LANGUAGE ADDED TO CODE FROM OTHER EXISTING DOCUMENTS: WUPHD BOARD APPROVED TECHNICAL MANUAL, MICHIGAN WELL CONSTRUCTION CODE, MICHIGAN PLUMBING CODE, WUPHD BOARD APRPOVED POLICY, STATE MINIMUM PROGRAM REQUIREMENTS, ETC.)

Connection of Discharges

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.

Site and System Evaluations

- Backhoe cut excavations may be required and shall be provided at the expense of the applicant.
- A complete site and soil evaluation shall include, but shall not be limited to, the following information:
 - 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.
 - A determination of the seasonal high water table elevation and limiting zone.
 - Slope limitations.
 - Location of the site in relationship to flooding or seasonal ponding of surface water.
 - Availability of sufficient area to install an adequate compliant OSTDS and an area for a replacement OSTDS when required.
 - Adequate area to maintain all required isolation distance.
 - A determination of any other limiting factor to the installation and performance of the proposed OSTDS.

Residential Single and Two-family OSTDS Construction

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

• 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.

LANGUAGE REFERENCES FROM OTHER DOCUMENTS

Table 3-14.2 A. Isolation Distances

A pressurized sewer or effluent line shall satisfy the minimum isolation distances from these types of drinking water wells: Residential 50 feet, Type IIB and Type III public water supply 75 feet, Type IIA and Type I public water supply 200 feet.

An earth pit privy shall satisfy the minimum isolation distances: Residential well 50 feet, Type IIB and Type III public water supply well 75 feet, foundation wall footing drains 10 feet, embankments 20 feet.

Absorption System Distribution

Trenches shall be installed so that a minimum of thirty-six inches (36") of undisturbed soil remains between each trench.

Aggregate/Stone

Aggregate/Stone Material. Aggregate shall be washed stone ranging in size from three-eighths inch (3/8") to two and one-half inches $(2\frac{1}{2}")$ 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.

Aggregate Cover

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.

Absorption System Distribution

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.

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.

Septic Tanks

- 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.
- Septic tanks shall be equipped with an approved effluent filter installed in the outlet baffle, or other approved location.
- 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 safety device to preclude accidental tank entry.
- All septic tanks shall be installed to be level and to flow in accordance with the manufacturer's design intent.
- 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.

• 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.

Privies/Outhouses / Permitting of Privies

- Privies may be permitted for public or private use.
- Privies shall not be installed where not compliant with State of Michigan construction codes, associated Technical bulletins, policies, and advisories.
- Privies shall not be permitted in lieu of the installation of a septic system for structures served by pressurized plumbing, or otherwise generating water carried sewage.
- Vaulted or earth pit privies may be permitted if there is no available sewer for connection.
- 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.

Earth Pit Privies

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

- 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.
- The effective soil depth shall be a minimum of sixty inches (60") from natural grade.

Privy Construction

- 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.
- The bottom of the pit of an earth pit privy shall terminate a minimum of forty-eight inches (48") above the limiting zone.
- 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.
- Privies shall be located at least fifty feet (50') from all habitable buildings other than that which they serve.
- Privies shall be located as prescribed in Table 3-14.2.A of these regulations.

Abandonment of OSTDS

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. **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.

Water Well Construction Permits

Pressurized water shall not be plumbed to a building without an approved connection to an OSTDS, or available sewer.

Well Inspection and Approval

A completed "Water Well and Pump Record", and the associated "Abandoned Well Plugging Record" if applicable, has been submitted, reviewed, and approved.

Hydraulic Fracturing

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.

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.