

**MAHONING COUNTY GENERAL HEALTH DISTRICT
BOARD OF HEALTH
REGULATION OF SERVICING AND DISPOSAL OF SEPTAGE**

A regulation adopted under authority of Section 3709.21 Ohio Revised Code by the Board of Health of the Mahoning County General Health District providing for the control of waterborne diseases through requirements for the servicing and disposal of septage; registration of sewage tank cleaners, prescribing the duties and authority of the Health Commissioner; and providing for enforcement of the regulation and penalties for the violation of its provisions.

References

- (1) U.S. Environmental Protection Agency Standards for the Use or Disposal of Sewage Sludge 40 CFR 503 http://www.epa.state.oh.us/dsw/sludge/503_08_04_99.pdf
- (2) U.S. Environmental Protection Agency EPA/832-B-92-005 A Guide to the Federal EPA Rule for Land Application of Domestic Septage to Non-Public Contact Sites http://www.epa.gov/owm/mtb/biosolids/septage_guide.pdf
- (3) Ohio State University Extension Bulletin 854-95 Septage Management in Ohio <http://ohioline.osu.edu/b854/>
- (4) Ohio Administrative Code 3701-29-06 Registration of Sewage Tank Cleaners <http://onlinedocs.andersonpublishing.com>
- (5) U.S. Environmental Protection Agency EPA/625/R-92/013 Environmental Regulations and Technology; Control of Pathogens and Vector Attraction in Sewage Sludge <http://www.epa.gov/ORD/NRMRL/Pubs/1992/625R92013.html>
- (6) Ohio State University Extension Bulletin 472-96 Ohio Agronomy Guide <http://ohioline.osu.edu/b472/>
- (7) U.S. Environmental Protection Agency D-752 Human Health Risk Assessment for the Use and Disposal of Sewage Sludge: Benefits of Regulation www.Ericse.org 800-276-0462
- (8) U.S. Environmental Protection Agency C-411 Guide to Septage Treatment and Disposal www.ericse.org 800-276-0462

Section 1: General Provisions

- 1.1 No person shall transport, store, use or apply septage on land except through a facility or at a non-public contact site which meets the requirements of this Regulation.
- 1.2 The land application of agricultural waste by-products and sewage sludge is exempt from this Regulation.

Section 2: Definitions

- 2.1 "Board of Health" means the Board of Health of the Mahoning County General Health District.
- 2.2 "Health Commissioner" means the Health Commissioner of the Mahoning County General Health District or his or her authorized representative.
- 2.3 "Injection" means incorporation into the soils with a plow or equipment specifically designed for placement of a liquid below the soil surface.
- 2.4 "Lake" means a body of water that is five (5) acres or greater in size.
- 2.5 "Non-Public Contact Sites" means sites that are not frequently visited by the public including agricultural land, forests, and reclamation sites.
- 2.6 "Nuisance" means a condition that is potentially injurious to the health, safety, comfort or property of a person, or that pollutes waters of the state.
- 2.7 "Person" means any individual, partnership, firm, company, corporation, association, or any other legal entity or their representatives, agents, or assigns.
- 2.8 "Pond" means a body of water under five (5) acres in size.
- 2.9 "Private or Public Water System" means a potable water system used or intended for human consumption.
- 2.10 "Septage" means liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device or a similar system that receives only domestic septage (household, non-commercial, non-industrial sewage). Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.
- 2.11 "Servicing" means the cleaning, removal, hauling, storage and/or disposal of septage.
- 2.12 "Sewage Tank Cleaner" means any person registered by the board of health who engages in the collection, transportation and disposal of the contents of sewage tanks or privies.
- 2.13 "Site" means contiguous land in common ownership where septage will be deposited.

- 2.14 "Sewage Sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage, scum or solids removed in primary, secondary, or advanced municipal wastewater treatment processes, and a material derived from sewage sludge.

Section 3: Registration of Sewage Tank Cleaners

- 3.1 No person shall service septage without a valid registration as a sewage tank cleaner issued by the board of health.
- 3.2 Each registration issued hereunder shall expire annually on December thirty-first of each year. Application for renewal of registration must be submitted with the appropriate fee by December 31 or a late fee established by the board of health shall be required.
- 3.3 Application for registration shall be made on forms provided by the health commissioner. Any fee established for registration by the board of health shall accompany the application.
- 3.4 Every sewage tank cleaner must submit a report for each sewage tank that is pumped on a form provided by the health commissioner. Failure to provide these reports to the board of health may result in the suspension of the sewage tank cleaner's registration.
- 3.5 Whenever the health commissioner finds that a sewage tank cleaner is or has engaged in practices which are in violation of any provision of this rule, the health commissioner shall give notice in writing to the registrant describing the alleged violation and state that an opportunity for hearing will be provided by the board of health to show cause why his registration should not be suspended or revoked.

Section 4: Criteria for Land Application of Domestic Septage

- 4.1 No site shall be used for land application of septage without prior approval from the health commissioner. Sewage tank cleaners must comply with all local land use and zoning regulations. The Health Commissioner shall give notice to the local political subdivision of a sewage tank cleaner's application for site approval. A site inspection will be conducted by the health commissioner prior to approval and a fee established by the board of health shall be required. The health commissioner may revoke site approval if the sewage tank cleaner fails to comply with all rules applicable to land application of septage.
- 4.2 The land applier must assure that he/she has only domestic septage. Liquid or solid

wastes removed from commercial sewage systems are prohibited from being land applied, including waste from grease traps.

- 4.3 The land applier must manage the domestic septage so that pathogens (disease-causing organisms) are reduced by:
- a) The applier must adjust the pH of the domestic septage so that it remains at pH twelve (12) or greater for at least thirty (30) minutes before land applying.
 - b) The applier must test two (2) separate, representative samples of the batch of lime treated domestic septage taken a minimum of thirty (30) minutes apart to verify that the pH remains at twelve (12) or greater.
 - c) The applier must also assure that the land owner follows these crop harvesting restrictions:
 - 1) Food crops with harvested parts that touch the surface and are totally above ground (e.g., melons, tomatoes, cucumbers, strawberries, lettuce) shall not be harvested for fourteen (14) months after application of domestic septage.
 - 2) Food crops with harvested parts below the surface (e.g., potatoes, onions, radishes) shall not be harvested for twenty (20) months after application of domestic septage when the domestic septage remains on the land surface for four (4) months or longer prior to incorporation into the soil.
 - 3) Food crops with harvested parts below the surface (e.g., potatoes, onions, radishes) shall not be harvested for thirty-eight (38) months after application of domestic septage when the domestic septage remains on the land surface for less than four (4) months prior to incorporation into the soil.
 - 4) Animal feed, fiber and those food crops that do not touch the soil surface (e.g., corn, apples, peaches, wheat, oats) shall not be harvested for thirty (30) days after application of domestic septage.
 - 5) Turf grown on land where domestic septage is applied shall not be harvested for one (1) year after application of domestic septage when the harvested turf is placed on either a lawn or land with a high potential for public exposure, unless otherwise specified by the board of health.
- 4.4 The land applier must manage the domestic septage so that its attractiveness to vectors (insects and rodents) is reduced.

- 4.5 The owner of the land where domestic septage has been applied must adhere to crop harvesting, animal grazing, and site access restrictions.
- 4.6 The land applier must certify that pathogen and vector attraction reduction requirements have been met including crop harvesting, animal grazing and site access restrictions.
- 4.7 The number of gallons of domestic septage applied per acre of land may not be more than needed to supply the soil nutrients required by the crop being grown. The health commissioner may place limits on the amount of septage applied to a site when soil samples or other factors indicate that the site has been over-applied or is creating a nuisance.
- a) The maximum volume of domestic septage that may be applied to any site during a 365 day period depends on the amount of nitrogen required by the planned crop and the yield. In no case may land application rates exceed 77,000 gallons per acre per year. The annual application rate is calculated by the following formula:
- $$\text{Annual Application Rate(gallons/acre/year)} = \frac{\text{pounds nitrogen required for crop yield}^*}{0.0026}$$
- (* Obtained from OSU Bulletin 472 OHIO AGRONOMY GUIDE)
- b) Septage shall not be applied if soil tests indicate that phosphorus (as P₂O₅) levels exceed 150 ppm or 300 lbs/acre.
- 4.8 Weather and Climatic Factors: Septage shall not be applied to frozen or snow covered ground; when slopes exceed 6%; or when soil moisture is at 75% of field capacity. When weather conditions prohibit land application of septage, septage shall be disposed of at a treatment works or receiving station, or be stored in such a way as to prevent the creation of a public health nuisance until such time as it can be land applied.
- 4.9 Slope: Septage shall not be spread on a slope that is so severe as to cause runoffs.
- 4.10 Septage shall be applied uniformly with no pooling in low areas as to create a nuisance condition.
- 4.11 Flooding: Septage shall not be applied in a 100-year floodplain.
- 4.12 Bedrock: Septage shall not be applied to areas with exposed bedrock.
- 4.13 Pasture: Septage shall not be applied to pasture currently housing livestock or root crops for human consumption.

4.14 Isolation Distances: The following isolation distances are intended to be minimum in nature and may be required to be increased upon justified nuisance complaints.

- a) Field drainage swale, wet weather streams, intermittent streams, open field drain tile - 33 feet.
- b) Lakes, ponds, rivers, creeks, - 500 feet, unless a lesser distance is approved by the health commissioner.
- c) Occupied dwellings - 500 feet.
- d) Potable water supply (e.g., wells, cisterns) - 500 feet.
- e) Property lines, roads, streets - 50 feet.

4.15 Lagoons or Holding Ponds: Lagoons or holding ponds may be used for the temporary storage of septage during periods when the capacity for spreading or saturation, is affected by heavy rain, snow cover, or other factors.

These facilities shall be constructed in such a manner as to prevent surface run-off into or from them, groundwater pollution or nuisance conditions to occur during storage or retrieval stages of the disposal process.

4.16 The land applier shall remove all inorganic, non-biodegradable materials from septage by screening prior to land application and properly dispose of these materials as solid waste.

4.17 The Health Commissioner may prohibit land application during the periods two (2) hours after sunrise and two (2) hours before sunset to prevent nuisance odors due to thermal inversions.

4.18 The health commissioner shall inspect annually each site approved for use in land application of septage. Land appliers shall notify the health commissioner, upon his or her request, before applying septage to an approved site.

Section 5: Record Keeping Requirements

5.1 Sewage tank cleaners must keep records of land application for five (5) years. These records must include the following information:

- a) The location where domestic septage is land applied, disposed of in a treatment works, or stored in a lagoon or holding pond, either the street address, or the longitude and latitude of the site.
- b) The number of acres to which domestic septage is land applied at each site.
- c) The date and time of each domestic septage land application.

- d) The nitrogen requirement for the crop or vegetation grown on each site during the year.
- e) The gallons of septage which are land applied to the site during the specified 365 day period.
- f) Certification of pathogen and vector attraction reduction requirements.
- g) A description of how the pathogen requirements are met for each batch of domestic septage that is land applied.
- h) A description of how the vector attraction reduction requirement is met for each batch of domestic septage that is land applied.

Section 6: Penalties

Any person who violates any provision of this Regulation shall be subject to the penalties provided in Section 3709.99 of the Ohio Revised Code.

Whenever the health commissioner finds that a sewage tank cleaner is or has engaged in practices which are in violation of any provision of this regulation, the health commissioner may suspend the sewage tank cleaner's registration. A suspension shall take effect immediately and remain in effect until the health commissioner or Board of Health lifts the suspension. After suspending a registration, the health commissioner shall immediately give notice in writing to the sewage tank cleaner describing the procedure for appealing the suspension. The sewage tank cleaner may appeal the suspension by giving written notice to the health commissioner and specifying in the notice whether a hearing before the Board of Health is requested. If an appeal is requested under this section, the Board of Health shall hold a hearing at which the sewage tank cleaner will have the opportunity to show cause why the suspension of the sewage tank cleaner's registration should not be continued or the sewage tank cleaner's registration revoked.

Section 7: Effect of Partial Invalidity

Should any part of this Regulation be declared invalid or unenforceable for any reason, the remainder of this Regulation shall not be affected thereby.

Section 8: Repeal and Date of Effect

All previous regulations of the board of health regulating the servicing and disposal of septage are hereby repealed and this Regulation shall be in full force as of the effective date set forth below.

This Regulation shall be effective on and after the 14th of November, 2004.

Adopted on the 28th day of October, 2004 by the Board of Health of the Mahoning County General Health District.

President

Secretary ex-officio

I, Matthew A. Stefanak, Clerk of the Board of Health of the Mahoning County General Health District, hereby certify that the above Regulation was published in the Vindicator on November 4, 2004 and November 10, 2004.

Clerk, Board of Health
Mahoning County General Health District

Notary Public