

Mid-Michigan District Health Department

*Serving Clinton, Gratiot and Montcalm counties*

# Environmental Health Regulations



Governing  
water supply  
sewage disposal  
refuse disposal  
housing

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# Mid-Michigan District Health Department

*Serving Clinton, Gratiot and Montcalm counties*

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## Mission

We take action to assure the health and well-being of our community and the environment by responding to public health needs and providing a broad spectrum of prevention and educational services.

## Vision

Your public health team, connecting with our communities to achieve healthier outcomes.

# INTRODUCTION

The science of controlling environmental health hazards is the forerunner of modern public health, which was founded on principles of basic public sanitation. Michigan's public health system was launched in 1873 in response to crippling outbreaks of diseases--many of them waterborne--like dysentery, typhoid and cholera; toxic hazards such as arsenic in wall paper; and the danger of foodborne illness including the dreaded scourge polio. Today, with millions of people living in Michigan, it's more important than ever to protect our waters and food. Most parts of Mid-Michigan are blessed to have one of the safest and best tasting ground water supplies in the world in the Saginaw aquifer. Many wells in Mid-Michigan produce water suitable for bottling, and environmental health policies are aimed at protecting that water for our children and grandchildren. It is estimated that every dollar invested in safe water in the 20th century saved over 23 dollars.<sup>4</sup> Although the great epidemics of the 19th and early 20th centuries are behind us, each year there are as many as 4,000 people hospitalized in Michigan for foodborne illnesses. Contemporary food services sanitation programs remain operators' and diners' best guarantee of safety.

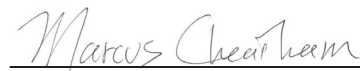
The Mid-Michigan District Health Department Environmental Health Regulations are applicable in Clinton, Gratiot and Montcalm Counties. The first District sanitary code was adopted in 1966 and became effective January 1, 1967.

The Environmental Health Regulations have been revised five times since then. The first revision in 1970 added a housing chapter, and the second in 1976 included a section on non-community water supplies (large non-municipal wells, for example a rural school, church or major business). The third revision in 2001 updated the Regulation by incorporating modern technologies and current administrative procedures. The fourth revision in fourth kept the Regulation up-to-date with evolving water and septic technologies and incorporated a consolidated glossary.

The fifth and current revision of 2012 clarifies language in Chapters I, II and III regarding general administrative provisions; drinking water supplies and on-site sewage disposal. Specific updates refer to emerging technologies within the Water Supply section; a modernized Sewage Disposal chapter; and clarified language for the glossary.

The Mid-Michigan District Health Department continually looks for better ways to ensure the health and safety of the residents of Clinton, Gratiot and Montcalm counties. A key to this effort is keeping the Department's Environmental Health Regulations up-to-date with the ever improving home, farm and industrial technologies. It is our belief that we have accomplished this with this latest revision.

4. Cutler, D. and G. Miller. 2004. The Role of Public Health Improvements in Health Advances: 20th Century United States. National Bureau of Economic Research. Working Paper 10511. Cambridge, MA, USA.



Mark W. (Marcus) Cheatham, Ph.D.  
Health Officer

Mid-Michigan District Health Department

# CHAPTER ONE

## General Provisions

### SECTION I - AUTHORITY, JURISDICTION, AND ADMINISTRATION

#### 1.1 Authority

By virtue of the power vested in the Board of Health of Mid-Michigan District Health Department under Act 368, P.A., 1978 Public Health Code (MCL 333.1101 - 333.25211) the following regulations are deemed necessary for the protection and promotion of the health, safety, and welfare of the people of Clinton, Gratiot, and Montcalm Counties.

#### 1.2 Health Officer

The Health Officer shall have jurisdiction throughout the counties of Clinton, Gratiot and Montcalm, including all cities, villages, and townships, in the administration and enforcement of these regulations and relevant state laws including all regulations or amendments hereafter adopted unless otherwise specifically stated.

The Health Officer shall act as the administrative officer of the Board of Health and shall be charged to make determinations necessary or appropriate to carry out the health department's functions under the Michigan Public Health Code, Act 368 of Public Acts of 1978, its rules and regulations, and the rules and regulations of the Mid-Michigan District Health Department.

#### 1.3 Inspection or Investigation

To assure compliance with laws enforced by a local health department, the Mid-Michigan District Health Department may inspect, investigate, or authorize an inspection or investigation to be made of any matter, thing, premise, place, person, record, vehicle, incident, or event within its jurisdiction under Michigan's Public Health Code, the laws of the State of Michigan, or the laws of governmental units in Clinton, Gratiot, or Montcalm Counties.

#### 1.4 General Power and Duties

The Mid-Michigan District Health Department shall continually and diligently endeavor to prevent disease, prolong life, and promote the public health through organized programs, including prevention and control of environmental hazards; prevention and control of diseases; and regulation of health care facilities and health service delivery systems to the extent provided by law.

#### 1.5 Interference with Notices

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

#### 1.6 Fees

The Board of Health may fix and require the payment of fees for services authorized or required to be performed by the local health department. The Board of Health may revoke, increase, or amend the fees. The fees charged shall not be more than the reasonable cost of performing the service.

All fees collected by the Health Officer shall be receipted for and deposited to the credit of the Mid-Michigan District Health Department with the county treasurer where the administrative offices of the agency are based.

- characteristics, for the purpose of designing or operating a water supply well.
- A recharge well used to discharge water into an aquifer.
- A de-watering well used to lower the groundwater level temporarily at a construction site.
- A heat exchange well used for the purpose of utilizing the geothermal properties of earth formations for heating and/or air conditioning.
- An industrial well used to supply water for industrial processes, fire protection, or similar non-potable uses.
- A freshwater well at an oil or gas well drilling site, when the freshwater well is to be retained after completion of the oil or gas drilling operation.

pearance, or presence of this material may have an obnoxious or detrimental effect on or to the senses and/or health of persons. A sewage absorption system is considered to have failed if any one of the following conditions exists:

- The system does not accept effluent at the rate of application; or
- Sewage effluent seeps from, or ponds on or around the absorption system, or contaminates the surface and/or groundwaters; or,
- When the back-up of sewage effluent in a basement, indoor plumbing, or crawl space occurs.

#### **Sewer**

A watertight conduit for carrying sewage.

#### **Soils Evaluation**

A textural analysis of the soil to determine the estimated percolation rate.

#### **Sump Pump**

A mechanical device specifically designed to move or propel clear water from a sump pit. Not intended for pumping any type of sewage.

#### **Unapproved Connection**

Any physical connection or plumbing arrangement whereby an unapproved water system is connected with any other public, semi-public or private water supply system.

#### **Variance**

An agreement to authorize an act contrary to the usual rule, regulation, law or policy; and shall include a satisfactory determination of all of the listed items a. through d. of Chapter One, Section 2.4 herein.

#### **Vermin**

An insect or animal that is destructive or harmful to the public health including but not limited to cockroaches, bed bugs, rats, and mice.

#### **Water Supply System**

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

#### **Well**

An opening in the surface of the earth for the purpose of obtaining groundwater, monitoring the quality or quantity of groundwater, obtaining geological 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:

- A water supply well used to obtain water for drinking or domestic purposes.
- An irrigation well used to provide water for plants, livestock, or other agricultural processes.
- A test well used to obtain information on groundwater quantity, quality, or aquifer

#### **1.7 Validity**

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 portion of these rules shall not be affected.

#### **1.8 Other Laws and Regulations**

These regulations are in addition to the minimum standards to the rules and regulations duly enacted by the Michigan Department of Environmental Quality, the Michigan Department of Community Health and to all other applicable laws of the State of Michigan relating to public health. Where any of the provisions of these regulations and the provisions of any other local or state ordinances or regulations apply, the more restrictive of any or all ordinances or regulations shall prevail.

#### **1.9 Notification and Adoption**

Prior to adoption of these regulations, the Mid-Michigan District Board of Health shall give notice of a public hearing and offer any person an opportunity to present data, views, and arguments. The notice shall be given not less than ten (10) days before the public hearing and not less than twenty (20) days before adoption of these regulations, and shall be in accordance with specifications given in Section 2442 of Act 368, Public Acts of 1978. After adoption by the Board of Health these regulations shall be approved by the Clinton, Gratiot, and Montcalm Counties Boards of Commissioners to become effective.

#### **1.10 Amendments**

The Board of Health of the Mid-Michigan District Health Department may from time to time amend, supplement, or change these regulations with the approval of the Boards of Commissioners.

#### **1.11 Effective Date**

These regulations and amendments thereto shall become effective at least forty-five (45) days after approval by the Boards of Commissioners for Clinton, Gratiot, and Montcalm Counties.

#### **1.12 Repeal of Other Regulations**

These regulations supersede the Environmental Health Regulations of October 25, 2006, effective January 1, 2007, which are repealed subject to enforcement of pre-existing violations.

#### **1.13 Penalty**

Any person who violates or otherwise fails to comply with any provisions of these Regulations is guilty of a misdemeanor, punishable by imprisonment for not more than 90 days, or a fine of not more than \$200.00, or both.

A violation of these Regulations may also result in the issuance of a citation, which shall include a monetary civil penalty according to a schedule of fines adopted by the Board of Health of the Mid-Michigan District Health Department of not more than \$1,000 for each violation or day that the violation continues.

#### **1.14 Pre-Existing Violations**

No violation of any repealed section or provision shall be made legal by virtue of a new effective date of these regulations. Any act, situation or condition of premises or things which when created or first allowed to exist was a violation of the Mid-Michigan District Health Department

Rules, shall continue to be a violation of these regulations if a similar section or provision is a part of these regulations. Any action, issuance of permit, or maintenance of a condition that was mandatory under the provisions of the regulations now repealed, shall continue to be required if the same or similar provision is contained in these regulations.

## **SECTION II - APPEALS, VARIANCES, AND INTERPRETATION**

### **2.1 Board of Appeals**

In order to provide for the procedural due process under the provisions of these regulations, and their prospective application including violations thereof, there is hereby created an “Appeals Board”. The Mid-Michigan District Board of Health shall constitute the “Appeals Board” and shall hear any appeals presented in accordance with rules and procedure established by said Board. The Chairperson of the Board of Health shall serve as chair of the Appeals Board. The Board shall furnish the appellant with a written report of its findings and decision.

### **2.2 Hearing of Appeals**

After having exhausted all possible remedies, including consideration from the Health Officer accompanied by a written response, a person may appeal a decision or order to the Appeal Board.

The Appeals Board shall hear appeals based on the following rules of procedure:

- A written request to appeal shall be filed with the Health Officer within ninety (90) days of the decision or order.
- The Health Officer shall provide to the appellant a “Request for Appeal” form and appeal procedure.
- The appellant shall submit the completed “Request for Appeal” form, appeal fee and additional information pertinent to his/her appeal.
- The request for appeal shall be transmitted to the Appeals Board at its next regular board meeting.
- The Appeals Board shall set a time and date for appeal within forty-five (45) days or at the discretion of the Chair, the Appeals Board may establish a special meeting for appeal purposes.
- The Health Officer shall forthwith transmit the appeal hearing information to the appellant at least fifteen (15) days prior to the hearing date.
- At the request of the appellant or at the discretion of the Appeals Board, a Technical Advisory Committee (TAC) may be convened to provide technical assistance during the appeal procedure. The TAC is established and maintained per policy adopted by the Board of Health and shall serve to provide impartial expertise as well as a neutral opinion.
- The Chair of the Appeals Board shall conduct the hearing.
- The Appeals Board shall provide a written disposition of its findings and decision within ten (10) days to the appellant.

### **2.3 Variance**

The Appeals Board and/or Health Officer may grant individual variances from the requirements of these rules when it has been determined that all the following conditions exist:

- That no substantial health hazard or nuisance is likely to occur; and

### **Privies or Outhouses**

A building or other structure not connected with a sewer system or with a properly installed and operated sewage disposal system, and which is used for the reception, disposition, or storage, either temporarily or permanently, of feces or other excreta from the human body.

### **Public Water Supply**

A water supply which provides water for drinking or household purposes to persons other than the supplier of water, except those water supplies which supply water to only one (1) living unit.

### **Riser**

Pre-cast or custom built (to industry standards) water-tight vertical extension located over the clean out port(s) on a septic tank.

### **Rubbish**

Processed, inorganic solid wastes, excluding ashes, consisting of both combustible and non-combustible wastes, such as paper, cardboard, tin cans, yard clippings, wood, glass, bedding, crockery, or litter of any kind that will be a detriment to the public health and safety. For the purpose of these regulations, rubbish shall also mean plastics, appliances, furniture, vehicles, construction and demolition debris, and tires.

### **Safe and Adequate Water Supply**

A water supply system which is in compliance with Part 127 of Act 368 P.A. of 1978 as amended or Act 399 P.A. of 1976 as amended and is constructed and located in such a manner as to provide water which will not endanger the public’s health and which provides sufficient water volume for the intended purpose.

### **Septage**

Septage is highly variable anaerobic slurry of liquids and solids removed from a septic tank.

### **Septic Tank**

A water-tight receptacle used for the purpose of receiving all domestic and organic sewage and so designed to permit the separation of solids in suspension from such wastes and to permit such retained solids to undergo decomposition therein, permitting the effluent or overflow to be disposed of in a manner consistent with the Department’s Environmental Health Regulations.

### **Sewage**

A combination of the domestic liquid or semi-solid wastes from a dwelling or habitable building. This includes human excreta, garbage disposal wastes, dishwater, bath water, laundry wastes, basement drains, etc.; but excludes roof storm water, water softener backwash discharge, footing drains and storm water discharge.

### **Sewage Effluent**

Sewage, water, or other liquid partially or completely treated or in its natural state, flowing from a septic tank.

### **Sewage Failure**

A Sewage Failure shall include but not be limited to any condition where effluent from any sewage absorption system is exposed to the surface of the ground or is permitted to drain on or to the surface of the ground, into any ditch, storm sewer, lake or stream, or when the odor, ap-

**Manual of Septic Tank Practices**

United States Department of Health, Education, and Welfare Publication No. (HSM) 72-10020, formerly known as “PHS Publication No. 526”, revised in 1967, is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20201.

**Michigan Criteria for Subsurface Sewage Disposal**

By authority of Act 368, P.A. 1978, as amended, and Act 245, P.A. 1929, D48, Rev. 4/94, Michigan Department of Public Health, Division of Environmental Health, Bureau of Environmental and Occupational Health, P.O. Box 30195, Lansing, MI 48909.

**Mottling**

The presence of mottling in the soil indicates poor aeration and impeded drainage. Mottling in a soil profile is determined by the presence of irregular spots of different colors in the excavation or boring. Mottling occurs with the seasonal saturation of the soil for a period of two or more weeks during the year. As a result, anaerobic activity during the period of saturation triggers a reduction process changing the color of minerals in the soil.

**Nuisance**

Unlawful performance of an act or omitting to perform a duty that, by act or omission, injures, or endangers the health, safety, or welfare of others.

**Open Loop Geothermal System**

Open Loop Geothermal System is a geothermal heat exchanger that withdraws groundwater from a supply well, passes the groundwater through a heat exchanger, and discharges the temperature altered water either back to the ground in a discharge (return) well or to the ground surface or into surface water.

**Owners**

Both the owner of title and record and/or those occupying or in possession of any property or premise.

**Percolation Test (Soil Absorption Capacity Test)**

A method of estimating the capacity of an existing soil to receive, disperse, and absorb (percolate) the anticipated quantities of effluent (outflow) from a septic tank or other treatment device.

**Person**

Any individual, firm, partnership, party, corporation, company, society, association or other legal entity.

**Premise**

A tract or parcel of land on which a habitable building is located and shall include the building.

**Private Sewage Disposal System**

A Private Sewage Disposal System is a sewage disposal system, other than a public system which receives either human excreta, liquid wastes or both from one premise. Included within the scope of its definition are septic tank-soil absorption systems, privies, chemical toilets, and such other types as may be approved by the Health Officer.

- That strict compliance with regulation requirements would result in unnecessary or unreasonable hardship; and
- That no state statute or other applicable laws would be violated by such variances; and
- That the proposed variance would provide essentially equivalent protection for the public health and would be in the public interest.

**2.4 Interpretation**

When not inconsistent with the context, words used in the present tense include the future, words in 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 or terms not defined herein shall be interpreted in the manner of their common meaning.

# CHAPTER TWO

## Water Supply

### SECTION I - WATER SUPPLY FOR ANY PREMISE

#### 1.1 Approved Water Supply

All private, type III, and type II public water supply systems shall be constructed in accordance with Act 386 of Public Acts of 1978 as amended and Rules or Act 399 of Public Act of 1976 and Administrative Rules and with Chapter II of these regulations; shall meet water quality standards as defined in these rules; and shall produce an amount of water which will meet the needs of all system users, during all periods of peak demand.

#### 1.2 Unapproved Water Supply

It shall be unlawful for any person to occupy or permit to be occupied, any premise which has a water supply system in violation of these Regulations. Any premise constructed or maintained which is not in accordance with this chapter may be declared unfit for habitation and may be so posted by the Health Officer.

### SECTION II - CROSS CONNECTION AND UNAPPROVED CONNECTION

#### 2.1 Cross Connection Rules

The rules of the Michigan Department of Environmental Quality, entitled "Cross Connections," being sections R 325.11401 through R 325.11407 of the Michigan Administrative Code, shall apply in Clinton, Gratiot, and Montcalm Counties. Where a duly appointed plumbing inspector has authority to enforce the Michigan Plumbing Code as amended, compliance with said Code shall be deemed to be compliance with this section.

#### 2.2 Protection of Potable Water From Cross Connections

Water supply piping carrying water intended for human consumption or body contact shall not be directly connected to any pipe fixture or device containing sewage, wastewater, chemical solutions, or water from any source which is not approved for human consumption. Where potable water is supplied to such pipe, fixture, or device, the potable water shall be separated there-from by a safe air gap (or other approved means). A safe air gap is defined as the minimum vertical distance above the highest possible water level or overflow rim of the fixture, device or container measured to the lowest opening of the potable water supply pipe or faucet. Such air gap shall be at least two times the internal diameter of the potable water supply pipe, except that it shall not be less than one inch and need not be greater than twelve (12) inches.

#### 2.3 Cross Connections Prohibited

There shall be no cross-connection between a public water supply system and any active or abandoned privately-owned water supply system at a premise served by a public water supply; or any sewer, drain, conduit, swimming pool, submerged inlet, siphon, storage reservoir, non-potable water supply piping, or any liquid capable of causing contamination of the approved public water supply. A physical connection between a privately-owned water supply that is in compliance with these Regulations and another water supply which is not in compliance with the provisions of Act 368 Part 127 of Public Acts 1978 and Rules as amended and these Regulations is prohibited.

#### Effluent Filter

A filtering device (used in conjunction with or to replace the effluent baffle as part of the septic tank) designed to remove suspended and/or excessive solids from the sewage effluent.

#### Effluent Pump

An electrically powered mechanical device specifically designed to move or propel sewage effluent from a pump chamber to a final disposal field.

#### Family

A person, or group of persons related by blood, marriage, or adoption, occupying a single dwelling unit.

#### Garbage

Rejected food wastes including waste accumulation of animal, fruit, and vegetable matter used or intended for food or that attend the preparation, use, cooking, dealing in or storing of meat, fish, fowl, fruit, or vegetable.

#### Grinder Pump

An electrically powered mechanical device specifically designed to grind or break apart raw sewage and to move or propel resulting wastes to a septic tank.

#### Habitable Building

Any structure or part thereof where persons live, or sleep, or reside, or are employed, or congregate and which is occupied in whole or in part.

#### Health Department

The Mid-Michigan District Health Department.

#### Health Officer

The Director of the Mid-Michigan District Health Department and/or their authorized representatives.

#### High Capacity Well

One or more water wells associated with an industrial or processing facility, an irrigation facility, a farm, or a public water supply system that, in the aggregate from all sources and by all methods, have the capability of withdrawing 100,000 or more gallons of groundwater in one day as detailed within Part 327 of the Natural Resources and Protection Act, PA 451 of 1994 as amended.

#### High Groundwater Elevation

The elevation of the groundwater during the normally wet periods of the year, as interpreted by the physical presence of water and/or as interpreted by the presence of mottling in the soil.

#### Holding Tank

A watertight receptacle equipped with an alarm device and approved risers, which receives and holds sewage prior to pumping.

#### Innovative On-site Sewage Treatment

A developed method of on-site sewage treatment that has not been fully proven in field tests or under the circumstances of its intended use.



respectively.

### **Clandestine Drug Lab**

An illicit operation consisting of a sufficient combination of apparatus and chemicals that either has been or could be used in the manufacture or synthesis of controlled substances.

### **Closed Loop Geothermal System**

Closed Loop Geothermal System include vertical, angled, diagonal or horizontal looped piping systems that are constructed for the purpose of utilizing the geothermal properties of the earth for heating and/or cooling purposes and that utilize circulation of a nontoxic antifreeze solution rather than ground water as the heat transfer medium.

### **Conventional On-site Sewage Treatment System**

Any proven method of on-site sewage treatment other than an alternative on-site sewage treatment system that consists of a watertight septic tank with non-uniform distribution of sewage effluent to a final disposal area (drainfield or drainbed).

### **Cross-Connection**

A cross-connection is any system of piping or other arrangement whereby a public or private water supply system is connected directly with a sewer, drain, conduit, swimming pool, well, submerged inlet, siphon, storage reservoir, abandoned water supply system ( or an active or abandoned privately-owned well at a premise served by a public water supply), any non-potable water supply system, or any similar circumstance or device which contains or may contain sewage, wastes or any liquid capable of causing contamination of the approved public or private water supply.

### **Distribution Box**

A receptacle, installed with proper footings and provided with outlets on the same horizontal plane, used for the purpose of assuring the equal distribution of the septic tank effluent, when such effluent is being disposed of by means of an absorption field, trench or bed.

### **Diversion Valve**

A mechanism provided to enable a switching of the effluent flow from one soil absorption system to another separate absorption system so as to permit alternate periods of loading and resting for each system.

### **Dosing/Pump Chamber**

A dosing or pump chamber is a water-tight tank or receptacle used for the purpose of retaining the overflow of effluent from the septic tank, pending its automatic discharge to a selected point.

### **Dwelling**

Any house, building structure, tent, shelter, trailer, or vehicle or portion thereof, which is occupied, or intended for occupancy, in whole or in part as the home, residence, living or sleeping place of one or more human beings, either permanently or transiently.

### **Dwelling Unit**

A room or group of adjoining rooms in a building occupied or intended for occupancy as living quarters by but one family and provided with living, sleeping and sanitary facilities.

## **SECTION III - PERMIT FOR WATER SUPPLY SYSTEMS**

### **3.1 Permit**

It shall be unlawful for any person to construct, alter or extend any private, type III, or type II public water supply system, open loop geothermal system, and/or well within Clinton, Gratiot, and Montcalm Counties, unless they have a permit issued by the Health Officer to construct, alter or extend same. Any person found to have constructed, altered, or extended any water supply system without benefit of an approved permit shall be subject to the penalties set forth in Chapter 1, Section 1.13 for violation of these Regulations.

### **3.2 Transfer of Permits**

Should the ownership of the property for which a permit has been issued change, the permit may be transferred to the new owner provided that no change in the scope of the project has or will occur. The transfer must be requested in writing on forms to be provided by the Health Department and signed by the new property owner as well as the original property owner.

### **3.3 Expiration of Permits**

Any permit issued pursuant to the requirements of the preceding sections shall be valid for the term of twenty-four (24) months from the date of issuance, unless declared void as pro-vided in Section 3.4 of these regulations. At the request of the applicant, said permit may be extended for a period of not more than one (1) year from the original date of expiration.

### **3.4 Void Permits**

The Health Officer may declare a previously issued Water Supply Construction Permit to be null and void for any of the following reasons:

- False, inaccurate, or incomplete information supplied by the applicant or permit holder; or
- A change in the construction plans of the applicant or permit holder affecting circumstances relative to the water supply design, location or use; or
- Discovery of health hazards at the site that might impact public health.

### **3.5 Denial of a Permit**

The Health Officer may deny an application for a Water Well Construction Permit when the applicant has supplied incomplete, inaccurate, or false information, or when the Health Officer determines that the requirements of these regulations and applicable state statutes have not or cannot be met. The denial and reasons for said denial shall be furnished to the applicant in writing.

When connection can be made to an available approved public or municipal water supply, the Health Officer shall not issue a permit to construct a private water supply system unless approved by the local municipality.

### **3.6 Easements – Water Supply Systems**

If any portion of a water supply system (well casing, pump, house, supply line, electrical, etc) is proposed for placement on a separate, legally recognized parcel, then an easement or permanent deed restriction shall be required and shall be recorded with the applicable County Register of Deeds Office. A “separate, legally recognized parcel” is defined as a parcel of land with a legal description or tax parcel identification number differing from the parcel where the dwelling is located or proposed to be built.

Plans, which may include a recorded survey, are to accompany any permit application where the intended water supply system, or any part thereof, is proposed on a “separate, legally recognized parcel”.

The Health Department shall require proof that all applicable documents related to an easement or permanent deed restriction have been recorded with the applicable County Register of Deeds Office prior to the issuance of a water well permit.

In instances where the recording of an easement or permanent deed restriction may delay construction of the repair or replacement of an existing water well, the homeowner may request authorization to record these documents at the completion of the water well repair or replacement process. Health Department final approval of the completed construction will be withheld until proof that all applicable documents have been recorded with the Register of Deeds Office and submitted to the Health Department.

## SECTION IV - INSPECTION AND APPROVAL

### 4.1 Inspection and Approval

All newly constructed water supply installations and records pertinent to each installation are subject to inspection by the Health Officer. Furthermore, all new water wells and pump installations shall be approved in accordance with Part 127 of Act 368, P.A. 1978 as amended, or Act 399 P.A. of 1976 as amended and Administrative Rules.

## SECTION V - APPLICATION, PERMIT AND FEES

### 5.1 Applications

An application for a permit to construct a private water supply system, type III, or type II public water supply system, open loop geothermal system, and/or well must be in writing and submitted to the Health Officer. A plan of the proposed well location shall be provided on the application showing the well location in relationship to the building, property lines and possible sources of contamination.

### 5.2 Permits

A permit to construct a private water supply system, type III, or type II public water supply system, open loop geothermal system, and/or well shall be issued upon approval by the Health Officer. Such approval shall be based upon the provisions of Part 127 of Act 368 Public Acts of 1978 or Act 399 Public Acts of 1976 and these Regulations.

## SECTION VI - ABANDONMENT OF WELLS

### 6.1 Abandonment

Water Supply Systems and/or wells which are determined to be irreparable, are subject to contamination, or are a threat to public health, shall be abandoned in accordance with Part 127 of Act 368, Public Acts 1978 and Administrative Rules as amended.

## GLOSSARY

### Abandoned Septic Tank

A septic tank whose use has been permanently discontinued.

### Abandoned Water Supply Systems

A permanently abandoned water supply system means a well that:

- Has been permanently taken out of service; or
- Has not been used for a period of three years or more; or
- Is in such disrepair that its continued use for the purpose of obtaining groundwater is impractical; or
- Has been left uncompleted; or
- Is a threat to groundwater resources; or
- Is or may become a health or safety hazard.

### Absorption Field, Trench, or Bed

A means of distributing septic tank effluent or outflow below the ground surface by means of a series of lines or drain tile laid on a bed of aggregate with openings so as to allow the effluent or outflow to be absorbed by the surrounding soil and thence dispersed by evaporation, transpiration, or percolation.

### Accessory Structure

Any building, shelter, structure intended solely for non-human habitation such as a pole barn, utility garage, storage facility, or other similar structure.

### Aggregate

An inert material (stone, chipped/shredded tires, or polystyrene) ranging in size from ½” to 2” intended for use in a sewage treatment final disposal bed or trench.

### Alternative On-site Sewage Treatment System

Any proven method of on-site sewage treatment other than the conventional treatment tank with absorption trenches, bed, or seepage pit, providing for protection of the environment through uniform distribution of the effluent to the final disposal system, enhanced treatment to the final disposal system or combinations thereof. Alternative systems include but are not limited to aeration treatment systems, pressurized mounds, and sand filters.

### Approved

Acceptable for intended use as judged by the Health Officer by utilizing public health rules, regulations and technical data.

### Available Public Sewer System

A public sewer system located in a right-of-way easement, highway, street, or public way that passes not more than two hundred (200) feet at the nearest point from a structure in which sewage originates.

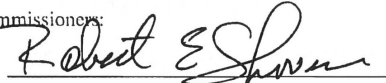
### Board of Health

The Board appointed by the Clinton, Gratiot, and Montcalm County Boards of Commissioners

**REVIEWED AND APPROVED BY:**

Clinton County Board of Commissioners:

Date: April 19, 2012

  
Chairman – Robert Showers

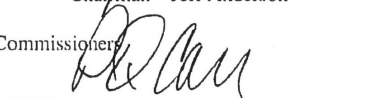
Gratiot County Board of Commissioners

Date: April 17, 2012

  
Chairman – Jeff Anderson

Montcalm County Board of Commissioners:

Date: April 23, 2012

  
Chairman – Patrick Q. Carr

**6.2 Connection to Public or Municipal Water Supplies**

Whenever use of a well is to be discontinued as a result of connecting the premise it served to a public or municipal water supply, the well shall be abandoned in accordance with Part 127 of Act 368, Public Acts 1978 as amended and Administrative Rules at the time of connection to the public or municipal water supply.

**6.3 Continued Use for Non-Potable Purposes**

In instances where an Abandoned Water Supply System and/or well is repairable and continued use of the well for non-potable purposes is proposed, the well may be upgraded to standards specified in Part 127 of Act 368, Public Acts 1978 as amended and Administrative Rules in lieu of abandonment if it has been determined the well is not subject to contamination or a threat to public health. A permit will be required before repairs, modifications or upgrades to the well can be implemented. A water supply system being considered under this section for continued use shall be in compliance with Chapter II, Section II of these Regulations.

**SECTION VII - PUMP OR WELL ROOMS**

**7.1 Rooms Housing Well and Pumping Equipment**

Rooms housing well and pumping equipment shall be above ground level or installed in a basement offset which is attached to an approved basement.

**SECTION VIII - EMERGENCY CONDITIONS**

**8.1 Emergency “Out of Water”**

In the event an emergency arises where the lack of water will result in undue hardship and all the following conditions exist:

- The offices of the Mid-Michigan District Health Department are closed; and
- When a registered well driller is involved in repair work; and
- It is deemed necessary to begin construction immediately on a new well; and
- Proper isolation of the well site from sources of contamination has been verified by the property owner and the well driller

A registered well driller may begin extensive changes and/or construction of a new, private water supply without notification or permit. On the next regular day of business, the well driller shall notify the Health Department that a well has been installed and provide the name and address of the homeowner. The homeowner or their designated representative is then required to make application for a water well construction permit on the next available day that the Health Department is open.

**SECTION IV – Geothermal Heat Pump Systems**

**9.1 Closed Loop Geothermal Systems**

The Health Officer is to be notified of the proposed and permanent location of any closed loop geothermal system so that proper separation distances from sources of groundwater contamination, water supplies, sewage systems (including replacement areas) and other on-site features

can be attained.

**9.2 Minimum Isolation Distances in Feet – Closed Loop Geothermal Systems**

A closed loop geothermal system shall be installed in a location meeting the following minimum horizontal separation distances:

Household (private) drinking water well	50
Type IIb or III public water well	75
Type I or IIa public water well	200
Residential on-site sewage system	25
Buried water service line or sewer line	10
Property line	10

**9.3 Open Loop Geothermal Systems**

1. Open loop geothermal systems are required to be in compliance with Section 3.1, 5.1, and 5.2 of this Chapter detailing required applications and permits.

2. If discharge water is proposed to be disposed of through a discharge well, an additional permit application and associated fee is required. If the discharge water does not contain additives, it may be discharged into the same aquifer as the supply well.

3. All open loop geothermal system wells are to be constructed and abandoned pursuant to the provisions of Part 127, of PA 368, 1978 as amended and the administrative rules comprising the Michigan Water Well construction and Pump Installation Code.

**CHAPTER SIX  
CONSTITUTIONALITY**

**SECTION I- UNCONSTITUTIONALITY CLAUSE**

**1.1 Unconstitutional**

Should any section, item, paragraph, sentence, clause or phrase of these regulations be declared unconstitutional or invalid for any reason, the remainder of said regulations shall not be affected thereby.

**SECTION II- RETROACTIVE CLAUSE**

**2.1 Retroactive**

These regulations shall not be retroactive, except when such systems become a health hazard. However, when extensive changes or repairs are made to the system, workmanship and materials shall conform as nearly as possible to these regulations.

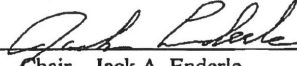
**SECTION III- ADOPTION CLAUSE**

**3.1 Adopting**

These rules and regulations shall be deemed to be in effect on and after July 1, 2012.

**ADOPTED BY THE MID-MICHIGAN DISTRICT HEALTH DEPARTMENT BOARD  
OF HEALTH ON APRIL 11, 2012.**

Date: April 11, 2012

  
Chair – Jack A. Enderle

Bruce Delong  
Member – Board of Health

Roland Merignac  
Member – Board of Health

Teresa Hagerman  
Member – Board of Health

Carl Paepke  
Member – Board of Health

Tom Lindeman  
Member – Board of Health

in or on the same, or in the yards, courts, passages, areas or alleys connected therewith, or belonging to the same. The owner of every dwelling or dwelling unit shall be responsible for complying with the provisions of this section except that the tenants shall be responsible for the cleanliness of those parts of the premises that they occupy and control.

### **SECTION VIII - DWELLING UNFIT FOR HUMAN HABITATION**

The Health Officer shall declare unfit for human habitation, and a public nuisance, any dwelling or dwelling unit, which shall have any of the following defects:

8.1 Those which have been damaged by fire, wind, water or other causes such as clandestine drug labs so as to become dangerous to life, safety and the general health and welfare of the occupants or to the general public.

8.2 Those which have become so blatantly unsafe; unsanitary; are in such an obvious state of decay; or which so utterly fail to provide the basic amenities essential to healthful living or are likely to cause sickness or disease so as to work injury to the health, safety, or general welfare of the public.

### **SECTION IX - PROCEDURE FOR PLACARDING AND VACATING DWELLING OR DWELLING UNITS UNFIT FOR HUMAN HABITATION**

9.1 After the Health Officer has declared a dwelling or dwelling unit unfit for human habitation he shall post in a conspicuous place, a placard bearing the following words: "These Premises are in Violation of Sanitary Regulations. Do Not Occupy".

9.2 Any dwelling or dwelling unit so condemned and placarded shall be vacated within a reasonable time, as required by the Health Officer. No person shall occupy, or let another person occupy a dwelling or dwelling unit that has been condemned until written approval is secured from, and the placard removed by the Health Officer.

9.3 No person shall deface, cover or remove the placard except the Health Officer, who shall remove it after the defect or defects have been corrected and it has been determined that the dwelling unit is fit for human habitation.

## **CHAPTER THREE Sewage Disposal**

### **SECTION I - SEWAGE DISPOSAL FOR ANY PREMISE**

#### **1.1 Premise Occupancy**

It shall be unlawful for any person to occupy, or permit to be occupied, any premise which has a sewage disposal system in violation of these Regulations. All such facilities shall be constructed in accordance with the provisions of these Regulations. Under no condition may the sewage from the existing or hereafter-constructed premise be discharged or deposited upon the surface of the ground, or into any lake, river, stream, county drain, ditch, or storm sewer. Any premise constructed or maintained which is not in accordance with these regulations may be declared unfit for habitation and may be so posted by the Health Officer and ordered vacated.

#### **1.2 Connection Required**

All facilities such as flush toilets, urinals, lavatories, sinks, bathtubs, laundry, showers or any other facility from which sewage emanates shall be connected to a private sewage disposal system except that any such facilities hereafter installed on a premise where public sewage is available shall be connected to said sewer. When such connections are made from a private sewage disposal system to the public system, the septic tank(s) shall be properly abandoned as defined in these regulations.

#### **1.3 Separate Systems for Each Family or Establishment**

Unless otherwise specifically approved by the Health Officer, each habitable building or dwelling may be served by its own private sewage disposal system, when public sewers are not available and/or accessible.

#### **1.4 Permits**

No person shall construct, alter or extend any on-site sewage disposal system unless he/she has obtained a permit issued by the Health Officer and/or their authorized representative. All permit forms shall be provided by the Mid-Michigan District Health Department, Environmental Health Division. Any person found to have constructed, altered, or extended any on-site sewage disposal system without benefit of an approved permit shall be subject to the penalties set forth in Chapter I, Section 1.13 for violation of these Regulations.

#### **1.5 Application for Permit**

Application for permit to construct, alter, or extend an on-site sewage disposal system shall be made by the property owner or their authorized representative to the Health Officer. The application shall include the name and address of the applicant, the description of the property on which said construction, alteration or extension is proposed, and a plot plan showing the pertinent features of the sewage disposal system and the well system along with property lines and the building location. At the discretion of the Health Officer, the Health Department may require substantiating data including, but not limited to, engineered drawings, maps, soil analyses, test borings, percolation tests, groundwater and flood elevations, and detailed plans of the proposed sewage disposal system. The actual or proposed use of the property shall be indicated in all instances. At the discretion of the Health Officer, the Health Department may require that the design plans and specifications for a sewage disposal system be prepared by a professional

engineer (PE) or registered sanitarian (RS).

### **1.6 Expiration of Permits**

Any permit issued pursuant to the requirements of the preceding sections shall be valid for the term of twenty-four (24) months from the date of issuance, unless declared void as provided in Section 2.7 of these regulations. At the request of the applicant, said permit may be extended for a period of not more than one year from the original date of expiration.

### **1.7 Void Permits**

The Health Officer may declare a previously-issued Sewage Disposal System Permit to be null and void for any of the following reasons:

- False, inaccurate, or incomplete information supplied by the applicant or permit holder.
- A change in the construction plans of the applicant or permit holder affecting circumstances relative to the water supply design, location or use.
- Discovery of health hazards at the site that might impact public health.
- The area designated for the soil absorption system is disturbed due to vehicular traffic and excessive compaction; or by major fillings, excavating, paving, or flooding; or by the installation of public sewer; or by location of a water supply well or other feature so as to encroach on any required isolation distance.
- An increase in the scope of the project prior to, during, or following construction of said system to the point that the quantity of anticipated sewage flow is beyond the capacity of said system to provide treatment.

### **1.8 Transfer of Permits**

Should the ownership of the property for which a permit has been issued change, the permit may be transferred to the new owner. Such transfer must be requested in writing on forms to be provided by the Health Officer and signed by the permit holder. The permit holder shall be the person to whom the permit was originally issued.

### **1.9 Denial of Permit**

The Health Officer shall have the right to deny the issuance of a permit under one or more of the following conditions:

- Where an available public sewer system (as defined in the Glossary) exists.
- Where the septic tank would be inaccessible for cleaning or inspection purposes.
- Where the property served is too small for proper isolation from existing water wells, the premise water well, surface waters or has insufficient drainage area.
- Where the seasonal high groundwater table elevation and/or vertical distance between hardpan, clay, or other impervious soils would be less than one (1) foot or twelve (12) inches below the original grade.
- Where the soil conditions are deemed to be unsuitable for the disposal of sewage as based upon recognized soil evaluation techniques or where the stabilized percolation rate is in excess of 60 minutes per inch.
- Where conditions exist or may be created which may endanger the public health or the environment.
- Where the proposed site is subject to flooding and/or within the 100-year flood plain.

Officer their approval of the requested variation.

4.1 Every dwelling unit shall contain a kitchen sink, a lavatory basin, bathing fixtures, and a flush water closet in working condition and properly connected with water to a well and sewer system approved by the Health Officer or to municipal water and sewer. Said fixtures shall be in compliance with applicable local and/or state Plumbing Codes. Authorized local and/or state plumbing code officials shall provide the Health Officer with adequate documentation affirming said fixtures are in compliance.

4.2 Every dwelling and dwelling unit occupied between November 1, and April 1, shall have heating facilities which are capable of heating all occupied rooms within such dwelling or dwelling unit under ordinary winter conditions to at least 70 degrees F.

4.3 Every dwelling or dwelling unit shall have two independent unobstructed means of egress leading to a safe and open space at ground level.

4.4 Dwelling or dwelling units providing temporary housing for farm workers, organized youth groups and for similar occupational or recreational groups are hereby exempted from the specific requirements of Sections 4.1, 4.2 and 4.3 provided no nuisance or health hazard is allowed to exist. Alternate systems for toilets, washing and bathing facilities, which meet the approval of the Health Officer, shall be provided.

## **SECTION V - MINIMUM STANDARDS OF MAINTENANCE**

Every dwelling or dwelling unit shall comply with the following:

5.1 All sewage and well fixtures shall be so constructed and installed that they will function safely and effectively, and shall be maintained in satisfactory working condition.

5.2 No person shall occupy or permit occupancy of a dwelling or dwelling unit unless it is clean, sanitary, and fit for human occupancy.

## **SECTION VI - MINIMUM STANDARDS OF SPACE, USE AND LOCATION**

The following shall apply to all dwellings and dwelling units:

6.1 There shall be available for each inhabitant thereof not less than 100 sq. ft. of floor area as defined in regulation 6.2.

6.2 At least one half of every habitable room shall have a ceiling height of at least 7 feet. Floor space in a habitable room that has less than 4 feet clear floor to ceiling height shall not be utilized in determining minimum floor space.

## **SECTION VII - CLEANLINESS OF DWELLING OR DWELLING UNITS**

Every dwelling or dwelling unit or every part thereof shall be kept clean and shall also be kept free from any accumulation of dirt, filth, rubbish, harborage for vermin, garbage or other matter

# CHAPTER FIVE

## Housing

### SECTION I - INSPECTION AUTHORIZATION

1.1 The Health Officer is hereby authorized to make such investigations and inspections necessary to determine the condition of dwellings, dwelling units, and other premises covered by these regulations so as to safeguard the health and safety of the occupants of the dwellings and the general public, and enforce the provisions of said regulations.

### SECTION II - ADMINISTRATION OF THE REGULATIONS

2.1 Whenever the Health Officer determines that there are reasonable grounds to believe that there exists a violation of any provision of these regulations or of any rule or regulation adopted pursuant thereto, the Health Officer shall give notice of such violation and orders to correct the violation to the person or persons responsible therefore, as thereafter provided. Such notice shall:

- Be in writing.
- Identify the property involved.
- Include a statement of the conditions that constitute violations of the regulations and what must be done to correct the same.
- Specify a reasonable time limit for the performance of any act it requires.
- Be served upon the owner or their agent, or the occupant as the case requires either personally, by certified mail to their last known address, or by other method authorized or required under laws of this state.

### SECTION III - EMERGENCY ACTION

3.1 Whenever the Health Officer finds that an emergency exists, which requires immediate action to protect the public health, the Health Officer shall without notice or hearing, issue an order reciting the existence of such an emergency action. Notwithstanding the other provisions of these regulations, such order shall be effective immediately. Any person to whom such order is directed shall comply therewith immediately.

### SECTION IV - MINIMUM STANDARDS FOR BASIC EQUIPMENT AND FACILITIES

Every dwelling or dwelling unit that is used or intended for use as living quarters shall comply with the standards enumerated in Sec. IV, V, VI, and VII of these regulations.

The Health Officer may grant variations from these standards provided that substantial compliance is obtained, further provided that no nuisance or health hazard shall be caused or allowed to exist, and further provided that the local building official shall submit in writing to the Health

### 1.10 Easements – Sewage Disposal Systems

If any portion of a sewage disposal system (septic tank, pump tank, sewer line, drainfield, drained, berm, or reserve area) is proposed for placement on a separate, legally recognized parcel, then an easement or permanent deed restriction shall be required and shall be recorded with the applicable County Register of Deeds Office. A “separate, legally recognized parcel” is defined as a parcel of land with a legal description or tax parcel identification number differing from the parcel where the dwelling is located or proposed to be built.

Plans, which may include a recorded survey, are to accompany any permit application where the intended sewage disposal system, or any part thereof, is proposed on a “separate, legally recognized parcel”.

The Health Department shall require proof that all applicable documents related to an easement or permanent deed restriction have been recorded with the applicable County Register of Deeds Office prior to the issuance of a sewage disposal permit.

In instances where the recording of an easement or permanent deed restriction may delay construction of the repair or replacement of an existing sewage disposal system, the homeowner may request authorization to record these documents at the completion of the sewage disposal repair or replacement process. Health Department final approval of the completed construction will be withheld until proof that all applicable documents recorded with the Register of Deeds Office have been submitted to the Health Department.

### 1.11 Building Site Criteria for Conventional Septic Systems

The following specifications shall be used in determining the stability of the soil to provide satisfactory drainage for a conventional sewage disposal system utilizing one or more septic tanks and an absorption field, trench or bed:

- Soil Data - The soil classification and interpretations as provided by the United States Department of Agriculture, Natural Resources Conservation Service, and the use limitations pertaining to that soil classification may be considered by the Health Officer and used as part of the soil and drainage evaluation.
- Deep Borings – Test borings or excavations shall be made within the area proposed for the sewage disposal system and proposed replacement area to determine that the groundwater level and soil formations comply with this section. The Health Officer may request that excavations or borings beyond a depth of five (5) feet be made available for inspection and evaluation of soil types and conditions.
- High Groundwater – A minimum of twenty-four (24) inches of suitable soils, twelve (12) inches of which are measured from original grade and native to the profile, shall be required between the bottom of the proposed trench or bed and the point where the high water table, or evidence thereof, is determined.
- Hardpan, Clay, Impervious Material – A minimum of twenty-four (24) inches of suitable soils, twelve (12) inches of which are measured from original grade and native to the profile, shall be required between the bottom of the proposed trench or bed and the point where clay, hardpan, or other impervious materials are found.
- Filled Ground – Filled ground or “made land” shall be subject to evaluation to a minimum depth of five (5) feet or sixty (60) inches below the point where the original grade has been identified. Fill material shall not be allowed over unstable soil, peat, muck, and organic material.

## **CHAPTER FOUR**

### **Garbage and Rubbish Disposal**

- Percolation Tests – In addition to evaluation of the data required above, the Health Officer may require stabilized percolation rate tests when deemed necessary to determine the absorption capacity of the soil.
- Replacement Area – Sufficient area of suitable or similar soil conditions shall be set aside or put on reserve for a future replacement system. Such replacement system area shall be at least equal the area required for the initial system and shall be located no closer than five (5) feet from any portion of the initial system (including berm areas).

#### **1.12 Building Site Criteria for Alternative Septic Systems.**

The following specifications shall be used in determining the stability of the soil to provide satisfactory drainage for an alternative sewage disposal system utilizing one or more septic tanks and an absorption field, trench or bed:

- Soil Data - The soil classification and interpretations as provided by the United States Department of Agriculture, Natural Resources Conservation Service, and the use limitations pertaining to that soil classification may be considered by the Health Officer and used as part of the soil and drainage evaluation.
- Deep Borings – Test borings or excavations shall be made within the area proposed for the sewage disposal system and proposed replacement area to determine that the groundwater level and soil formations comply with this section. The Health Officer may request that excavations or borings beyond a depth of five (5) feet be made available for inspection and evaluation of soil types and conditions.
- High Groundwater – A minimum of twelve (12) inches of suitable native soils, as measured from original grade, shall be required between the bottom of the proposed trench or bed and the point where the high water table, or evidence thereof, is determined.
- Hardpan, Clay, Impervious Material – A minimum of twelve (12) inches of suitable native soils, as measured from original grade, shall be required between the bottom of the proposed trench or bed and the point where clay, hardpan, or other impervious materials are found.
- Filled Ground – Filled ground or “made land” shall be subject to evaluation to a minimum depth of five (5) feet or sixty (60) inches below the point where the original grade has been identified. Fill material shall not be allowed over unstable soil, peat, muck, and organic material.
- Percolation Tests – In addition to evaluation of the data required above, the Health Officer may require stabilized percolation rate tests when deemed necessary to determine the absorption capacity of the soil.
- Replacement Area – Sufficient area of suitable or similar soil conditions shall be set aside or put on reserve for a future replacement system. Such replacement system area shall be at least equal the area required for the initial system and shall be located no closer than five (5) feet from any portion of the initial system (including berm areas).
- Lake and Riverfront Properties - For aerobic treatment units, sand filters, pressure mounds or similar type alternative technologies that are installed in environmentally sensitive areas such as properties fronting on lakes, rivers or other similar bodies of water, a minimum of twenty-four (24) inches of suitable soils, twelve (12) inches of which are measured from original grade and native to the profile, shall be required between the bottom of the proposed trench or bed and the point where clay, hardpan, or other impervious materials are found OR where the high water table, or evidence thereof, is determined.

#### **1.13 Inspection and Certification**

After construction of the sewage disposal system has been completed to the extent of the place-

#### **SECTION I - ACCUMULATION OF GARBAGE AND RUBBISH**

##### **1.1 Accumulation of Garbage**

No owner of any premise shall permit to accumulate upon such premise any garbage except in covered containers so as to prevent a nuisance or health hazard, except for the purposes of composting.

##### **1.2 Accumulation of Rubbish**

No owner or occupant of any premise shall permit to accumulate upon such premise any rubbish except in durable containers with close-fitting covers except that bulky rubbish such as tree limbs, weeds, large cardboard boxes, etc. may be bundled and so stored as not to provide a harborage or breeding place for rodents. Also, no owner or occupant of any premise shall permit to accumulate appliances, furniture, vehicles, tires or construction and demolition debris in such a way as to pose a threat to public health.

#### **SECTION II - DISPOSAL OF GARBAGE AND RUBBISH**

Garbage and rubbish shall be disposed of in a manner, which creates neither a nuisance nor a menace to health in accordance with the provisions of Act 451, Public Acts of 1994, and Part 115 as amended. Any person or property owner disposing of garbage or rubbish from their own household, upon property under their control, can dispose of such material as long as such disposal method does not create a nuisance or hazard to health and is in compliance with all local junk, littering, dumping, nuisance or solid waste ordinances.



including:

- An approved permit application;
- Detailed engineered plans signed by and bearing the seal of a licensed professional engineer OR detailed plans from a manufacturer certified design consultant;
- A signed Variance Request form;
- A signed Alternative Treatment Sewage Disposal System Permit Agreement;
- A signed Deed Advisory;
- Copy of the maintenance agreement signed by the applicant and maintenance provider clearly indicating the terms and length included therein.
- A copy of the Operations and Maintenance (O & M) Manual for the alternative treatment system.

Before a final inspection can be conducted, the applicant shall produce documentation to the Health Department verifying the signed Deed Advisory has been filed with the County Register of Deeds Office.

### **5.2 Maintenance Contracts**

Maintenance for the lifetime of the alternative sewage disposal system shall be required. An initial maintenance contract agreement for the alternative septic system shall be signed by the applicant prior to the issuance of a permit to install an alternative septic system. Subsequent renewals of maintenance agreements shall be provided to and retained by the Health Department. Maintenance standards shall be a minimum of manufacturer requirements and shall be performed by person(s) meeting the manufacturer's minimum credentialing criteria.

Evidence that maintenance is occurring on a regular basis (as determined by the manufacturer) or that maintenance is occurring at a minimum of once per year shall be provided to the Health Department annually. Failure to provide suitable documentation of annual maintenance shall be reason for the Department to conduct an "operational inspection" to establish the septic system is not malfunctioning or failing. An Operational Inspection fee will be charged to the homeowner for failure to document annual maintenance of the alternative system.

### **5.3 Performance Standards**

Performance standards for any alternative sewage disposal system installed shall be, at a minimum, those of the manufacturer and must be in accordance with standards established by the National Sanitation Foundation (NSF) OR (if applicable) standards as established by the Michigan Department of Environmental Quality and/or Environmental Protection Agency at a minimum.

ment of all sewers and distribution tile lines, and before any portion of the distribution tile system has been covered or placed in operation, request for an inspection shall be made to the Health Officer. If the inspection has not been made within two (2) working days or 48 hours after notification to the Health Officer that the system is ready for inspection, the installer may proceed to cover the system and place it into operation. The installer in such an instance shall furnish a written statement to the Health Officer on forms provided by the Health Department certifying that the system was installed exactly as shown on the permit or describing exactly any deviations there from. After approval of the system for backfill, it shall not be allowed to remain open for longer than 48 hours, unless otherwise approved by the Health Officer.

### **1.14 Condemnation of Existing Installations**

The Health Officer may condemn any existing individual sewage disposal system where the effluent there from is exposed to the surface or is permitted to drain onto the surface of the ground or into any lake, river, county drain, storm sewer, or stream, or where the seepage of effluent there from may endanger a public or private water supply or where an improperly constructed or maintained system creates a public or private nuisance. The Health Officer may condemn any existing sewage disposal system where the performance of the system meets any or all of the conditions of a sewage system failure.

### **1.15 Variances**

Variances to the provisions of these regulations may be made in cases where physical size or shape of the premise makes their application a physical impossibility. In such event, if the Health Officer finds that special conditions are present, the owner may construct or cause to be constructed an individual sewage disposal system under the direction of the Health Officer and subject to such reasonable conditions as the Health Officer may require considering the limitations of the property, the protection of public health, and the prevention of any nuisance. An alternate method of sewage disposal may be approved by the Health Officer if it provides equal or better treatment than the minimum requirements provided for herein. The Health Officer, on application may make exceptions to the specific requirements when, in the Health Officer's judgment, special factors warrant such a variance. Approval of variances shall be in writing and filed with the Health Department.

### **1.16 Registration Required**

Any person, firm, company, or corporation who shall engage in the business of installation of a sewage disposal system or any part thereof within the counties of Clinton, Gratiot, or Montcalm, under the provisions of these regulations, shall register with the Mid-Michigan District Health Department. In no way shall this provision be construed to prohibit an individual from installing their own sewage disposal system (with the exception of alternative on-site sewage treatment systems as defined in the Glossary) provided that said person obtains a permit from the Mid-Michigan District Health Department.

### **1.17 Contractor/Installer Registration – Revocation/Suspension**

Septic contractor or installer registration may be revoked or suspended by the Mid-Michigan District Health Department for any of the following:

- Failure to abide by recognized construction standards and/or installation practices; or
- Failure to adhere to the conditions and specifications provided within a sewage disposal permit; or
- Failure to adhere to the requirements of the Mid-Michigan District Health Department's Environmental Health Regulations.

Should revocation or suspension be initiated by the Health Department, the subject contractor/installer shall be afforded hearing before the Health Officer or his/her designee, with the right to appeal any adverse decision to the Board of Appeals.

**1.18 Methods of Sewage Disposal**

When a sewer is not available for public use, all facilities hereafter installed (such as flush toilets, urinals, lavatories, sinks, bathtubs, showers, laundry, basement drains, and any similar fixtures used to receive or conduct sewage) shall be connected to an approved sewage disposal system or to some other device approved by the Health Officer, provided that such facilities existing at the time these regulations are adopted and which may become or are at present a possible hazard to public health, in the opinion of the Health Officer, shall be connected to a sewage disposal system or to some other device approved by the Health Officer.

No sewage may be discharged into any body of water or into the ground within fifty (50) feet of a body of water or into a county drain or ditch. Footing drainage, downspouts or roof drains, water conditioners recharge water and any other wastewater not defined as sewage shall not be connected to or discharge into the sewage disposal system.

**1.19 Drains**

Whenever the Health Officer shall determine that sewage is flowing from any public or private sewer or drain of unknown course and origin, the Health Officer may issue public notices requiring persons owning premises from which such sewage could originate, to connect such sewage flow to a public sewage system if available, or in the absence thereof, to comply with the provisions of these regulations. Public notice shall consist of the posting of at least five (5) conspicuous notices in the probable area served by said sewer or drain. After not less than thirty (30) days following the posting of the notices, the Health Officer may plug or cause to be plugged the outlet of said sewer or drain until such time as the sources of the sewage have been located.

Owners of the properties known to be discharging sewage into such sewers or drains posted by the Health Officer shall be given written notice of corrections required within the time allowed by the posted notices. Failure to comply shall be considered a violation of these regulations.

**1.20 Facilities other than Single and Two Family Dwellings.**

Minimum septic tank capacity, number of tanks, and size of sub-surface absorption area for facilities other than single and two family dwellings shall be determined in accordance with good engineering practice and based on the recommendations contained in the “Michigan Criteria for Subsurface Sewage Disposal”.

**SECTION II – CONSTRUCTION AND MAINTENANCE OF PRIVIES AND SIMILAR TOILET DEVICES**

**2.1 Privies and Outhouses**

All privies and other non-flushing toilet devices shall be constructed and maintained in accordance with Section 12771 of Act 368, P.A. of 1978 and Administrative Rules promulgated therefrom.

**4.8 Required Septic Tank Capacity in Gallons**

Number of Bedrooms	Minimum Capacity*
1-2	1,000 gallons
3	1,500 gallon, 2 compartment (or equivalent gallons)
4	2,000 gallon, 2 compartment (or equivalent gallons)
5	2,500 gallon, 2 compartment (or equivalent gallons)

\*Note that for over 5 bedrooms add 500 gallons per bedroom to above listed capacities.

**4.9 Single Family Residential Based on Number of Bedrooms**

Subsurface absorption bed sizing in square feet\*\*

Soil Texture	1-3	4	5
Sand and Gravel	600	700	800
Loamy Sand	900	1050	1200
Sandy Loam	1350	1575	1800
Loam, Sandy Clay Loam	1725	2015	2305
Silt Loam, Clay Loam	1800	2400	3000

**4.10 Single Family Residential Based on Number of Bedrooms**

Subsurface absorption trench sizing in square feet\*\*

Soil Texture	1-3	4	5
Sand and Gravel	480	560	640
Loamy Sand	720	840	960
Sandy Loam	1080	1260	1440
Loam, Sandy Clay Loam	1380	1610	1840
Silt Loam, Clay Loam (replacement only)	1610	1880	2150

\*\*Note that where a garbage disposal is planned, an additional 20% of square footage is added to all the above listed sizes.

**SECTION V – ALTERNATIVE ON-SITE SEWAGE DISPOSAL SYSTEMS**

To function effectively, alternative on-site sewage disposal systems must be properly designed, constructed and maintained. To help ensure that an alternative on-site sewage disposal system functions properly, the Health Department shall require that a sewage permit be obtained for the design and installation of an alternative on-site sewage disposal system and that a maintenance contract assuring lifetime maintenance exists for the system.

**5.1 Permits**

A sewage permit shall consist of a Health Department-issued permit containing all pertinent information related to the construction and installation of the alternative on-site disposal system,

#### 4.5 Minimum Isolation Distances In Feet\*

	Septic Tank/Sewer Line	Final Disposal
Well/Unprotected Suction Lines	50	50
Pressurized Water Lines	10	10
Storm and Drainage Ditches	25	25
Surface Waters inc. County Drains	50	50
Swimming Pools	10	10
Slope Bank (recommended)	10	25
Property Line (recommended)	10	10
Footing Drains	10	25
Dwelling/Structure w/Footing Drains	10	25
Dwelling/Structure w/o Footing Drains	10	10
Closed Loop Geothermal System	25	25

\* These distances are minimums and may be modified if conditions warrant.

#### 4.6 Subsurface Trench Construction Requirements

	Minimum	Maximum
Number of Lateral Trenches	2	---
Size of Gravity Distribution Sewer Line	4 inch	4 inch
Size of Pressurized Sewer Line	1 inch	---
Length of Lateral Line (Trench Length)	---	100 feet
Width of Trenches	12 inches	36 inches
Trench Laterals on Center	7 feet	---
Number of Lateral Lines per Trench	1	1
Depth of Cover over Stone	12 inches	24 inches
Slope of Lateral Lines	Level preferred	3 inches/100 feet
Depth of Stone over Lateral Line	2 inches	---
Depth of Stone under Lateral Line	6 inches	18 inches
Distance between Initial & Reserve area	5 feet	---
Size of Aggregate	½ inch	2 inches

#### 4.7 Additional Absorption Bed Construction Requirements

	Minimum	Maximum
Distance between Lateral Lines	18 inches	36 inches
Length of Lateral Line	---	100 feet
Distance between Lateral Lines and Bed Wall or beginning of Sand Berm Slope	12 inches	24 inches

#### 2.2 Prohibition of Privies

No privy shall be maintained or be constructed on or moved to any premise where the service of a public sewer is available. No privy shall be maintained at any licensed food service establishment.

#### 2.3 Location of Privies in Relation to Other Dwellings

Privies shall be located at least 100 feet from all dwellings other than that which they serve. No privy shall serve more than one dwelling.

#### 2.4 Temporary Privies

Temporary privies used at construction sites, places of public assembly, camps, etc., shall comply with Section 12771 of Act 368, P.A. of 1978 and Administrative Rules promulgated therefrom, and when cleaned or serviced, the agency performing such service shall comply with Part 117 of Act 451, of Public Acts of 1994, as amended.

### SECTION III – SUITABILITY FOR DEVELOPMENT

#### 3.1 Subdivision/Site Condominium Development

The Land Division Act and the rules of the Michigan Department of Environmental Quality (R560.401-R560.405 as amended and R560.406 to R560.428) shall be the basis for acceptance or rejection of proposed subdivisions that are not served by public sewers and/or public water.

#### 3.2 Vacant Land Evaluations

Application for soil evaluation of vacant properties where proposed size and location of residential structure is unknown and the act of division is not under Act 288, PA 1967, may be made by the property owner or agent to the Health Officer. Such evaluation shall be documented and reported on forms provided by the Health Officer. Results of such evaluations shall not be construed to be a directive toward applicable zoning or land use.

### SECTION IV – CONSTRUCTION CRITERIA FOR SEWAGE DISPOSAL SYSTEMS

#### 4.1 Service/Sewer Lines

- All sewer lines shall meet the requirements of the Michigan Plumbing Code and shall be constructed of cast iron soil pipe with sealed joints, or schedule 40 plastic PVC pipe with glued joints, or other state approved materials.
- Grade – Sewer pipe installed prior to connection to a septic tank shall be laid at a grade of not less than 1/8 inch per foot or not more than ½ inch per foot unless otherwise approved by the Health Officer.
- Concentric Piping – Any portion of a sewer line between the house and the septic tank inlet or between the septic tank outlet and the absorption system header that lies below a driveway shall be encased in a six inch (or larger) schedule 40 plastic PVC or steel pipe.
- Clean-Outs – Any sewer line length greater or equal to 100 lineal feet or at any turn of a sewer line 45 degrees or greater shall be provided a clean-out extended to the ground surface meeting the requirements of the Michigan Plumbing Code. Clean-outs shall be schedule 40 PVC with glued joints or other State approved materials.

#### 4.2 Septic Tanks

- Location – Septic tanks shall be located at least fifty (50) feet from any well, spring or other drinking water supplies. In no case shall a driveway, parking area, paved surface, stockpiled material, structure or building be placed over the septic tank. The septic tank must be located on the property being served unless otherwise approved by the Health Officer. Special written permission may be given by the Health Officer when it is impractical to meet these requirements providing other satisfactory health safeguards are used.
- All septic tanks shall be equipped with an access port (at the outlet end) that has an attached watertight riser that extends to or above the finished grade. Said riser shall be equipped with a secure or locked lid to prevent unauthorized access. No septic tank shall be installed at a depth of more than five (5) feet below the finished grade, except by special permission of the Health Officer.
- All single compartment septic tanks shall be designed and constructed with inlet and outlet ports located at each end wall of the tank. Inlet and outlet ports on the side wall of the septic tank(s) shall not be allowed without approval from the Health Department.
- Capacity – Every septic tank shall have a capacity of at least the average volume of sewage flowing into it during the period of twenty-four (24) hours, but in no case less than seven hundred fifty (750) gallons, as measured from the water level, unless otherwise authorized by the Health Officer. If a tank consisting of more than one (1) compartment is installed, the first compartment must have a capacity of at least 2/3's of the total capacity. A two compartment tank shall be required for any proposed installations utilizing a sewage ejector or garbage disposal.
- The bottom of the inlet line into the septic tank shall be at least two (2) inches above the operating water level of the tank. The outlet shall be constructed to permit withdrawal of liquid from the middle third of the depth of the liquid in the tank and to prevent the escape of floating or settled solids and must have a minimum scum clearance of eight (8) inches. The inlet must be so designed to permit gas above the liquid level to pass through the inlet line and out the vent pipe serving the sewer leading to the tank.
- Construction Material – Septic tanks shall be constructed to conform to the specifications of the "Manual of Septic Tank Practice". Tanks constructed of fiberglass, plastic or other materials shall not be installed without prior written approval of the Health Officer. Every septic tank shall be constructed in a workmanlike manner of materials not subject to corrosion or decay when installed; shall be of water-tight construction; and shall be provided with one or more suitable openings with cover to permit ease of inspection and cleaning.
- Effluent Filters – The final outlet (between the tank and absorption field) on all septic tanks installed on or after the effective date of these regulations, shall be equipped with an approved (per Michigan Department of Environmental Quality) sewage effluent filter.
- Abandonment of a Septic Tank – The Health Officer may order abandoned any septic tank that is in violation of these regulations, a threat to public safety, or representing a public or private nuisance. A properly abandoned septic tank shall be emptied of all effluent wastes with the top cover being crushed and the void space filled with sand. All wastes pumped from a septic tank shall be disposed of at either a municipal waste treatment facility or a MDEQ approved land application site.

#### 4.3 Final Disposal

- Location – In no case shall any driveway, parking area, paved surface, stockpiled material, structure or building be placed over the final disposal system or reserve area. The final disposal system must be located on the property being served unless otherwise approved by the Health Officer. All surface drainage must be diverted away from the septic

- absorption system.
- Distribution Header/Box – A header or distribution box plus return header (footer) shall be required in all tile absorption systems, the exception being step/slope systems or other such similar designs. A header or distribution box shall be set true so as to afford an even distribution of all septic tank effluent throughout the subsurface disposal laterals. The sewer line from the septic tank outlet to the distribution header shall be connected at the center point of said header and shall be offset in such a manner that it does not discharge directly into a lateral run. Where six or more lateral distribution lines exist or are proposed, a "bridle" header connecting at two or more centralized points along the distribution header shall be required.
- Sewer Line Between the Septic Tank and the Final Disposal System – All sewer or distribution lines extending from the septic tank outlet to the connecting header of the final disposal system shall be constructed of schedule 40 PVC pipe with glued joints. Flexible corrugated pipe is not allowed.
- Dosing/Pump Chamber – The Health Officer may require that dosing/pump chambers or mechanical pumps be used in installations where adverse soil conditions or elevation deem it necessary. An alarm system may be required at the discretion of the Health Officer. The capacity of the dosing/pump chamber and/or pump size shall be determined by the Health Officer.
- Absorption System – Field or Bed – The absorption field or bed shall be constructed of drain tile, which complies with standards established by the Michigan Department of Environmental Quality.
- Aggregate or Stone – All aggregate or stone intended for use in a drainfield or drainbed must be washed, clean, and free of any soils or other foreign materials.
- Straw (a minimum two (2) inches) or other approved material shall be placed between the stone and the final cover to prevent soils from filtering into the aggregate.
- Approval of a tile distribution system may be withheld if one or more of the following conditions exist:
  1. Tile or perforated pipe does not meet acceptable construction criteria.
  2. Tile not laid at a uniform grade.
  3. Tile in poor condition.
  4. Soils have been allowed to fill up the air spaces around the stone.
  5. Insufficient amount of tile in absorption system.
  6. Distance between tile lines does not meet minimum Regulation requirements.
  7. Insufficient depth of aggregate around, under, and above tile.
  8. Insufficient isolation between bottom of absorption bed and established groundwater level.
  9. Slope of tile exceeds Regulation requirements.
  10. Any other violation of the construction requirements as specified herein.

#### 4.4 Submission and Approval of Plans

Where installation, alterations and/or construction of any sewage disposal systems are planned in low or wet land areas, or where the water table is high, or where tight clay soil conditions exist, plans for such sewage disposal systems shall be submitted and approved by the Health Officer.