewage Treatment and Disposal	6
3-4 Premises Occupancy/Condemnation.....	12
3-5 Public Sewer Connection	12
3-6 Permits Required.....	12
3-6.1 Permit Application.....	12
3-6.2 Construction Permits.....	13 12
3-6.3 Priority Over Building Permits.....	14
3-7 Use of Existing Systems.....	14
3-7.1 Authorization to Use an Existing OSTDS.....	14
3-7.2 Existing OSTDS of Permit Record.....	15

3-7.3 Existing OSTDS of No Record or Permitted Systems with No Record of a Final Inspection Performed by the Department.....	15
3-7.4 Failing Existing System.....	16
3-8 Connection of Discharges.....	16
3-9 Public or Private Drain of Unknown Course and Origin.....	16
3-10 Prohibitions.....	17
3-11 Site and System Evaluations.....	17
3-11.1 Minimum Test Excavations.....	17
3-11.2 Seasonal/Weather Restrictions.....	18
3-11.3 Final Construction Inspections.....	1918
3-12 Commercial OSTDS.....	19
3-13 Lots less than 1 Acre, Subdivisions and Site Condominiums.....	20
3-14 Residential Single and Two-family On-site Sewage Treatment and Disposal System (OSTDS) Construction.....	2120
3-14.1 Minimum Site Requirements.....	2120
3-14.2 Construction Requirements.....	22
3-14.2 A Isolation Distances Table.....	22
3-14.2 B Absorption System Sizing Table.....	23
3-14.3 Aggregate/Stone.....	23
3-14.4 Absorption System Distribution.....	24
3-14.5 Septic Tanks.....	24
3-14.6 Experimental Systems.....	25
3-15 Privies/Outhouses.....	25
3-16 Abandonment of OSTDS.....	27
Article IV – Commercial OSTDS 1,000 gallons/day to 10,000 gallons/day.....	27
4-1 Applicability.....	27
4-2 Requirements.....	27
Article V – Water Wells.....	28
5-1 Applicability.....	28
5-2 Technical Definitions.....	28
5-3 – Well Permits.....	29
5-3.1 Application for Permit.....	29
5-3.2 Construction Permits.....	29

5-3.3 Construction Permit Not Required.....	31
5-4 Availability of Public Water Supply	31
5-5 Water Well and Pump Record.....	31
5-6 Priority Over Building and Occupancy Permits	32
5-7 Stop Work Order	32
5-8 Notification.....	32
5-9 Well Inspection and Approval	32
5-9.1 Inspection	32
5-9.2 Approval	32
5-10 Rental Properties	33
5-11 Emergency Conditions	33
5-12 Grouting Requirements for Bedrock Wells	33
5-13 Hydraulic Fracturing.....	33
5-14 Geothermal Wells	33
5-15 Lots Less than 1 acre, Subdivisions, and Site Condominiums.....	34
5-16 Well Abandonment and Plugging	34
Article VI – Public Health Nuisance/Imminent Danger	34
6-1 Technical Definitions.....	34
6-2 Public Health Nuisances Prohibited	34
6-3 Public Health Nuisance Investigation.....	35
6-4 Complaints Concerning Public Health Nuisance	35
6-5 Investigation of Complaints	35
6-6 Abatement of Public Health Nuisance	35
6-7 Imminent Danger	35
Article VII – Food Service.....	36
7-1 Compliance with State Law.....	36
7-2 Plan review for New Construction	36
Article VIII - Public Swimming Pools and Hot Tubs.....	36
8-1 Compliance with State Law	36
8-2 Certified Pool Operator.....	36
Article IX - Campgrounds.....	36
9-1 Compliance with State Law	36
Article X - Septic Tank Pumping and Land Application of Septage.....	37

10-1 Compliance with State Law	37
Article XI - Body Art	37
11-1 Compliance with State Law	37
Article XII – Cemeteries and Burials	37
12-1 Establishing Cemeteries	37
12-1.1 Minimum Site Criteria	38
12-1.2 Required Isolation Distances	38
12-1.3 Approval of Cemetery Plat	38
12-2 Disinterment’s and Vacating Cemeteries.....	39
12-3 Cemetery Related Complaints	39
Article XIII – Clandestine Drug Related Contamination.....	40
13-1 Clandestine Drug Laboratories.....	40
13-2 Other Drug-Related Contamination.....	40
13-3 Expansion of Condemnation	40
13-4 Lifting of Condemnation	40
Article XIV – Enforcement	40
14-1 Criminal Enforcement	40
14-2 Civil Enforcement.....	40
14-3 Appearance Tickets.....	41
14-4 Schedule of Civil Penalties	41
14-5 Inspections, Investigations and Warrants.....	41
14-6 Injunctions.....	42
14-7 Obstruction of Health Officer.....	42
Article XV – Variances.....	42
15-1 Variances.....	42
Article XVI - Appeals	42
16-1 Board of Appeals.....	42
16-2 Informal Resolution of Disputes	43
16-3 Formal Hearings	43

THE UPPER PENINSULA ENVIRONMENTAL HEALTH CODE

Article I – Title, Purpose, Authority, Jurisdiction, and Administration

1-1 Title

These regulations shall be identified by the title “The Upper Peninsula Environmental Health Code”.

1-2 Purpose

These regulations are hereby adopted for the purpose of protecting public health and safety and the quality of the environment as it affects human health and to prevent the occurrence of public health nuisances for all habitants of the counties of the Western Upper Peninsula Health Department jurisdiction and persons entering therein.

1-3 Authority

The regulations imposed by this code are hereby adopted pursuant to authority conferred upon local health departments by Section 2435 (D) and Section 2441 (1) of the Michigan Public Health Code, Act 368, P.A. 1978 as amended. (Mich. Comp. Laws § 333.2435(d) and 333.2441).

1-4 Jurisdiction

- A. The Western Upper Peninsula Health Department and its duly appointed employees shall have jurisdiction throughout Baraga, Gogebic, Houghton, Keweenaw, and Ontonagon Counties in all areas incorporated and unincorporated, which includes cities, villages, and townships for the administration and enforcement of these regulations.
- B. The Western Upper Peninsula Health Department is hereby authorized to develop and adopt a technical guidance manual.
- C. Nothing herein contained shall be construed to restrict or abrogate the authority of any municipality in Baraga, Gogebic, Houghton, Keweenaw, and Ontonagon Counties to adopt more restrictive regulations or to enforce existing regulations relating to these regulations, control the issuance of licenses or the renewal or revocation thereof, or to charge and collect a fee, provided that whenever inspection relating to health and sanitation is required, no such municipality shall issue or renew such license without first having obtained a written statement from the Western Upper Peninsula Health Department indicating compliance with the requirements of these regulations.

1-5 Inspections and Investigations

- A. To assure compliance with the provisions of this regulation, the Department may conduct inspections or investigations as provided for by Section 2446 of the Michigan Public Health Code, Act 368, P.A. 1978 as amended. (Mich. Comp. Laws § 333.2446).
- B. It shall be unlawful for any person to molest, willfully oppose, verbally abuse, or otherwise obstruct the Department, or any other person charged with enforcement of these regulations, during, or as a result of performing, his or her professional duties. (Mich. Comp. Laws § 333.1291).

- C. The Department may request the assistance of law enforcement agencies when necessary to fulfill the Department's duty in a manner prescribed by law.

1-6 Interference with Notice

No person shall remove, mutilate or conceal any notice or placard posted by the Department, except by permission of the Department.

1-7 Severability

If any section, subsection, clause or phrase of these regulations is for any reason declared unconstitutional or invalid, it is hereby provided that the remaining portions of these regulations shall not be affected.

1-8 Other Laws and Regulations

These regulations are supplemental to the Michigan Public Health Code, Act 368, P.A. 1978 as amended (Mich. Comp. Laws Ch. 333) and to other statutes duly enacted by the State of Michigan relating to public health and safety. These regulations shall be liberally construed for the protection of the health, safety, and welfare of the people of Western Upper Peninsula Health Department and shall control and prevail over a less stringent or inconsistent provision enacted by a local governmental entity for the protection of public health.

1-9 Fees

The Department reserves the right to set fee schedules, through approval by their governing board, to cover reasonable costs associated with the enforcement and administration of these regulations.

All fee schedules existing prior to the adoption of these regulations shall remain in effect until revised.

1-10 Approval and Effective Date

These regulations were approved by action of the Western Upper Peninsula Health Department Board of Health on February 27, 2023 and approved by action of the Baraga, Gogebic, Houghton, Keweenaw, and Ontonagon County Boards of Commissioners on _____ respectively to become **effective** ~~March 1~~ effective April 15, 2023.

1-11 Repeal of Previous Regulations

- A. Previous regulations entitled The Sewage and Water Regulations for the Western Upper Peninsula Health Department are hereby repealed.
- B. Previous regulations entitled "Superior Environmental Health Code" adopted by the Western Upper Peninsula Board of Health on December 1, 1997 and approved by action of the Houghton County Board of Commissioners on December 8, 1997; the Keweenaw County Board of Commissioners on December 9, 1997; the Baraga County Board of Commissioners on January 5, 1998; the Ontonagon County Board of Commissioners on January 6, 1998; and the Gogebic County Board of Commissioners on January 28, 1998; to become effective March 14, 1998 are hereby repealed.
- C. Any other Western Upper Peninsula Health Department regulations existing prior to the adoption of these regulations and in conflict with these regulations are hereby repealed.

D. No violation of any repealed regulation or portion thereof shall be made legal by virtue of adoption of these regulations. Any act, situation or condition which when created or first allowed to exist that was previously a violation shall continue to be a violation under these regulations. Any action, issuance of a permit, etc., that was previously mandatory shall continue under these regulations to be mandatory if a similar requirement is provided herein.

1-12 Policy and Guidelines

A. The Department is hereby granted the authority to adopt guidelines, not in conflict with the purpose and intent of these regulations, for the purpose of carrying out the responsibilities herein delegated to the Department by law and as necessary to conduct associated duties as required by contract with the State of Michigan and the minimum program requirements set forth in those contracts.

B. All such guidelines shall be in writing and shall be kept in a policy file available for public inspection upon request.

1-13 Amendments

The Department, through approval by the Western Upper Peninsula Health Department Board of Health and the Baraga, Gogebic, Houghton, Keweenaw, and Ontonagon Board of Commissioners, may amend, supplement or change these regulations or portions thereof.

Article II – General Definitions

2-1 Interpretation

When not inconsistent with the context, words used in the present tense include the future, words in the singular number include the plural number, and words in the plural number include the singular. The word "shall" is always mandatory, and not merely directory. Words, terms or expressions not defined herein shall be interpreted in the manner of their commonly accepted meanings, in accordance with Standard English usage.

2-2 Definitions

- Approved -** Acceptable for intended use as determined by the Department.
- Board of Appeals -** A board appointed by the Board of Health whose purpose is to hear, pass judgment and make recommendations upon enforcement actions under these regulations that have been appealed above the Health Officer.
- Board of Health -** The Board approved by the Baraga, Gogebic, Houghton, Keweenaw, and Ontonagon County Board of Commissioners to sit as the Western Upper Peninsula Health Department Board of Health.
- Department -** Western Upper Peninsula Health Department having jurisdiction.
- Dwelling -** Any house, building, structure, tent, watercraft, shelter, mobile home, camper, vehicle, or portion thereof which is occupied or adopted in whole or in part as a home, residence, or living or sleeping place for one or more occupants.

Environmental Health -	Per Mich. Comp. Laws § 333.12101, the area of activity that deals with the protection of human health through the management, control, and prevention of environmental factors, which may adversely affect the health of individuals. This activity is concerned with the existence of substances, conditions or facilities in quantities, of characteristics, and under conditions, circumstances, or duration which are or can be injurious to human health.
Governing Board -	The Board of Health and/or the Board of Commissioners to which the Department reports.
Habitable Building -	Any building, or other place where occupants reside, are employed, or congregate, or any building adopted for such purposes.
Hazard -	A condition or practice which could reasonably be expected to cause death, disease, or serious physical harm immediately or before the danger can be eliminated through normal enforcement procedures established in this code.
Health Officer -	The administrative officer appointed by the local governing board who is responsible for the operations of the Department and the administration and enforcement of Michigan's Public Health Code, Act 368, P.A. 1978 as amended (Mich. Comp. Laws Ch. 333) and associated statutes within the legal jurisdiction of the Department. Health Officer also includes any employee or designee of the Department acting under the direction of the Health Officer during their normal course of duties.
His/He -	Shall be construed as non-gender specific.
License -	Includes the whole or part of a Department permit, certificate, approval, registration, charter, or similar form of permission required by law.
Occupant -	Those persons who occupy, live, habitually use, or otherwise are in possession of any property or premise.
Owner -	Both the owner of title record, and those persons occupying or in possession of any property or premises, or their designated representative.
Person -	Any individual, firm, partnership, party, corporation, company, society, association, local governmental entity or other legal entity responsible for the ownership or operation of a premise, or an employee or officer thereof.
Permit -	A written document issued and signed by the Health Officer which authorizes a person to construct, repair, or install an OSTDS or well.
Premises -	A tract or parcel of land on which a habitable building or dwelling is, or would be, located and shall include the building or dwelling.

Article III – On-site Sewage Treatment and Disposal

3-1 Applicability

This article shall apply to single and two-family On-Site Sewage Treatment and Disposal Systems (OSTDS) and OSTDS other than private single or two-family residences, which utilize septic tanks and absorption system for peak daily flows less than 1,000 gallons per day.

- A. This article is not applicable to facilities that generate wastewater under the jurisdiction of Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the rules entitled Part 22 or Part 41 Groundwater Discharge Permits.
- B. Appeals on all sites which serve buildings other than single and two-family residences, including those with peak daily flows of less than 1,000 gallons per day evaluated under these regulations, shall be made to the Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirement.
- C. Appeals on all sites where an OSTDS is proposed to be located on a parcel of less than one acre as created after July 28, 1997, a parcel within a subdivision, a parcel which is classified as a site condominium, or a parcel that was otherwise created in excess of the allowable number of exempt parcel splits under the Land Division Act, Act 288, PA 1967, (Mich. Comp. Laws Section 560) shall be made to the Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the rules entitled Part 4. Department of Environmental Quality On-site Water Supply and Sewage Disposal for Land Divisions and Subdivisions, being R560.401-R560.428 of the Michigan Administrative Code, or current State statute.

3-2 Licensure

- A. All OSTDS installers shall be licensed by the Department. No person shall install, alter, or repair an OSTDS unless they are a licensed sewage system installer.
- B. Nothing in this code shall preclude a property owner, who is not a licensed OSTDS installer, from installing an OSTDS for his own use under a valid permit.
- C. The Department shall have authority to promulgate standards for licenses, registrations, renewals, and examinations.
- D. In developing minimum standards for licensing or registration, the Department shall consider equivalency and proficiency testing and where appropriate, grant credit for past training, education, or experience in related fields.
- E. An individual shall not make a false representation or impersonation or act as a proxy for another individual in connection with an examination or application for licensure or registration or a request to be examined, licensed or registered.

- F. The Department shall issue a certificate of licensure or registration to an applicant who has satisfied all of the requirements set forth in this code.
- G. A licensee or registrant shall have available for inspection a certificate issued by the Department.
- H. A license is not transferable.
- I. No person shall permit anyone to operate under his license without supervision by the licensee.
- J. The Department may deny, suspend, revoke, or refuse to renew any license for fraud or deceit in obtaining the license or for violating, or aiding or abetting in a violation of this code.
- K. An applicant or licensee may request an informal hearing in connection with the suspension, revocation, or denial of a license or registration in accordance with Article XVI.

3-3 Technical Definitions - On-site Sewage Treatment and Disposal

Absorption System -	The part of an OSTDS in which septic tank effluent is distributed by arrangement of trenches or beds that allows the effluent to be absorbed and treated by the surrounding soil.
Absorption Bed -	An absorption system with a minimum of two lateral lines in a distribution system wider than three feet installed below natural grade, at natural grade, or above natural grade on fill.
Absorption Trench -	An absorption system twelve to thirty-six (12-36") inches in width with one distribution line and installed below grade. Native soils shall remain in place between trenches in multiple trench systems.
Alter -	To change the design or location of an existing OSTDS or any part of a system.
Alternative Sewage System -	Any OSTDS that is not a conventional sewage system and meets NSF/ANSI Standard 40 or equivalent; or a sewage lagoon.
Available Sewer -	A public sewer that is physically and politically available, of acceptable design and capacity, within 200 feet of the proposed origin of sewage.
Bedroom-	A separated living or sleeping space within a dwelling that has a minimum space of 70 square feet with an egress window and a door with a minimum width of 32-inch.
Cesspool -	A pit which receives raw sanitary sewage, allows separation of solids and liquids, retains the solids, and allows liquids to seep into the surrounding soil through perforations in the lining.
Commercial Facility -	Any structure or building, or any portion thereof, other than a single or two-family dwelling.

Composting Toilet -	An enclosed non-portable self-contained toilet into which non-water-carried human wastes are disposed, from which no liquid or solid waste materials are discharged, and from which a humus-like end product is produced.
Conventional Sewage System -	An OSTDS containing a septic tank used in conjunction with an absorption system.
Deep Cut -	An excavation beginning at a depth of six (6') feet below ground surface and extending to a depth not to exceed twelve (12') feet below ground surface.
Distribution Pipe -	Approved pipe used in the dispersion of septic tank effluent.
Drain -	A pipe or manmade conduit used to carry surface water or other liquid material via pressure or gravity.
Earth Pit Privy -	A structure used for the disposal of human waste which is discharged directly into the natural soils.
Effective Soil Depth -	The depth of soil material between the natural grade and the limiting zone suitable for the installation of an absorption system.
Effluent -	Partially treated sanitary sewage which is discharged from a septic tank or other sanitary sewage treatment system device.
Effluent Filter -	A commercially produced filter designed to be installed in the outlet of a septic tank, or other approved location, for the purpose of preventing the discharge of solid material from the septic tank to the absorption system.
Experimental System -	A developed method of on-site sewage treatment that has not been fully proven in field tests.
Failing System -	<p>An OSTDS is considered to be failing if any one of the following conditions exists:</p> <ol style="list-style-type: none"> (1) The OSTDS fails to accept effluent at the rate of application. (2) Sanitary sewage effluent seeps from, ponds on or around the OSTDS, or backs up into the structure. (3) The Department has determined that the OSTDS has contaminated the groundwater, surface water, or a water supply. (4) Any part of the OSTDS is bypassed; the system is the source of an illicit discharge; there is an absence of an absorption system and/or a septic tank, or there is a structural failure of a septic tank or other associated appurtenances.

(5) The OSTDS is creating or contributing to a threat to public health or the environment.

Fill and Fill Material -	<p>Soil that is placed beneath the absorption system of an OSTDS for the purpose of improving the infiltrative capacity of the native soil or to elevate the absorption system above a limiting layer to improve system performance.</p> <p>Fill shall consist of clean medium sand uncontaminated by other soil texture classes or debris of any kind, unless otherwise specified as part of a permit condition and approved by the Department.</p> <p>Fill may also refer to any non-native soil deposited above natural grade.</p>
Filter Fabric -	<p>A permeable geotextile fabric made with polymer used to impede or prevent the movement of sand, silt, and clay into aggregate/filter media.</p>
Floodplain -	<p>A nearly level alluvial plain that borders a river, lake, or stream and is subject to flooding unless protected artificially.</p>
Footer -	<p>That portion of the soil absorption system which interconnects the rear portion of the distribution line laterals.</p>
Footing drains -	<p>A conduit installed around foundation footings to transport groundwater away from the foundation.</p>
Fragipan -	<p>A loamy subsurface horizon with high bulk density relative to the horizon above, seemingly cemented when dry, and weakly to moderately brittle when moist. Fragipans are mottled and low in organic matter. They impede movement of water and air, and growth of plant roots.</p>
Groundwater Table -	<p>The saturated zone which exists below the ground surface throughout the year.</p>
Hardpan -	<p>A hardened layer in soil caused by cementation of soil particles with either silica, calcium carbonate, magnesium carbonate, or iron and/or organic matter. The hardness does not change appreciably with changes in moisture content. Hardpan impedes movement of water and air, and growth of plant roots.</p>
Header -	<p>That portion of a soil absorption system which receives effluent from the septic tank and the front portion of the distribution line laterals.</p>
High Strength Wastewater -	<p>Sanitary wastewater from structures other than a single or two family dwelling including, but not limited to, food service establishments, campgrounds, etc. that generate wastewater that exceeds the parameters of typical residential dwelling wastewater. High strength wastewater is determined by the use of the structure served and the influent contaminant load. High strength wastewater exceeds the following parameters: 1. A</p>

monthly average of 30 mg/L fats, oil and grease. 2. A monthly average of 220 mg/L BOD5. 3. A monthly average of 150 mg/L TSS. 3. or other constituent that interferes with biological action in the treatment facilities.

- Holding Tank -** A watertight receptacle designed to receive and store sanitary sewage effluent to be pumped, hauled, and disposed of in an approved manner by a licensed septage hauler.
- Install -** To alter, construct, place, or repair an OSTDS or any component thereof, or to provide labor or oversight under formal contract or informal agreement including excavation work, installation of fill material, placement of a tank or installation of associated piping.
- Limiting Zone -** Any horizon or condition in the soil profile or underlying strata which will interfere in any way with the treatment and/or infiltration of sewage effluent before entering the groundwater table. Such horizons include hardpans, fragipans, clay layers, compacted soils, bedrock, clayey soils, permanent and perched groundwater tables, and seasonal high water table.
- Native Soil -** Naturally occurring soil deposited through geologic processes and undisturbed by human activity. Native soil does not include soil deposited as fill.
- Natural Grade -** The ground elevation as it exists in the natural state prior to the placement of any fill.
- New or Increased Use -** The connection of a new structure to an existing OSTDS or the addition to a structure of at least one bedroom, or a change to a structure resulting in an increase in one bedroom or increased sewage flow rate of 150 gallons per day or more.
- OSTDS -** An On-Site Sewage Treatment and Disposal System having the primary design that incorporates a septic tank and an absorption system, or a privy.
- OSTDS Installer -** A person licensed to alter, install or repair an OSTDS.
- Perched Water Table -** The upper surface of a saturation zone resulting from a limiting zone.
- Permeability -** The quality of the soil which enables it to transmit water or air. Permeability values in these regulations are based upon standard estimates derived from the United States Department of Agriculture (USDA) established soil texture classes.
- Privy -** An enclosed non-portable toilet into which non-water-carried human wastes are disposed. Privies may be of earth pit or vaulted design.
- Public Sewer -** A sanitary sewer or combined sanitary and storm sewer used or intended for use by the public for the collection and transportation of sanitary sewage. Commonly known as a municipal sewage system.

Riser -	A watertight attachment to the top of a septic tank or dose chamber that allows at grade access to the tank for inspection and maintenance.
Sanitary Sewage -	Human wastes discharging from any plumbing fixture within a residence, building, commercial establishment, or other place, including toilets, sinks, showers, dish-washing, laundry wastes, and/or other associated fixtures.
Saturated Zone -	A three dimensional layer, lens, or other section of the subsurface in which all open spaces including joints, fractures, interstitial voids, or pores are filled with ground-water. The thickness and extent of a saturated zone may vary seasonally or periodically in response to changes in the rate or amount of groundwater recharge or discharge.
Seasonal High Water Table -	The elevation of the groundwater at the upper surface of the saturation zone as may occur during the wettest periods of the year, as indicated by mottling or a water surface in an unlined hole, whichever of the two levels is higher.
Septage Hauler -	A person who holds a Septage Waste Servicing License issued by the State of Michigan.
Septic Tank -	A watertight receptacle which receives sewage designed to separate solids from liquids, digest organic matter during a period of retention, and to allow the liquids to discharge into a second treatment unit or to a soil absorption system.
Sewer line -	That part of the system of drainage piping which conveys sanitary sewage from a building or dwelling into an OSTDS or public sewer.
Sewage Lagoon –	A lagoon is a treatment method that utilizes a septic tank for primary treatment with the clarified effluent from the tank being discharged into a lagoon where sunlight, temperature, and wind provide the final treatment.
Site and Soils Evaluation -	An on-site investigation to evaluate the suitability of a site (i.e., a specific location on each parcel) to support a functional, legally compliant, and environmentally sound OSTDS.
Slope -	The rate of fall or drop in feet per one hundred (100') feet of the ground surface. It is expressed as a percent of grade.
Soil Texture -	The relative proportions of sand, silt, and clay particles in a mass of soil. The United States Department of Agriculture (USDA) Soil texture classes used in this regulation are as follows:
Sand -	Individual grains which can be seen and felt readily. Squeezed in the hand when dry, this soil will fall apart when the pressure is released.

- Loamy Sand -** Consists mainly of sand, but has a small amount of clay, and/or silt to give it some stability. It breaks very easily when handled and will not withstand much handling.
- Sandy Loam -** Consists largely of sand, but has enough silt and clay present to give it a small amount of stability. Individual sand grains can be readily seen and felt. Squeezed in the hand when dry, this soil will readily fall apart when the pressure is released. Squeezed when moist, it forms a cast which will not only hold its shape when the pressure is released, but will withstand careful handling without breaking. The stability of the moist cast differentiates this soil from loamy sand.
- Loam -** Consists of an even mixture of the different sizes of sand, silt and clay. It is easily crumbled when dry and has a slightly gritty, yet fairly smooth feel. It is slightly plastic. Squeezed in the hand when dry, it will form a cast that will withstand careful handling. The cast formed of moist soil can be handled freely without breaking.
- Silt Loam -** Consists of a moderate amount of fine grades of sand, a small amount of clay, and a large quantity of silt particles. Lumps in a dry, undisturbed state appear quite cloddy, but they can be pulverized readily; the soil then feels soft and floury. When wet, silt loam runs together in puddles. Either dry or moist, casts can be handled freely without breaking. When a ball of moist soil is pressed between thumb and finger, it will not press out into a small unbroken ribbon, but will have a broken appearance.
- Sandy Clay Loam -** Consists of 20 to 35 percent clay, less than 28 percent silt, and 45 percent or more of sand. When moist, a thin ribbon of one-eighth inch (1/8") or less sized wire can be formed between the thumb and finger to a length of one to two inches before breaking under its own weight. Soil feels gritty when excessively wet.
- Clay Loam -** Consists of an even mixture of sand, silt, and clay, which breaks into clods or lumps when dry. When a ball of moist soil is pressed between the thumb and finger, it will form a thin ribbon that will readily break, barely sustaining its own weight. The moist soil is plastic and will form a cast that will withstand considerable handling.
- Silty Clay Loam -** Consists of a moderate amount of clay, a large amount of silt, and a small amount of sand. It breaks into moderately hard clods or lumps when dry. When moist, a thin ribbon or one-eighth (1/8") inch wire can be formed between thumb and finger that will sustain its weight and will withstand gentle movement.
- Silty Clay -** Consists of even amounts of silt and clay and very small amounts of sand. It breaks into hard clods or lumps when dry. When moist, a thin ribbon or one-eighth (1/8") inch or less sized wire can be formed between thumb and finger that will withstand considerable movement and deformation.

Clay -	Consists of large amounts of clay and moderate to small amounts of sand. It breaks into very hard clods or lumps when dry. When moist, a thin long ribbon or one-sixteenth (1/16") inch wire can be molded with ease. Fingerprints will show on the soil, and a dull to bright polish is made on the soil by a shovel.
Stream -	A river, watercourse, creek, gully, ravine, or ditch, natural or manmade, which may or may not be serving as a drain, having definite banks, a bed, and visible evidence of flow, either continuous or intermittent, for a period of greater than two months in any one year.
Surface Water -	Any natural or manmade body of water that exists on the ground surface for greater than two months in any one year.
Technical Manual -	Guidelines, specifications and standard practices used to implement this code.
Test Pit -	An open pit of defined size and depth, to permit thorough examination of the soil.
Vaulted Privy -	A structure used for the disposal of human waste which is discharged into a watertight receptacle designed and constructed for the purpose of receiving sanitary sewage.

3-4 Premises Occupancy/Condemnation

It shall be unlawful for any person to occupy, or permit to be occupied, any premises not equipped with an approved OSTDS for the disposal of sanitary sewage unless properly connected to a public sewer. Any premises constructed or maintained contrary to these regulations may be declared unfit for habitation, posted and ordered to be vacated by the Health Officer.

3-5 Public Sewer Connection

All facilities from which sanitary sewage flows shall be connected to an available sewer. When the Department has determined a lack of an available sewer, all facilities from which sanitary sewage flows shall be connected to an approved OSTDS.

3-6 Permits Required

3-6.1 Permit Application

- A. An application to construct, alter, extend or replace a residential or commercial OSTDS shall be provided by the Department.
- B. An application for a permit to construct, alter, extend or replace a residential or commercial OSTDS shall be submitted by the property owner or his authorized representative using the appropriate form provided by the Department.
- C. The Department shall not act upon any application unless the application is complete.

3-6.2 Construction Permits

- A. No person shall construct, alter, extend, or replace a residential or commercial OSTDS without first having been issued a construction permit from the Department.
- B. Any permit issued pursuant to the requirements of this code shall be valid for the term of 24 months from the date of issuance unless declared void as provided in this code. After the expiration of the construction permit, a 30 day grace period shall exist for an extension request. A construction permit may be extended for a period of 12 months following a site evaluation conducted by the Department that determines no change in the site conditions.
- C. A permit shall not be transferable from one person to another.
- D. A permit may be rescinded or declared void by the Department when one or more of the following conditions exist:
 - 1. The location of the OSTDS specified on the permit is altered.
 - 2. There is an increase in the scope of the project prior to, during, or following construction of the OSTDS.
 - 3. The Department acquires new information indicating that the previous permit approval does not satisfy the requirements of this code.
 - 4. The construction standards and prohibitions set forth in this code are violated before, during, or after construction.
 - 5. The Department has reasonable cause to believe that an intentional misrepresentation has occurred, or continued operation of the OSTDS constitutes a nuisance.
- E. The health officer may order the property owner or OSTDS installer to complete or correct remaining work or eliminate any health hazard or nuisance that may exist after a permit has been issued, rescinded or declared void, or stop work order issued.
- F. The Department shall not issue a construction permit for any residential OSTDS which does not meet the minimum criteria set forth in Section 3-14.1. The reasons for denial shall be furnished to the applicant in writing.
- G. The Department shall not issue a construction permit for any commercial OSTDS having a sewage flow rate of equal to or greater than 1,000 gallons per day, which does not meet the minimum criteria set forth in the Michigan Criteria for Subsurface Sewage Disposal, D48 Rev. 4/94, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State of Michigan requirement governing the installation of subsurface sewage disposal and treatment systems designed to handle sanitary sewage. The reasons for denial shall be furnished to the applicant in writing.
- H. The Department may require specific technologies, procedures, or construction practices as a condition of the permit.

- I. The Department may require a third-party operation and maintenance agreement. Operation and maintenance manuals for specific system designs may be required from manufacturers and contractors for homeowner and/or third-party use.
- J. Any variance to the requirements of these regulations shall be documented by the Health Officer.
- K. The Health Officer shall have the authority to issue a construction permit for an alternative OSTDS if the site does not meet the site requirements for a conventional OSTDS.
- L. The OSTDS installation contractor shall have a valid permit in possession on-site at the time of construction.

3-6.3 Priority Over Building Permits

- A. No municipality, township, county, or other governing body shall issue a building permit for, or otherwise allow commencement of construction or placement of, any habitable building on any land not served by an available sewer until a permit has first been obtained from the Department for an OSTDS and proof of a permit has been received.
- B. No municipality, township, county, or other governing body shall issue a building permit for, or allow commencement of construction of, any addition to or alteration of any habitable building which would result in an increase in the number of bedrooms and/or additional sewage flows for any habitable building located on any land not served by an available sewer until a permit has first been obtained for construction of an OSTDS or acceptance of continued use of existing OSTDS has been obtained from the Department.
- C. A municipality, township, or other agency or an officer or employee thereof shall not issue an occupancy permit for any newly constructed or placed habitable structure until final approval of the structure's water supply and sanitary sewage connection has been granted by the Department.

3-7 Use of Existing Systems

3-7.1 Authorization to Use an Existing OSTDS

- A. No person shall connect any habitable structure to an existing OSTDS except where allowed, in writing, by the Department.
- B. Sewage flow to an existing OSTDS shall not be increased beyond the original design capacity of the existing system except where permitted in writing by the Department.
- C. Approval of a new/increased use is not required for the following:
 - 1. A permit with a final inspection indicating OSTDS approval is on file and Department documentation indicates the water supply meets the required isolation distances and the proposed dwelling was not constructed and a new or increased use is not proposed.
 - 2. A permit with a final inspection indicating OSTDS approval was performed within the past five years and Department documentation indicates the water supply meets the

required isolation distances, the proposed dwelling was constructed, and new or increased use does not occur.

3. New or increased use was approved within the past two years, through the performance of an existing system evaluation by the Department, and an additional new or increased use has not occurred and is not proposed.

3-7.2 Existing OSTDS of Permit Record

When a permit record with a final inspection conducted by the Department is available for the existing OSTDS in question, the new or increased use of the system may be granted when the following conditions are met:

- A. A system evaluation, conducted by the Department reveals no signs of system failure.
- B. The septic tank shall have been pumped and evaluated by a septage hauler within the last three years. A written report shall be provided by the septage hauler to the Department on forms provided. The report shall include information regarding the tank's materials and construction, condition, volume, and presence or absence of an outlet baffle.
- C. The proposed new/increased use is no greater than a one bedroom increase for residential structures or 150 gallons per day in the projected sanitary sewage flow for commercial structures.
- D. When the projected sanitary sewage flow is greater than 150 gallons per day or a one bedroom increase, the OSTDS shall be modified or replaced to meet the requirements of these regulations. Permits shall be obtained for any modification or replacement.

3-7.3 Existing OSTDS of No Record or Permitted Systems with No Record of a Final Inspection Performed by the Department.

When a permit record is not available, or when no record of a final inspection conducted by the Department is available, for the existing OSTDS in question, the new or increased use of the OSTDS may be granted when the following conditions are met:

- A. When adequate site and soil information, including water table information, is not recorded in the permit file, or when no permit exists, a site and soils evaluation shall be performed in the area of the existing OSTDS by the Department. It shall be the applicant's responsibility to provide excavations for the purpose of evaluation of soil conditions.
- B. Minimum of twenty-four inches (24") of soil exists between the limiting zone and the bottom of the absorption system.
- C. Isolation distances meet the requirements of this code as specified in Table 3-14.2A.
- D. The septic tank shall be pumped and evaluated by a septage hauler, as part of the existing system evaluation process, with results reported to the Department on forms provided.
- E. An OSTDS evaluation, conducted by the Department, reveals no signs of OSTDS failure.
- F. Existing septic tank and absorption system is sized adequate to meet the current sanitary sewage flows from the structure.

- G. The proposed new or increased use is no greater than a one bedroom increase for residential structures or 150 gallons per day in the projected sanitary sewage flow for commercial structures.
- H. When the projected sanitary sewage flow is greater than 150 gallons per day or a one-bedroom increase, the OSTDS shall be modified or replaced to meet the sizing requirements of this code. Permits shall be obtained for any modification or replacement.

3-7.4 Failing Existing System

- A. The Department shall condemn any existing OSTDS meeting the definition of a failing system per these regulations.
- B. Any OSTDS so condemned shall be repaired, rebuilt or replaced by an OSTDS constructed according to the provisions of these regulations where possible, or by another method approved by the Department in order to abate a public health nuisance, within a specified period of time not to exceed 90 days after official notification from the Department, unless there is an imminent hazard to the public health, safety, and welfare by the continued improper drainage.

3-8 Connection of Discharges

- A. All facilities such as flush toilets, urinals, lavatories, sinks, bathtubs, showers, laundry or any other facility from which sanitary sewage flows shall be connected to an OSTDS, except that any such facilities hereafter installed on a premise where public sewer is available, shall be connected to said sewer.
- B. The following shall not be connected to an OSTDS:
 - 1. Seepage water from footing drains or underground flows.
 - 2. Surface runoff or roof drainage from rainfall or snow melts.
 - 3. A swimming pool, hot tub (spa) or its appurtenances.
 - 4. Brine or recharge water from any water treatment system.
 - 5. Chemical solutions or other wastes which would interfere with biological action in the treatment facilities.
 - 6. Non-sanitary wastewater from commercial facilities.
- C. The Department may require suitable provisions for the proper discharge or disposal of liquid wastes listed above.

3-9 Public or Private Drain of Unknown Course and Origin

- A. Whenever the Department determines that improperly treated sanitary sewage is flowing from the outlet of any public or private drain, the Department shall notify in writing persons owning, leasing, or residing on the premises from which sanitary sewage originates to connect to a public sewer, an approved OSTDS, or to otherwise abate the discharge.

- B. The notice to the owners, leaseholder, or residents of such properties shall inform said persons of such unlawful discharge of improperly treated sanitary sewage into such drain and shall specify the maximum period of time not to exceed 90 days within which such unlawful discharge shall be terminated.
- C. If after the expiration of the minimum period of time specified in the notice, such unlawful discharge continues, the Department may plug or cause to be plugged the outlet(s) from the drain to render it incapable of discharge of improperly treated sanitary sewage.
- D. Where the Department is unable to plug the flow of sanitary sewage, the Department shall institute all necessary and proper legal remedies to abate the nuisance and threat to the public's health, safety, and welfare, which shall include restraining orders, temporary and permanent injunctions and summary proceedings to vacate the premises or condemnation until such time as the sources of pollution have been eliminated or the pollution properly controlled. Citation and proceedings shall be consistent with Article XIV and Article XVI of this code.

3-10 Prohibitions

- A. No person shall discharge sanitary sewage to the ground surface or surface water.
- B. Any substance not defined as sanitary sewage by this code shall not be discharged to the OSTDS without the approval from the Health Officer.
- C. Cesspools are prohibited.
- D. The disposal of sanitary sewage by facilities utilizing on-site storage, hauling and final disposal at an off-site receiving facility (pump and haul) is prohibited, except as follows:
 - 1. During construction of a public sewer or approved sewage treatment facilities to serve the proposed development.
 - 2. The installation of an approved OSTDS has been delayed by weather conditions or seasonal construction limitations.
 - 3. The holding tank is serving a temporary construction site.
 - 4. For existing development where previous OSTDS have failed and there are no other alternatives for on-site sewage disposal as determined by the Health Officer.
 - 5. When an exception has been granted, the on-site storage, hauling and disposal methods and facilities shall be designed, constructed, and operated in accordance with the provisions of the technical manual.

3-11 Site and System Evaluations

3-11.1 Minimum Test Excavations

- A. Prior to the issuance of a permit to install a commercial or residential OSTDS, the Department shall conduct a site and soils evaluation to determine the ability of the parcel to meet the minimum requirements of these regulations. Backhoe cut excavations may be required and shall be provided at the expense of the applicant.

- B. The depth, number, type and location of soil excavations required to evaluate site suitability for the installation of a permitted OSTDS shall be determined by the Department and shall be consistent with the contract requirements of the State.
- C. A complete site and soil evaluation shall include, but shall not be limited to, the following information:
 - 1. Soil permeability, based upon soil texture and structure in the native soil profile to a depth of at least four feet below the proposed infiltrative surface beneath the absorption system.
 - 2. A determination of the seasonal high water table elevation and limiting zone.
 - 3. Slope limitations.
 - 4. Location of the site in relationship to flooding or seasonal ponding of surface water.
 - 5. Availability of sufficient area to install an adequate compliant OSTDS and an area for a replacement OSTDS when required.
 - 6. Adequate area to maintain all required isolation distance.
 - 7. A determination of any other limiting factor to the installation and performance of the proposed OSTDS.
- D. The Department may require as part of a soil evaluation, information including but not limited to engineering plans or drawings, topographic maps of a site indicating surface relief and/or grade elevations, soil analyses, additional soil test borings, groundwater elevations, flood elevations, information specific to easements, right-of-ways, parcel boundaries, wetland delineation, etc.
- E. A site and soil approval for the suitability of installation of an OSTDS shall be valid for not more than 24 months.
- F. Approval or denial of a site proposed for the installation of an OSTDS shall be provided in writing to the applicant.

3-11.2 Seasonal/Weather Restrictions

- A. A site and soils evaluation shall not occur when depth of snow cover, frost, or other impeding condition prohibits adequate evaluation of a parcel of land to determine the suitability of a site proposed for the installation of an OSTDS.
- B. Installation of an OSTDS shall not occur when it is reasonable to assume that weather and site conditions will result in a compromise to the construction, installation, and/or long-term operation of the proposed system.
- C. The health officer may grant written permission for an emergency situation on an individual basis during the restricted seasons if weather conditions are suitable and total installation shall be completed within forty-eight hours.

3-11.3 Final Construction Inspections

- A. All permitted OSTDS installed shall receive a final construction inspection prior to being placed into use and prior to being approved by the Department.
- B. It shall be unlawful to backfill or cover any portion of a newly installed component of any OSTDS until a final construction inspection has been completed and/or approval to backfill has been granted by the Department.
- C. The Department shall deny final approval of any installation which does not comply with any permit condition, is of faulty workmanship and/or construction materials or otherwise does not meet requirements of these regulations.
 - 1. The sewage system shall be tagged in a conspicuous location indicating that it does not meet this code and that approval for backfilling shall not be granted.
 - 2. The department shall provide notification to the installer indicating the deficiencies noted at the time of inspection, methods of correction, and a time frame for corrections to be made.
- D. Installation contractors shall notify the department 3 working days in advance of the date of completion of the OSTDS to schedule the final construction inspection. The Department shall perform the final inspection of the OSTDS within 3 working days of completion of installation, if advanced notification is provided as required.
- E. After Department final approval inspection of the construction of a newly installed OSTDS, or any newly installed component thereof, backfilling/covering shall be completed within 3 working days unless otherwise approved by the Health Officer.
- F. When a final construction inspection cannot be performed due to unforeseen circumstances, the Health Officer may allow submission of an affidavit of construction on a form provided by the Department in lieu of a final construction inspection. The installer shall submit the affidavit within ten days after completion of the system, certifying that the system was installed in accordance with this code.

3-12 Commercial OSTDS

- A. All OSTDS proposed to receive sanitary sewage from habitable buildings other than single and two-family residential structures shall comply with these regulations and the requirements of the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirements governing commercial OSTDS designed to receive sanitary sewage.
- B. The minimum site criteria for residential systems as specified in Section 3-14.1 of this Code shall apply to those OSTDS which serve buildings other than single and two-family residences with peak daily flows of less than 1,000 gallons per day.

- C. The Department shall use the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirement, for sizing and design criteria for those systems less than 1,000 gallons per day serving a structure other than a single or two-family residence.
 - i. Commercial facilities that generate high-strength wastewater shall provide additional treatment capacities to ensure the quality of influent discharged into the native soil does not exceed the parameters of typical residential dwelling wastewater.
- D. The minimum size of any OSTDS proposed to receive sanitary sewage from habitable buildings other than single and two-family residential structures shall be a system of a 1,000 gallon septic tank connected to a 200 ft² absorption system or greater based upon estimated sewage flows and loading rates.
- E. OSTDS other than private single or two-family residences, which utilize septic tanks and absorption system for peak daily flows equal to or greater than 1,000 gallons and up to 10,000 gallons per day flow, shall be sited and constructed in accordance with the guidelines set forth by the Michigan Department of Environment Great Lakes and Energy in the most current revision of the publication entitled Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State statute.
- F. All OSTDS proposed to receive sanitary sewage from habitable buildings other than single and two-family residential structures shall be equipped with the following:
 - 1. A septic tank outfitted with an effluent filter designed for commercial applications.
 - 2. A septic tank equipped with a water-tight access riser installed to facilitate the pumping of the septic tank and the maintenance of the effluent filter, or other internal components, without the need to excavate the lid.

3-13 Lots less than 1 Acre, Subdivisions and Site Condominiums

Site and soils evaluations for an OSTDS proposed to be located on a parcel of less than one acre as created after July 28, 1997, a parcel within a subdivision, a parcel which is classified as a site condominium, or a parcel that was otherwise created in excess of the allowable number of exempt parcel splits under the Land Division Act, Act 288, PA 1967, (Mich. Comp. Laws Section 560) shall comply with all aspects of the rules entitled Part 4. Department of Environmental Quality On-site Water Supply and Sewage Disposal for Land Divisions and Subdivisions, being R560.401-R560.428 of the Michigan Administrative Code, or current State statute, prior to permitting.

3-14 Residential Single and Two-family On-site Sewage Treatment and Disposal System (OSTDS) Construction

The following requirements shall apply to the construction and installation of all OSTDS.

3-14.1 Minimum Site Requirements

A. Conventional Sewage System

1. Soil permeability rates of the native soil in the proposed infiltrative area of the absorption system shall be between 3 and 45 minutes per inch, as estimated by the USDA soil texture class.
2. The effective native soil depth or depth to seasonal high water table shall be a minimum of twenty-four inches (24") from natural grade in stratified sand and gravel, medium sand; eighteen inches (18") in fine sand, loamy sand; twelve inches (12") in sandy loam, loam, silt loam, sandy clay loam.
3. The natural slope in the proposed infiltrative area of the system shall not exceed twelve percent (12%). When natural slopes are greater than 12% but less than 25%, the department shall require a detailed development plan to be submitted for review and approval by the Department.

Development plans shall be drafted by a licensed professional engineer, a professional surveyor, a registered sanitarian, a registered environmental health specialist, or other professional approved by the health department.

Development plans shall be to scale with a maximum two foot (2') contour interval, with both the existing and proposed contours indicated. The development plan shall show the proposed design for the initial and replacement OSTDS, and shall indicate the location of the existing or proposed dwelling and water supply well. Locations of the OSTDS and the water supply well shall facilitate ease of access for future maintenance and/or replacement.

4. Deep cut excavations to remove undesirable soil horizons shall be made to a soil horizon meeting the requirements of Section 3.14.1.A.1 and 2.
5. The isolation distances shall meet the requirements set forth in Section 3-14.2.A of this code.
6. The site of the proposed system shall not be located in a floodplain of 100 years or less, or in an area subject to seasonal flooding, runoff, or ponding of surface waters. It shall be the property owner's responsibility to document the 100 year flood plain as recognized by the Michigan Department of Environment Great Lakes and Energy (EGLE), or appropriate agency, at the request of the Department.
7. The system shall be located so that it is accessible for cleaning or inspection purposes.
8. The proposed site shall not have an available sewer by definition.

B. Alternative OSTDS

Specific site requirements for the installation of an OSTDS employing alternative treatment technologies may be defined by the Health Officer on a case by case basis or may be defined in the technical manual.

3-14.2 Construction Requirements

- A. The proposed OSTDS shall satisfy the isolation requirements as summarized in Table 3-14.2.A.
- B. The soil depth between the limiting zone and the aggregate/soil interface shall not be less than:
 - a. Thirty-six inches (36”) for an OSTDS that provides uniform distribution through pressure distribution.
 - b. Forty-eight inches (48”) for an OSTDS that provides non-uniform distribution through gravity flow.
- C. Prior to entering the soil absorption system, all sewage shall first be treated by a septic tank.
- D. The absorption system selected for use in a specific soil shall meet the minimum application rates and required absorption area as determined by the native soil and Table 3-14.2B.
- E. The absorption system shall have a minimum absorption area of 400 ft² for a bed system, or 300 ft² for a trench system.
- F. Alternative sewage systems shall be designed by a licensed professional engineer in accordance with the specifications of the technical manual.

3-14.2 A. Isolation Distances Table

Isolation Distances						
From	To					
	Gravity Sewer or Effluent Lines	Pressurized Sewer or Effluent Lines	Septic Tanks or Pump Tanks	Absorption System	Earth Pit Privies	Vaulted Privies
Residential Well	10	50	50	50	50	50
Type IIB and Type III public water supply wells	10	75	75	75	75	75
Type IIA and Type I public water supply wells	10	200	200	200	200	200
Property Lines	n/a	n/a	10	10	10	10
Foundation Wall/ Footing drains	n/a	n/a	5	10	10	5
Storm/Subsoil Drains	n/a	n/a	5	25	25	5
Water Lines	n/a	n/a	10	10	10	10
Embankments	n/a	n/a	10	20	20	10
Surface Water	n/a	n/a	75	75	75	75

3-14.2 B Absorption System Sizing Table

Absorption System Sizing - Minimum Sizing 400 ft ² bed 300 ft ² trench						
Texture Class of Native Soil	Estimated Permeability Rate		Sewage Application Rate (GPD/ft ²)		Minimum Absorption Area Required (ft ² /bedroom)	
	inches/hour	minutes/inch	bed	trench	bed	trench
Coarse Sand, Gravel, Gravelly Sand	>20	<3	Not Suitable – Infiltrates too quickly to provide adequate treatment to protect groundwater/surface water.			
Stratified Sand and Gravel, Medium Sand	20-6.0	3-10	0.75	1.0	200	150
Fine Sand, Loamy Sand	6.0-3.0	11-20	0.5	0.75	300	200
Sandy Loam, Loam	3.0-2.0	21-30	0.375	0.5	400	300
Silty Loam, Sandy Clay Loam	2.0-1.35	31-45	0.3	0.4	500	375
Clay Loam, Silty Clay Loam	Not Suitable – Infiltrates too slowly to accept sewage at rates applied.					
Silty Clay,						

3-14.3 Aggregate/Stone

A. Aggregate/Stone Material

- Aggregate shall be washed stone ranging in size from three-eighths inch (3/8") to two and one-half inches (2 1/2") with a total fines content not exceeding five-tenths percent (0.5%) loss by washing. Stone aggregate shall rate three or more on Moh's scale of hardness. Sizing and hardness specifications and testing methodology shall be defined in the technical manual.
- Alternative aggregate may be approved by the Department.
- Documentation shall be provided to the Department upon request that all aggregate used in sewage systems complies with above size and fines requirements.

B. Aggregate/Stone Installation

- The aggregate in an absorption system shall be a minimum of twelve inches (12") in depth. There shall be a minimum of six inches (6") of aggregate below the distribution pipe. The aggregate in an absorption bed system shall extend a minimum of two feet (2') beyond the header, footer, and laterals.
- The aggregate shall be continuous throughout the full width and length of the absorption bed or trench.
- Aggregate shall not be mounded around the distribution pipe and shall be uniform in depth throughout the absorption bed or trench.

C. Aggregate Cover

1. Prior to backfilling the absorption system, the aggregate shall be covered with an approved filter fabric.
2. Other materials used as aggregate cover shall be approved by the Department or shall be consistent with the current technical manual.
3. The septic system shall be backfilled with a minimum of six inches (6") and a maximum of thirty inches (30") of sand-based soil cover.

3-14.4 Absorption System Distribution

- A. Piping within a gravity distribution network of an absorption system shall meet the following conditions:
 1. The septic tank effluent line shall be solid schedule 40 PVC and connect to the header at a ninety (90°) degree angle between the centermost laterals.
 2. A double header or wye (Y) shall be required when seven or more laterals are used.
 3. The header shall be solid piping installed to be level to allow even distribution of effluent throughout its length. The header shall connect all lateral distribution pipes within the absorption system.
 4. The footer shall connect to all distribution line laterals within the absorption system.
 5. Distribution line laterals for absorption bed installations shall be placed a minimum of three feet (3') and a maximum of four feet (4') on center unless otherwise approved by the Department.
 6. The slope of the distribution lines shall not exceed four inches (4") in one hundred feet (100').
 7. Trenches shall be installed so that a minimum of thirty-six inches (36") of undisturbed soil remains between each trench.
 8. All piping and distribution products shall be approved by the Department.
- B. All perforated pipe shall be installed with centerline markings facing up to allow for proper drainage.
- C. Installation of technologies not comprising a conventional stone aggregate and perforated pipe design shall obtain approval of the Department prior to permitting and installation, or shall be designed specifically in accordance with the Department's technical manual.

3-14.5 Septic Tanks

- A. Septic tanks shall be watertight and constructed of concrete or other materials approved by the Department.
- B. The sewer line from the building to the septic tank shall be constructed of schedule 40 PVC plastic with water tight joints or other approved material.

- C. Septic tanks shall have a liquid capacity of at least the average volume of sewage flowing into it during any 24-hour period, but in no case shall the liquid capacity of the first septic tank be less than 1,000 gallons.
- D. The minimum capacity for septic tanks for a one, two, or three-bedroom dwelling shall be 1,000 gallons, except where in the opinion of the Department, increased capacities may be required. Each additional bedroom shall require an additional 250 gallons. Each garbage grinder shall require an additional 250 gallons.
- E. Septic tanks shall be equipped with an approved effluent filter installed in the outlet baffle, or other approved location.
- F. Septic tanks shall be equipped with a water tight access riser installed to grade to facilitate maintenance. Risers shall be installed with dual lids, leaving the concrete lid in place, or shall be equipped with other Department approved secondary safety device to preclude accidental tank entry.
- G. All septic tanks shall be installed to be level and to flow in accordance with the manufacturer's design intent.
- H. When gravity flow from the septic tank to the absorption system is not possible, a separate pump chamber of a two-compartment tank or a separate dosing tank is required to pump effluent to the absorption system. In no case shall the liquid capacity of the pump tank or pump chamber be less than 500 gallons.
- I. All systems receiving sewage from a grinder pump shall be equipped with a minimum of two 1,000 gallon septic tanks. The first septic tank shall be installed in series to allow the settling of sewage discharged by the pump and shall be equipped with an outlet baffle.
- J. When septic tanks, privies, temporary privies, or portable toilets are cleaned or serviced, the agency performing such service shall comply with Part 117 P.A. 451 of 1994 (Mich. Comp. Laws § 324.11701 et seq.), as amended, or current State of Michigan requirement, and 40 CFR, Part 503 or current Federal requirements.

3-14.6 Experimental Systems

The use of experimental systems may be authorized at the discretion of the Health Officer. This authorization shall be for the purpose of testing new technologies. An experimental system shall be designed by a licensed professional engineer.

3-15 Privies/Outhouses

- A. Permitting of Privies
 - 1. Privies may be permitted for public or private use.
 - 2. Privies shall not be installed where not compliant with State of Michigan construction codes, associated Technical bulletins, policies, and advisories.

3. Privies shall not be permitted in lieu of the installation of a septic system for dwellings or structures served by pressurized plumbing, or otherwise generating water carried sewage.
4. Vaulted or earth pit privies may be permitted if there is no available sewer for connection.
5. Privies shall not be permitted within a 100 year floodplain boundary. The property owner shall be responsible for documenting the 100 year floodplain elevation as recognized by the Michigan Department of Environment Great Lakes and Energy upon the Department's request.
6. Dwelling or structures serviced by a privy are limited to an outdoor hand pump water supply system.

B. Earth Pit Privies

Prior to an earth pit privy construction permit being issued the proposed location shall meet the following site requirements:

1. Soil permeability rates of the native soil in the proposed infiltrative area of the absorption system shall be between 3 and 45 minutes per inch, as estimated by the USDA soil texture class.
2. The effective soil depth shall be a minimum of sixty inches (60") from natural grade.

C. Privy Construction

- A. All privies shall be constructed and maintained in accordance with Section 12771 of Act 368, P.A. of 1978 (Mich. Comp. Laws § 333.12771) and R 325.421 et seq. of the Michigan Administrative Code promulgated there under, or current State requirement.
- B. The bottom of the pit of an earth pit privy shall terminate a minimum of forty-eight inches (48") above the limiting zone.
- C. Vault privies shall have a minimum tank capacity of 1,000 gallons, shall be of water tight construction, and shall be located to facilitate pumping of waste.
- D. Privies shall be located at least fifty feet (50') from all habitable buildings other than that which they serve.
- E. Privies shall be located as prescribed in Table 3-14.2.A of these regulations.

D. Composting Toilets

A composting toilet may be used as an alternative to a privy, if all conditions of 3-15 (A) are met, and they comply with the following conditions:

1. No drains shall emanate from the composting toilet.
2. The composting toilet shall be of adequate capacity for the intended use.

3. Composting toilets shall meet NSF/ANSI Standard 41_Non-Liquid Saturated Treatment Systems.

3-16 Abandonment of OSTDS

The health officer shall order the owner to abandon a sewage system when any of the following exist:

1. The source of the sewage effluent has been permanently eliminated.
2. The sewage system creates or has the potential to create a public health hazard.
3. The sewage system has been installed or otherwise repaired, after the effective date of this code, without first obtaining a permit.

When an OSTDS is abandoned, it shall be rendered to prevent a potential safety hazard. Abandoned septic tanks shall be pumped and the contents disposed of by a licensed septage waste hauler according to law. The septic tank shall then be collapsed and filled with an approved material or shall be removed and transported and disposed of at a Type II landfill in accordance with law.

Article IV – Commercial OSTDS 1,000 gallons/day to 10,000 gallons/day

4-1 Applicability

This article shall apply to OSTDS other than private single or two-family residences, which utilize septic tanks and absorption system for peak daily flows equal to or greater than 1,000 gallons per day flow and less than 10,000 gallons per day flow.

Appeals on all sites which serve buildings other than single and two-family residences, including those with peak daily flows of less than 1,000 gallons per day evaluated under these regulations, shall be made to the Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirement.

4-2 Requirements

- A. All OSTDS proposed to receive sanitary sewage from habitable buildings other than single and two-family residential structures shall comply with these regulations and the requirements of the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirements governing commercial OSTDS designed to receive sanitary sewage.

Article V – Water Wells

5-1 Applicability

This Article is intended to regulate the installation of water wells and water supply systems. Installation, operation, alteration, and maintenance shall be consistent with, and complementary to the Administrative Rules, as amended, of the Michigan Public Health Code, 1978 PA 368, Part 127 (Mich. Comp. Laws §333.12701), the Michigan Safe Drinking Water Act, 1976 PA 399 (Mich. Comp. Law Section 325), or current State requirement. This Article does not apply to the installation of wells, water mains, service lines, etc., which are part of a Community water supply as defined by the Michigan Safe Drinking Water Act.

5-2 Technical Definitions

- Abandoned Well -** A well which has its use discontinued, has been left uncompleted, is a threat to the groundwater resource, is or may be a health or safety hazard, or that is in such disrepair, or its construction is such, that its use for the purpose of obtaining groundwater is impractical.
- Bedrock -** Consolidated and continuous geologic material, such as limestone, dolomite, shale, sandstone, basalt, or granite.
- Bentonite -** A plastic, colloidal clay which has extensive ability to absorb fresh water and swell in volume and which is composed predominantly of the mineral Montmorillonite.
- Concrete Grout -** A mixture of Portland cement, sand, and water in the proportion of one bag of cement (94 pounds), an equal volume (one cubic foot) of dry sand or gravel aggregate, and not more than six gallons of clean water.
- Extensive Change -** Includes, but is not limited to, replacing the entire well casing, removing a well casing from the ground, changing aquifers, or increasing well capacity by more than 10 GPM.
- Hydraulic Fracturing -** The application of liquids or gasses exceeding 250 pounds per square inch via confinement in a predetermined portion of borehole for the purpose of parting the rock matrix or opening existing rock fractures to increase permeability. The pressure is pump pressure, measured at the ground surface.
- Neat Cement -** A mixture of one bag of Portland cement (94 pounds) and not more than six gallons of freshwater. Drilling fluid bentonite that is not more than 5% by weight of cement and additional water that is not more than 0.6 gallons for each 1% of bentonite may be added to neat cement. Other additives and admixtures shall be approved by the Department before use.
- Pump Installer -** A person qualified to engage in the installation, removal, alteration, or repair of water well pumping equipment.
- Rental Property -** A tract of land or dwelling offered for lease to the public for human living purposes which may consist of short or long-term use.

Water Supply System - A system of pipes and structures through which water is obtained including, but not limited to, the source of water such as wells, surface water intakes, and hauled water; pumping and treatment equipment; storage tanks; pipes, and appurtenances, or a combination thereof, used or intended to furnish water for domestic or commercial use.

Well - An opening in the surface of the earth for the purpose of obtaining groundwater, monitoring the quality and quantity of groundwater, obtaining geologic information on aquifers, recharging aquifers, purging aquifers, utilizing the geothermal properties of earth formations, or removing groundwater for any purpose. Wells, as defined in this Section, include but are not limited to:

1. A water supply well used to obtain water for drinking or domestic purposes.
2. A test well/monitoring well used to obtain information on groundwater quality, quantity, or aquifer characteristics for the purpose of designing or operating a water supply system.
3. A recharge well used to discharge water into an aquifer.
4. A heat exchange well used for the purpose of utilizing the geothermal properties of the earth formations for heating or air conditioning. This includes both supply and return wells and vertical bore holes for closed-loop systems.
5. An industrial well used to supply water for non-potable uses.
6. An irrigation well used to provide water for plants, livestock, or other agricultural processes.

Well Driller - A person qualified to engage in well construction, well alteration, or well repair and pump installation, who supervises the construction of water wells and the installation of pumps, and who owns, rents, or leases equipment used in the construction of water wells.

5-3 – Well Permits

5-3.1 Application for Permit

- A. An application for a water supply construction permit shall be provided by the Department.
- B. An application for a water supply construction permit shall be made by the property owner or his authorized representative.
- C. The Department shall not act upon an application unless the application is complete.

5-3.2 Construction Permits

- A. No person shall begin construction of a well or water supply or make an extensive change to an existing water supply without first obtaining a water supply construction permit from the Department.

- B. Any construction permit issued pursuant to the requirements of this Code shall be valid for a term of 24 months from the date of issuance unless declared void as provided in this code. After the expiration of the construction permit, a 30 day grace period shall exist for an extension request. A permit may be renewed (extended) one time for a period of 12 months following a site evaluation conducted by the Department that determines no change in the site conditions.
- C. A permit shall not be transferable from one person to another.
- D. The Department may deny a water supply construction permit when incomplete, inaccurate, or false information has been supplied or when determined that the requirements of this code and/or applicable state statutes have not or cannot be met. The reasons for denial shall be furnished to the applicant in writing.
- E. The Department may allow a change in the proposed well location for a permitted supply without additional application fees. The Department may require a site plan signed by the property owner(s) or their authorized representative.
- F. A permit may be rescinded or declared void by the Department when one or more of the following conditions exist:
 - 1. A change in the plans of the permit holder affecting circumstances relative to the water supply design, location, or use.
 - 2. Misrepresentation, omission, or withholding pertinent information upon which compliance with the minimum requirements contained within this code are based.
 - 3. Issuance of the permit, and/or the construction of facilities thereunder, may create a condition that constitutes a nuisance, or a threat to public health or the environment.
- G. The Department shall issue a water supply construction permit when an application containing all of the requested information has been received and the proposal satisfies all the requirements of this code. An onsite evaluation may be required prior to issuance of the permit.
- H. The permit may impose limitations or require special construction practices which the Department deems necessary to protect public health or groundwater quality. An on-site inspection conducted by the Department during construction or portions thereof may be required as part of the water supply construction permit.
- I. The well driller/contractor shall have a valid permit in possession and on-site at the time of construction, unless operating under emergency conditions per Section 5-11.
- J. A separate water supply construction permit for each well on the premises may be required by the Department.
- K. Pressurized water shall not be plumbed to a building without an approved connection to an OSTDS, or available sewer.

5-3.3 Construction Permit Not Required

- A. A permit is not required for minor repairs to the water supply system such as replacing a telescoped well screen, changing a screen elevation, deepening or plugging back a bedrock well, installing a liner pipe, replacing a pump, pump controls, pump drop pipe or pressure tank, or chemical treatment or disinfection of the well.
- B. A permit is not required from the Department for the installation of any wells under the jurisdiction of Michigan's *Mineral Well Act*, Part 625, 1994 P.A. 451, (Mich. Comp. Laws Section 324) amended, or current State statute regulating mineral exploration.
- C. If the owner, owner's agent, well driller, or pump installer is required to obtain a permit directly from the Michigan Department of Environment Great Lakes and Energy in accordance with the requirements established under the provisions of the 1976 PA 399, Michigan's Safe Drinking Water Act (Mich. Comp. Laws Section 325), they shall not be required to obtain a permit from the local health department. When the Department issues a permit for the installation or extensive change of a public water supply system under agreement, contract or cooperative arrangement as stated in Act 399 (Mich. Comp. Laws Section 325), the permit shall be issued in accordance with Section 5-3 of this Article.

5-4 Availability of Public Water Supply

- A. The existence or availability of a public water supply shall not preclude the issuance of an individual water supply construction permit under this Code unless prohibited by other regulations.
- B. When a public water supply is available the Department will contact the municipal water supplier prior to issuing a permit.

5-5 Water Well and Pump Record

A water well and pump record shall be submitted to the Department in accordance with Administrative Rule 325.175 adopted under authority of Part 127, of Act 368 (Mich. Comp. Laws Section 333), Michigan's Public Health Code, or current State requirement, and when any of the following conditions apply:

- A. A well is deepened after completion.
- B. A liner pipe is installed.
- C. The capacity of the well is increased by 10 GPM or more.
- D. A well screen is replaced.
- E. A different aquifer is utilized.
- F. A bedrock well is plugged back.
- G. A pump is replaced.
- H. An underground pressure tank is installed.

- I. A pitless adapter is installed.
- J. A well is hydraulically fractured.
- K. A water well and pump record is requested by the Department.

5-6 Priority Over Building and Occupancy Permits

Where a municipal water supply is not available, a municipality, township, or other agency shall not issue a building permit or otherwise allow construction to commence for any dwelling unless one of the following conditions exists:

- A. A water supply construction permit has first been issued.
- B. Provisions for a water supply system have been accepted by the Department.
- C. The Department does not require a water supply system.

5-7 Stop Work Order

The Health Officer may issue a stop-work order when the water supply under construction does not comply with the requirements of this Code and all applicable laws, regulations and ordinances. Work shall not resume until the owner and/or authorized agent has agreed to comply and the Health Officer rescinds the stop-work order.

5-8 Notification

The Department may require the well driller to notify the Department prior to or during construction of the water supply.

5-9 Well Inspection and Approval

5-9.1 Inspection

- A. The Department may inspect the water supply system construction or well drilling process.
- B. An inspection of a new or extensively changed water supply system may be required by the Department before the system is put into use.

5-9.2 Approval

- A. The final approval of a water supply system shall not be granted until all of the following conditions have been met:
 - 1. The water supply system is found to be in compliance with this Code, other applicable codes, and the permit requirements.
 - 2. A completed “Water Well and Pump Record”, and the associated “Abandoned Well Plugging Record” if applicable, has been submitted, reviewed, and approved.
 - 3. The Department, upon review of the required water sample analysis results, has determined

that the water quality meets safe drinking water standards for the parameters tested.

5-10 Rental Properties

- A. Water supplies serving rental properties may be condemned and ordered corrected by the Department when any one of the following conditions exists:
 1. The water quality from the well does not meet safe drinking water standards.
 2. The Department determines that continued use of a well represents a potential health hazard.
 3. A well is found to be in violation of previous applicable rules which were in effect at the time of construction.
- B. A condemnation order shall be provided by the Health Officer in writing to the owner of the water supply. The order shall specify the conditions and methods of correction and establish a compliance date not to exceed 90 days.
- C. The owner, upon receiving an order of condemnation, shall notify all tenants that continued use of the water supply represents a potential health hazard, and that precautionary measures should be taken to protect their health.

5-11 Emergency Conditions

When a lack of water results in undue hardship and the Department is closed, a well driller or property owner may initiate repair work or construction of a new well or water supply without prior notification or permit. The well driller or property owner shall contact the Department on the next working day to obtain a permit. The well driller or property owner shall be responsible for complying with all other provisions of this code.

5-12 Grouting Requirements for Bedrock Wells

Where bedrock is encountered within twenty five feet (25') of ground surface, an oversized borehole shall be drilled and the entire length of casing grouted with neat cement or concrete grout.

5-13 Hydraulic Fracturing

- A. Hydraulic fracturing to improve water well capacity shall be in accordance with the Michigan Department of Environment Great Lakes and Energy, Office of Drinking Water and Municipal Assistance, Policy and Procedure #ODWMA-368-127-005 (original effective date October 10, 1996, reformatted date April 3, 2013) which was developed to assist in the application of Administrative Rule 325.16137 adopted under authority of Part 127, 1978 PA 368 (Mich. Comp. Laws Section 333, Michigan's Public Health Code, or current State requirement.
- B. All wells that have been hydraulically fractured shall be tested for the presence of coliform bacteria after completion of the hydraulic fracturing process and the disinfection/chlorination of the well.

5-14 Geothermal Wells

Vertical closed-loop geothermal wells shall be permitted as a water well and shall be constructed in accordance

with Michigan Water Well Construction and Pump Installation Code, Ground Water Quality Control (R325.1601 et seq.), by authority provided in Part 127, Act 368, PA 1978 as amended (Mich. Comp. Laws § 333.12714) and rules, the Michigan Department of Natural Resources and Environment, Best Practices for Geothermal Closed-Loop Installations, April 2010, and the Upper Peninsula of Michigan Geothermal Technical Guidance document, or current State and regional technical guidance and/or statute.

5-15 Lots Less than 1 acre, Subdivisions, and Site Condominiums

Permit evaluations for wells proposed to be located on a parcel of less than one acre as created after July 28, 1997, a parcel within a subdivision, a parcel which is classified as a site condominium, or a parcel that was otherwise created in excess of the allowable number of exempt parcel splits under the Land Division Act, Act 288, PA 1967 (Mich. Comp. Laws Section 560), shall comply with all aspects of the rules entitled Part 4. Department of Environmental Quality On-site Water Supply and Sewage Disposal for Land Divisions and Subdivisions, being R560.401-R560.428 of the Michigan Administrative Code, or current State statute, prior to permitting.

5-16 Well Abandonment and Plugging

- A. Any abandoned well, dry hole, or well that has been determined to be contaminated or to be a safety hazard shall be plugged in accordance with Part 127 of Act 368, P.A. 1978 (Mich. Comp. Laws 333.12701 et seq.), as amended, or current State requirement.
- B. The plugging of any well or dry hole on a parcel containing a well that serves the public, or a residence other than that of the owner, shall be plugged by a State of Michigan registered well-drilling contractor.
- C. When a replacement well has been permitted and constructed, the existing well previously in service shall be abandoned and plugged unless remaining active and serving a beneficial use, or unless placed in a temporarily abandoned status in accordance with Part 127 of Act 368, P.A. 1978 (Mich. Comp. Laws 333.12701 et seq.), as amended, or current State requirement.

Article VI – Public Health Nuisance/Imminent Danger

6-1 Technical Definitions

- Imminent Danger -** An environmental health-related condition or practice which could reasonably be expected to cause death, disease, or serious physical harm immediately or before the imminence of the danger can be eliminated through enforcement procedures otherwise provided.
- Public Health Nuisance -** An environmental health-related activity, or failure to act, resulting in a condition known to, or reasonably expected to be capable of, significantly adversely affecting the health of the general public.

6-2 Public Health Nuisances Prohibited

A person shall not engage in an activity or create or permit a condition to exist, which is or may become a public health nuisance.

6-3 Public Health Nuisance Investigation

The Department may initiate investigations of public health nuisances and take all necessary action to abate the same. The Department may also investigate complaints concerning alleged public health nuisances as hereafter provided.

6-4 Complaints Concerning Public Health Nuisance

Complaints shall include specific details regarding the situation, including the nature and location of the alleged nuisance condition, the date and time of occurrence, the person responsible, the names of witnesses, and the contact information of the complainant. The Department may require such complaints to be submitted in writing and signed.

6-5 Investigation of Complaints

The Department, upon receipt of a complaint concerning a public health nuisance, may consider the information provided and may conduct such investigations, as it deems necessary. If the investigation by the Department discloses that the alleged public health nuisance no longer exists or does not represent a threat to the health and safety of the public, the complainant may be notified of such findings.

If the investigation of the Department reveals that the complaint pertains to an activity or condition subject to the statutory regulation of an official agency, bureau, or department other than the Local Health Department, the Department may notify the appropriate agency, bureau, or department of the complaint, or otherwise refer the complaint to the appropriate authority.

6-6 Abatement of Public Health Nuisance

- A. The Department may issue an order to avoid, correct, or remove any condition the department reasonably believes to be a public health nuisance.
- B. Upon issuance of an order by the Department to avoid, correct, or remove a public health nuisance, the person so named in the order shall immediately abate, mitigate, remove, or otherwise control the public health nuisance.
- C. All costs incurred as a result of the abatement of a public health nuisance shall be at the expense of the owner of the parcel and/or property from which the nuisance emanates.

6-7 Imminent Danger

- A. Upon determination that an imminent danger to the health or lives of individuals exists, the Department shall immediately inform the individuals affected by the imminent danger.
- B. Where imminent danger has been determined to exist, the Department shall issue an order to the person authorized to avoid, correct, or remove the condition creating the imminent danger. The order may be posted by the Department at or near the imminent danger. The order may specify actions to be taken, or prohibit the presence of individuals in locations or under conditions where the imminent danger exists. Authorization for presence or access may be given to individuals whose presence is necessary to avoid, correct, or remove the imminent danger.
- C. Upon issuance of an order by the Department to avoid, correct or remove an imminent danger, the person so named in the order shall immediately abate, mitigate, remove, or otherwise control the imminent danger.

- D. The owner of the parcel or property from which the imminent danger emanates, or the person otherwise responsible for the creation or control of the imminent danger shall be responsible for all costs and expenses associated with the abatement, mitigation, removal, or control of the imminent danger.
- E. In accordance with Mich. Comp. Laws § 333.2451, the Department may petition the court to restrain the condition or practice or require action to avoid, correct or remove the imminent danger. Upon failure of the person to comply promptly with an order issued under this section, the Department may petition a circuit court or district court having jurisdiction to restrain a condition or practice which the Department determines causes the imminent danger or to require action to avoid, correct, or remove the imminent danger. Any action taken to correct, abate, or mitigate an imminent danger shall be at the expense of the owner of the parcel or property from which the imminent danger emanates.

Article VII – Food Service

7-1 Compliance with State Law

All operations, establishments, individuals, and entities providing food to the public shall fully comply with Michigan Food Law, Act 92 of 2000, as amended, (Mich Comp Laws §§ 289.1101-289.8111), and the regulations adopted pursuant to this act, or current State requirement.

7-2 Plan review for New Construction

No jurisdiction [oref](#) authority shall issue a construction permit or building permit for a structure proposed to be used as a food service establishment without prior approval from the Department. Commencement of construction without Department approval will result in the issuance of a stop work order by the Department.

Article VIII - Public Swimming Pools and Hot Tubs

8-1 Compliance with State Law

All public swimming pools and hot tubs shall be fully compliant with the requirements of Part 125 of Article 12, Act 368, PA 1978, (Mich. Comp. Laws §§ 333.12521-333.12534) and the regulations adopted pursuant to this authority, or current State requirement.

8-2 Certified Pool Operator

All facilities operating and/or housing a public swimming pool or hot tub shall employ an operator possessing the National Swimming Pool Foundation (NSPF) Certified Pool Operator (CPO) credential or equivalent. The certified swimming pool operator shall be available for immediate response to the facility within 15 minutes.

Article IX - Campgrounds

9-1 Compliance with State Law

All permanent and temporary campgrounds, except children’s camps that are licensed by the Michigan Department of Health and Human Services, shall be fully compliant with the requirements of Part 125 of Article 12, Act 368, PA 1978 (Mich. Comp. Laws §§ 333.12501-333.12515) and the regulations adopted pursuant to this authority, or current State requirement.

Article X - Septic Tank Pumping and Land Application of Septage

10-1 Compliance with State Law

All entities providing septic tank pumping service, or performing land application of septage waste, shall fully comply with Part 117 of the Natural Resources and Environmental Protection Act, Act 451, PA 1994, (Mich. Comp. Laws § 324.11701 et seq.) and the regulations adopted pursuant to this authority, or current State requirement.

Article XI - Body Art

11-1 Compliance with State Law

All body art facilities, or individuals, performing tattooing, body piercing, branding, scarification, or other applicable body art activities shall fully comply with Act 375, PA 2010, as amended (Mich. Comp. Laws §§ 333.13101-333.13112) and the regulations adopted pursuant to this authority, or current State requirement.

Article XII - Cemeteries and Burials

12-1 Establishing Cemeteries

- A. Prior to the establishment of a cemetery, the landowner shall make application to the Department for review and plat approval of the proposed cemetery.
- B. The applicant shall submit two copies of a recorded survey with the location of the plat to the Department for review and approval. The plat plan shall include the following:
 1. The legal definition of the property.
 2. A scaled site plan with five foot (5') contour intervals, numbered lots, and the location of test holes.
 3. Soil information and seasonal water table elevation within the upper ten feet (10') of the soil profile.
 4. Current groundwater well locations and construction records in the vicinity and any proposed wells to be located within the proposed cemetery.
 5. Distances and locations to the nearest surface water bodies.
 6. Information regarding land uses, both current and future, for adjacent properties.
 7. Signature and seal of registered land surveyor or professional engineer.
- C. A landowner may establish a "Family Cemetery" as allowable and defined under Section 128.111 of Michigan Act 88 of 1875 as amended (Mich. Comp. Laws § 128.111), or current State regulation. A Family Cemetery shall meet the requirements of local zoning and Department review. Family cemeteries shall be one acre or less in size and be platted and deeded as a cemetery. Individuals applying for approval of a Family Cemetery shall be advised of potential future complications during land sale or transfer and of the potential necessity of legally vacating and relocating the cemetery at a future date.
- D. Backhoe cut test holes for the purpose of soil suitability determination shall be provided by the applicant for on-site evaluation by the department. The number of test holes required for approval shall be at the discretion of the department based upon local soil, geological and hydro-geological conditions. Test holes shall be excavated to a depth of ten feet (10') below natural grade, or to a depth at which bedrock or water table is encountered.

- E. Crematory remains are exempt from these requirements. Cremated remains need not be buried. Ashes may be scattered, stored, or saved.

12-1.1 Minimum Site Criteria

A. Casket or Natural Burial

1. A minimum soil depth of ten (10') feet shall be required prior to encountering evidence of seasonal high water table or bedrock for a site to be considered suitable, allowing 4 feet of suitable soil to lie beneath the casket/body and 4 feet of soil cover once buried.
2. The initial 4 feet of soil located beneath the casket or body shall not have a percolation rate greater than 3 minutes per inch.

B. Burial Using Burial Vault

1. Where a watertight burial vault is used, sufficient soil depth shall be available to install the burial vault so that the bottom of the vault is above seasonal high water table, or bedrock.
2. A minimum of four feet (4') of soil cover shall be installed over the burial vault.

C. Clean soil fill with a percolation rate less than 3 minutes per inch may be installed to meet the vertical isolation and cover requirements of these rules. Fill containing sufficient organic content and possessing a percolation rate that optimizes nutrient and contamination removal should be used.

D. Construction of cemeteries will not be allowed in environmentally sensitive areas, such as: floodplains, swamps, wetlands, ravines, steep slopes, or drainage areas to rivers, lakes, or other waterways.

E. No burials shall lie at the cemetery boundary. A buffer zone of at least 25 feet shall be required along the cemetery boundary. A fence shall also surround the cemetery.

F. There is no minimum lot size for gravesites. However, for a "family cemetery", the cemetery area cannot exceed one acre.

12-1.2 Required Isolation Distances

A. All burial sites within the cemetery shall be at least 100 feet from surface water.

B. All burial sites in a cemetery shall be located beyond the 100-year floodplain boundary.

C. All burial sites shall be located seventy five feet (75') from any water wellhead.

D. All burial sites shall maintain required isolation distance to wellheads and/or wellhead protection zones of public water supply wells.

12-1.3 Approval of Cemetery Plat

A. Upon approval, one copy of the plat and a letter of approval shall be returned to the applicant and the second copy and a copy of the letter of approval shall remain on file at the Department.

- B. The approved plat shall be recorded with the Register of Deeds by the applicant and shall meet the zoning/land use requirements of the local township.
- C. The Department shall reject the proposed cemetery if the conditions of these regulations cannot be met, or if any potential threat to public health, public safety, or the environment would be created by its approval.
- D. The owner of the cemetery shall be required to maintain retrievable and accurate records of burial dates and locations.

12-2 Disinterment's and Vacating Cemeteries

- A. Pursuant to Mich. Comp. Law § 333.2853, a permit application shall be submitted to the Department on forms provided by the State and signed by a funeral director prior to being granted an approval and permit from the Health Officer, associated with any disinterment and reinterment of human remains or the vacating of a cemetery containing human remains
- B. The Health Officer shall approve any disinterment or reinterment requests pursuant to Mich. Comp. Laws § 333.2853. A fee may be charged for review of disinterment and re-interment requests. The affidavit for interment or burial shall be signed by a licensed funeral director and specify surviving relatives. If the required signatures cannot be obtained, the licensed funeral director shall be advised to obtain a circuit court order.
- C. If a cemetery is to be vacated, a circuit court order is required and the Michigan Historical Commission shall be contacted. The Health Officer shall supervise the actual disinterment and re-interment of bodies and remains as required by Mich. Comp. Laws § 333.2458.

12-3 Cemetery Related Complaints

- A. All complaints regarding cemetery maintenance and operation are under the legal jurisdiction of the Cemetery Commissioner under authority of Michigan Cemetery Regulation Act, Act 251 of the Public Acts of 1968, as amended (Mich. Comp. Laws §§ 456.521-456.453), or current State regulations. Complaints regarding human cemeteries should be addressed to the Michigan Department of Licensing and Regulatory Affairs (LARA), or current designated State department.
- B. Complaints associated with animal burial fall under authority of the Bodies of Dead Animals Act (Mich. Comp. Laws §§ 287.651-287.683) and administrative rules adopted thereunder (Mich. Admin. Code R287.651-R287.657). Complaints associated with animal burial should be referred to the Michigan Department of Agriculture and Rural Development (MDARD) or current designated State department.

Article XIII – Clandestine Drug Related Contamination

13-1 Clandestine Drug Laboratories

The Department shall condemn and prohibit occupancy of any habitable building, or portion thereof, for which credible evidence or notification has been received indicating that a clandestine drug laboratory has been operated within that habitable building in accordance with Michigan Public Health Code (Mich. Comp. Laws § 333.12103) and the Housing Law of Michigan (Mich. Comp. Laws § 125.485a).

13-2 Other Drug-Related Contamination

The Department shall condemn and prohibit occupancy of any habitable building or portion thereof for which credible evidence or notification has been received indicating that drug-related contamination exists within the structure posing a significant health risk to the occupants. Contaminants of concern may include, but are not limited to, methamphetamine, fentanyl, and carfentanyl.

13-3 Expansion of Condemnation

Condemnation of an individual residence or area within a habitable building may extend into other areas or residences in a habitable building based upon interconnectivity of building design. Justification for expansion of condemnation may include, but is not limited to, interconnectivity and environmental assessment of heating, ventilation and air conditioning (HVAC) ductwork. Environmental assessment and associated costs shall not be at the expense of the Department.

13-4 Lifting of Condemnation

Habitable buildings, or any portion thereof, condemned under this Article shall remain condemned until the Department has received and approved the laboratory results and reporting from an environmental assessment deemed acceptable by the Department and performed by a qualified third party environmental consulting professional, company, firm or agency and until such time that the Department has lifted the condemnation. The decontamination, environmental assessment, and associated costs shall not be at the expense of the Department.

Article XIV – Enforcement

14-1 Criminal Enforcement

- A. A person who violates this code or the rules promulgated under it is guilty of a misdemeanor.
- B. By authority of Michigan’s Public Health Code, Act 368, P.A. of 1978, Section 2443, as amended (Mich. Comp. Laws § 333.2443), a misdemeanor committed under this code is punishable by imprisonment for not more than six months, or a fine of not more than \$200 or both.
- C. Each act of violation shall constitute a separate offense.

14-2 Civil Enforcement

- A. Whenever the Health Officer determines that this code has been violated, he shall issue a notice of violation to the person responsible. The Health Officer shall issue this notice no later than 90 days after the discovery of the alleged violation.
- B. The notice shall be in writing and include the following information:

1. The nature of the violation, stated with particularity, including reference to the section alleged to have been violated.
2. The civil penalty, if any, established for the violation.
3. The remedial action required to comply with this code.
4. A reasonable time, not to exceed 90 days, for compliance.
5. A statement that failure to correct or abate the violation in the prescribed manner shall result in the issuance of an appearance ticket.
6. A statement that the alleged violator has the right to appeal the notice in accordance with Article XVI.
7. The notice of violation shall be served upon the alleged violator by delivering the notice to him in person; or by sending a copy of the notice by registered mail with proof of mailing to his last known address; or if the person to be served is unknown, by posting the notice in a conspicuous place on the premises.

14-3 Appearance Tickets

- A. The Health Officer is authorized, by authority of Michigan's Public Health Code Act 368, P.A. of 1978, Section 2463 (Mich. Comp. Laws § 333.2463), pursuant to Sections 9a to 9g of Chapter 4 of Act No. 175, P. A. of 1927, as amended, (Mich. Comp. Laws §§ 7.64.9a-7.64.9g), to issue and serve appearance tickets for violations of this code.
- B. No appearance ticket shall be issued for a violation of this code without first having served the alleged violator with a written notice of violation.

14-4 Schedule of Civil Penalties

- A. Monetary civil penalties shall be imposed according to the following schedule for subsequent violations occurring within a rolling 24-month period. Violations occurring beyond 24 months of the initial violation will be considered first violation:
 1. First violation: \$200.00
 2. Second violation: \$500.00
 3. Third and subsequent violations: \$1,000.00.
- B. A civil penalty levied under this Section shall be for each violation or day that the violation continues. The civil penalty may be assessed for a specified violation of this code or order issued which the Health Officer has the authority and duty to enforce. A civil penalty may be recovered in a civil action brought in the county in which the violation occurred or the defendant resides.

14-5 Inspections, Investigations and Warrants

To enforce this code, the Department may inspect or investigate any matter, thing, premises, place, person, record, vehicle, incident, or event. The Department may collect samples for laboratory examination. The

standards and procedures for issuance of an inspection or investigation warrant shall be in accordance with Mich. Comp. Laws §§ 333.2242-2247.

14-6 Injunctions

The Health Officer, without posting bond, may maintain injunctive action to restrain, prevent, or correct a violation of a law, rule, or order which he has the duty to enforce, or to restrain, prevent, or correct an activity or condition which he believes adversely affects the public health. This remedy may be used notwithstanding the existence and pursuit of any other remedy.

~~14-7 Obstruction of Health Officer~~

~~It shall be unlawful for any person to molest, willfully oppose, or otherwise obstruct the Health Officer.~~

Article XV - Variances

15-1 Variances

- A. A variance from the specific requirements of this code may be granted by the Health Officer when all of the following conditions exist:
 - 1. No substantial health hazard or nuisance is likely to occur.
 - 2. Strict compliance with the code requirements would result in unnecessary or unreasonable hardship to the petitioner.
 - 3. No state, local statute, or other applicable laws would be violated.
 - 4. The protection of the health, safety, and general welfare of the public is assured.
- B. The variance request shall be in writing. The applicant shall demonstrate that the variance would pose no hazard to the public or the environment.
- C. The Health Officer may specify conditions necessary for the granting of the variance

Article XVI - Appeals

16-1 Board of Appeals

- A. In order to provide for reasonable and equitable interpretations of the provisions of this code and associated technical manual, a board of appeals may be formed to hear appeals. The board shall have not less than three but not more than five members, appointed by the board of health. The appeals board shall be representative of varied interests.
- B. The membership of the board of appeals shall elect their own chairperson from among its membership.
- C. The Department shall provide administrative support to the board of appeals.

- D. Appeals on all sites which serve buildings other than single and two-family residences, including those with peak daily flows of less than 1,000 gallons per day evaluated under these regulations, shall be made to the Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the Michigan Criteria for Subsurface Sewage Disposal, as written by the Division of Environmental Health, Bureau of Environmental and Occupational Health, Michigan Department of Public Health, April 1994, By authority of Act 368, P.A. 1978, as amended (Mich. Comp. Laws Ch. 333) and Act 451, P.A. 1994, as amended (Mich. Comp. Laws § 324.101 – 324.90106), or current State requirement.
- E. Appeals on all sites where an OSTDS is proposed to be located on a parcel of less than one acre as created after July 28, 1997, a parcel within a subdivision, a parcel which is classified as a site condominium, or a parcel that was otherwise created in excess of the allowable number of exempt parcel splits under the Land Division Act, Act 288, PA 1967, (Mich. Comp. Laws Section 560) shall be made to the Michigan Department of Environment Great Lakes and Energy or current State agency responsible under the rules entitled Part 4. Department of Environmental Quality On-site Water Supply and Sewage Disposal for Land Divisions and Subdivisions, being R560.401-R560.428 of the Michigan Administrative Code, or current State statute.
- F. Appeals against specific language referenced in State act, law, or statute shall be referred to the State regulatory authority having oversight over that specific act, law, or statute.

16-2 Informal Resolution of Disputes

- A. A person who disagrees with a decision of the Health Officer, arising out of this code, is encouraged to meet and resolve the dispute with the Director of Environmental Health or the Health Officer. At any time a person may cease efforts to reach an informal resolution and may request a formal hearing before the board of appeals.
- B. Before the Health Officer suspends or revokes a license, the Health Officer shall give notice, personally or by mail, to the licensee. The licensee shall be given an opportunity, at an informal meeting, to show compliance with all lawful requirements for retention of the license.
- C. In the absence of compliance, the Health Officer shall issue a notice of a formal hearing, followed by a hearing, in accordance with the procedures outlined in Section 16-3 below. The Health Officer may order a summary suspension of the license if the public health, safety, or welfare requires emergency action.

16-3 Formal Hearings

- A. A person who disagrees with the decision of the Health Officer, and who has been unable to resolve the dispute informally, may petition the Department for a formal administrative hearing before the board of appeals. The petitioner has 20 days after the receipt of an adverse decision to do so. The formal hearing shall be held within 30 days after the receipt of the petition. The petitioner shall be notified in writing by registered mail, or personally served, at least five days before the hearing, of the time, date, and place. After the administrative hearing, the board of appeals, by resolution of the majority of the board, may affirm, dismiss, or modify the decision. The board of appeals shall state its decision on the record or shall furnish the petitioner with a written decision within 15 days following the hearing.

- B. Hearings shall be conducted in an impartial manner. The parties shall be given an opportunity to present oral and written arguments on issues of law and policy and an opportunity to present evidence and argument on issues of fact. The petitioner shall be allowed to present his argument and evidence first, followed by the respondent.
- C. A party may cross-examine a witness, including the author of a document prepared by, on behalf of, or for use of the Department and offered in evidence. A party may submit rebuttal evidence.
- D. The hearing shall be recorded, but need not be transcribed unless requested by a party, who shall pay for the transcription.
- E. The board of appeals shall set aside a decision of the Health Officer only if substantial rights of the petitioner have been prejudiced because the decision is any of the following:
 - 1. In violation of the constitution or a statute.
 - 2. In excess of the statutory authority or jurisdiction of the Department.
 - 3. Made upon unlawful procedure resulting in material prejudice to a party.
 - 4. Not supported by competent material and substantial evidence.
 - 5. Arbitrary, capricious or clearly an abuse or unwarranted exercise of discretion.
 - 6. Affected by other substantial and material error of law.
- F. The decision of the board of appeals in all cases is final and shall be subject to judicial review as provided by law. A person aggrieved by a decision of the board of appeals may petition the circuit court of the county in which the principal office of the Department is located for review. The petition shall be filed not later than 60 days following the receipt of the final decision.