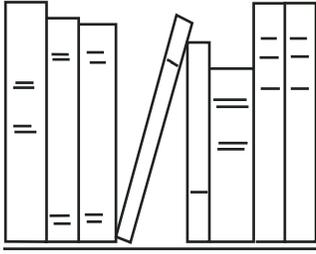


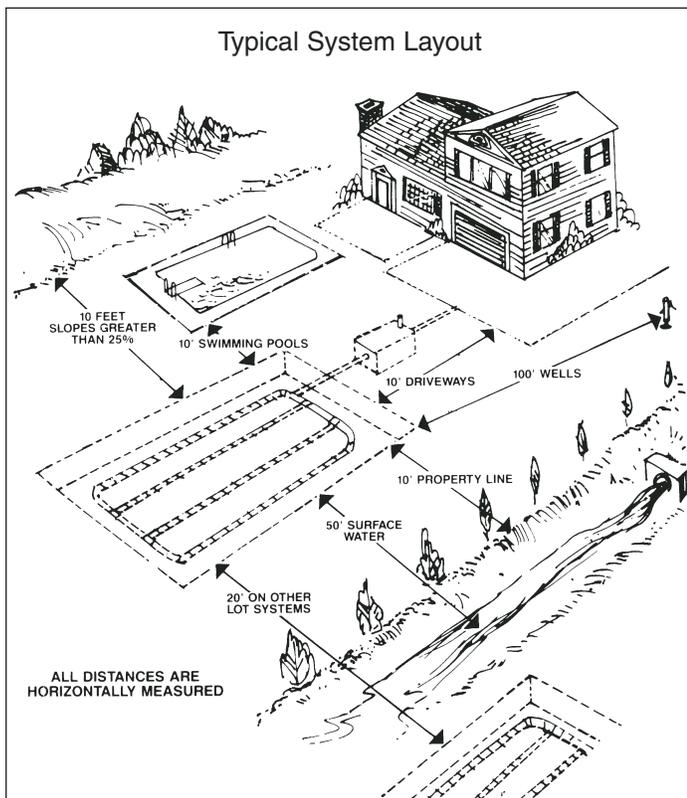
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Septic System Management for Clean Water



COURTESY OF RUSSELL REID

How Septic Systems Work

Most individual septic systems consist of a septic tank and a septic drain field. The purpose of the septic tank is to separate the solids from the liquids and to promote partial breakdown of contaminants by microorganisms naturally present in the wastewater. The wastewater solids, known as sludge, collect on the bottom of the tank.

The liquid, or effluent, moves from the septic tank either by gravity, or by pumping to a subsurface drain field where a perforated pipe disperses it. The drain field's size and depth is determined by the size of the septic tank, the soils, geology and groundwater levels. The effluent exits the pipe and trickles through soil under the field. The soil treats the wastewater through physical, chemical and biological processes. It also filters out many of the bacteria, viruses and nutrients before the effluent reaches groundwater.

Cesspools were commonly used many years ago and are still in use in some areas today. They are

Septic systems treat and dispose of household wastewater on individual lots, mostly in more rural areas with large lots where sewers are not practical. According to the federal Environmental Protection Agency, nearly one out of every four homes in the U.S. relies on septic systems. When properly designed, installed, operated and maintained, septic systems can be the most cost-effective method of wastewater treatment.

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simply underground pits with open-jointed linings that receive septage. The effluent leaches into the surrounding soil while the solids are retained in the pit. Cesspools do not connect to a septic field but simply allow the liquid to escape through the open joints. The New Jersey Department of Environmental Protection (DEP) regulations outlaw new cesspools and require replacement of old cesspools when they are found to be in use.

Proper Location, Design and Operation

Septic systems can fail due to improper siting (involving soil conditions, slopes or water table levels) or improper construction.

Location

DEP regulations (N.J.A.C.7:9A) spell out the minimum requirements for the design and location of septic systems. The regulations specify that a septic system shall not be located where it would be adversely affected by natural features including: bedrock outcrops, sink holes, steep slopes, bare eroded ground, sand dunes, mine spoils or landfills, low-lying coast areas with tidal inundation, low-lying inland areas with ponding or freshwater wetlands, flat low-lying areas adjoining streams, and high groundwater areas.

Septic systems must be located in soils that have acceptable permeability to provide adequate absorption characteristics for septic fields. The regulations require a minimum number of percolation tests that must be completed for different size disposal fields. The tests determine the design permeability needed for proper infiltration to ensure the effluent can move through the soil in enough time for adequate treatment to take place. For example, in areas of low permeability, sandy material may need to be added to increase permeability. By the same token, in areas of very high permeability, clay material would be needed to decrease permeability.

Systems must be adequately distanced from occupied buildings, property lines, adjacent septic systems, water courses, water supply lines, reservoirs, and wells.

Design

The design of the septic system is determined by its location – soils, groundwater elevation, topography, geology – and by the number of bedrooms of the residence it is to serve. The number of bedrooms determines the number of expected occupants and, therefore, the estimated volume of daily sewage flow. For residential systems, the DEP assigns a flow of 200 gallons per day to the first bedroom and 150 gallons per day for each additional bedroom. The more bedrooms in a house, the higher the wastewater volume and the larger the septic field will have to be. The site characteristics determine the size of the disposal field. The slower the soil's permeability, the more area will be required to absorb the wastewater in the septic field.

Operation

The regulations prohibit septic systems from receiving drainage from basement floors, footings and backwash from water softeners within the septic field. The regulations also specifically prohibit discharges, including: industrial wastes, material from photo-processing, dry-cleaning, printing, furniture stripping, auto painting. Grease traps must be installed where septic systems serve food establishments.

Additives should not be used unless they are bacterial and enhance bacterial action in septic tanks.

Properly Functioning Septics Support the Water Cycle

The recurrent droughts in New Jersey highlight the need for land use practices that mimic the natural water cycle. Experience and research show the importance of infiltrating water as close to its source as possible. Septic systems are important in maintaining the water cycle and should be considered a resource. They help replenish groundwater and maintain base stream flows by keeping used wastewater on site rather than sending it to a sewage treatment plant that discharges far from the water source.

Why Septic Management

Malfunctioning Septic Systems

In New Jersey, about 1.2 million people rely on individual septic systems for their wastewater management needs. Properly designed, sited and constructed individual septic systems provide necessary on-site wastewater treatment, provide important groundwater recharge and contribute to base flow in streams. Improperly sited and maintained septic systems can discharge bacteria, viruses and nutrients to groundwater and surface water. In addition, improper use of septic systems can contaminate ground and surface water with toxic chemicals. Over half New Jersey's population relies on groundwater for its water supply, making improper use and failure of septic systems of very serious concern. Septic malfunction can also cause surface water pollution, which can lead to fish advisories, beach closings and contaminated water supplies.

Public sewage collection systems are not the answer according to the 1996 NJ Water Supply Master Plan.

“When septic systems begin to fail in a municipality, public sewage collection systems are often installed and denser development often follows in nearby areas. The end result may be increased nonpoint source pollution and reductions in base flow in local streams.”

In other words, pollution from stormwater generated by newly induced development may become a problem if sanitary sewers replace septic systems.

The 1996 New Jersey Water Supply Master Plan raises the need for aquifer protection from malfunctioning septic systems. The Plan estimates that approximately 100 million gallons of septic effluent are discharged into the state's aquifers every day.

“When these systems are well managed, they allow the recycling of treated wastewater into the source supply as long as the density of the systems is not excessive and wells or streams are not in close proximity. However, if homeowners do not operate these systems properly (such as by introducing toxic chemicals or failing to periodically inspect and maintain the systems), they may malfunction and cause ground water contamination.”

In New Jersey the power to protect water quality from nonpoint source (NPS) pollution rests largely in the hands of local government. Local officials need to select, adopt and implement ordinances to ensure the maintenance of on-site systems to prevent nonpoint source pollution. Septic management is especially important as the

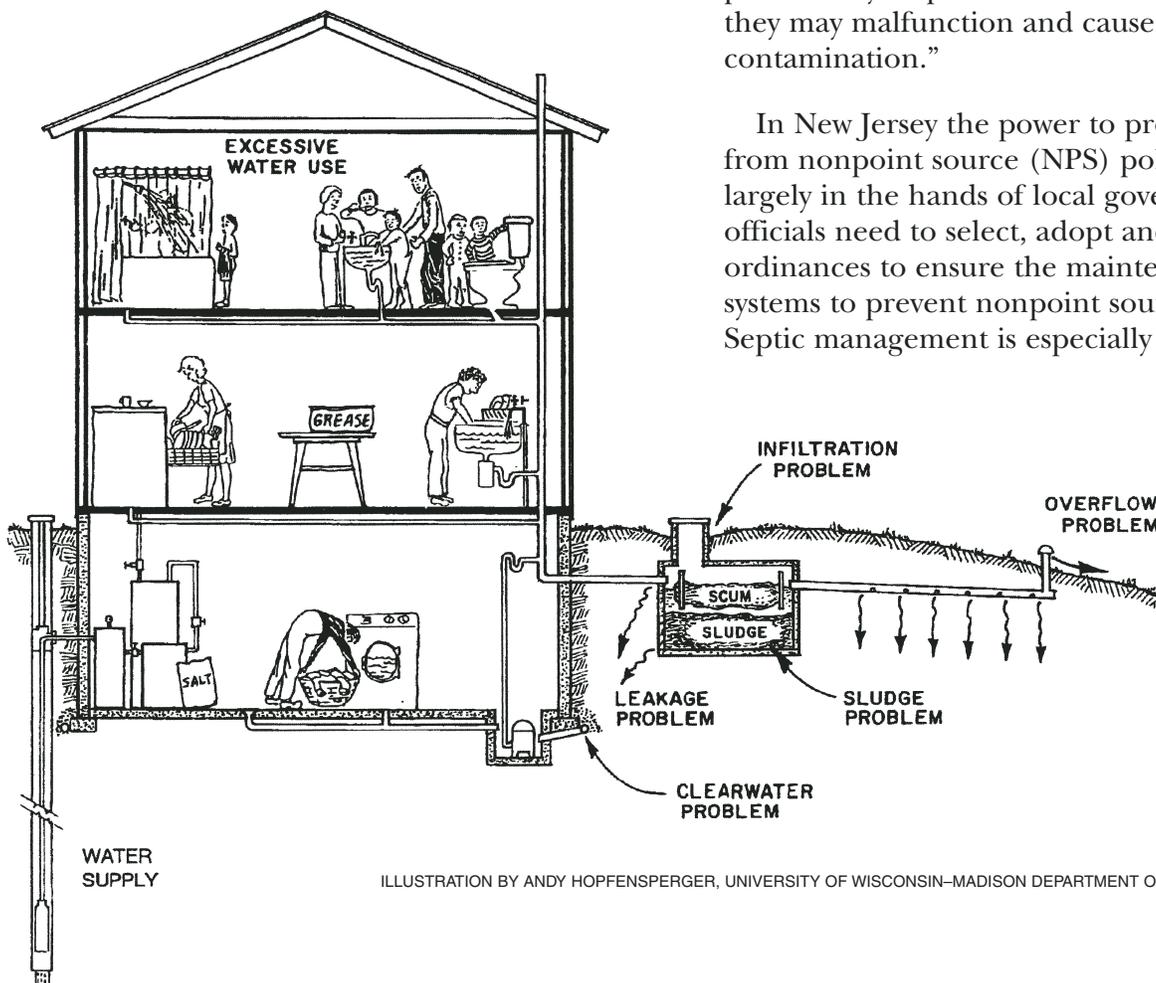


ILLUSTRATION BY ANDY HOPFENSBERGER, UNIVERSITY OF WISCONSIN-MADISON DEPARTMENT OF AGRICULTURAL ENGINEERING

state's population increases in areas dependent on septics.

Alternative Solutions for Older Systems

Often, steps can be taken to improve the function of malfunctioning older systems where site constraints limit solutions and public sewers are not feasible or desirable. In accordance with the state regulations, an aerobic treatment unit can be placed after a septic tank. The aerobic unit reduces the biological oxygen demand and total suspended solids in the fluid that exits the septic tank, and converts the ammonia to nitrate. It reduces clogging potential, and lowers fecal levels somewhat. An aerobic unit is a good solution when systems are located in areas of high water table, in proximity to streams, or where properties have no space for a full-sized septic field.

The Pinelands Commission in 2002 launched a five-year study of the use of alternative septic systems as opposed to conventional systems in the Pinelands. The Commission will monitor and evaluate specified alternate systems for effectiveness.

Many of New Jersey's septic systems predate implementation of more scientifically based regulations. In some areas, cesspools are still being used. Older systems need to be properly managed, upgraded or replaced. Newer systems are much improved, but still must be properly managed and maintained to remain effective.

Septic Management – Good Environmental Sense

A septic management program that requires proper maintenance of septic systems makes good environmental sense, as it helps to insure proper operation of both older and newer systems. Because older systems were not subject to strict requirements, they may be in inappropriate places and have minimum design. They pose serious pollution threats to surface and ground water. Newer systems also need to be properly maintained to insure effective wastewater treatment into the future.

Basic septic management consists primarily of regular pumping of septic tanks. This simple management requirement can vastly improve septic system functioning and protect the environment since the septic tank is a key component of the septic system. The septic system's function is drastically limited if the septic tank is not properly maintained. If the sludge level in the bottom of the tank builds up to the outlet pipe that carries the liquid to the septic field, the sludge will be carried to the field and will block release of the liquid. The liquid may then overflow the tank, or may leak out to the surface of the septic field. The tank is susceptible to damage caused by solvents, which kill the active bacteria essential to the breakdown of sludge. Garbage disposals can overload the tank. Grease and oils can clog vital tank components.

Establishing Proper Density

Even properly functioning septic systems can pollute water, primarily through release of excess nitrates. High nitrate concentrations in groundwater can flow to surface waters or wells. At concentrations in excess of 45 mg/l (milligrams of nitrate per liter of water), nitrate can be fatally toxic to infants. To establish appropriate septic densities, the DEP New Jersey Geologic Survey (NJGS) has developed a Nitrate Dilution Model (www.state.nj.us/dep/njgs/geodata/dgs02-6.htm). This model estimates the average area required per septic system to generate enough groundwater recharge to dilute the nitrate in that system's effluent to acceptable levels. Using average annual recharge calculated from soils and geology, the model estimates the required acres per system based on book values of nitrates in septic systems.

The NJGS emphasizes that the model is a starting point and a community can modify it to reflect its goals and concern for critical environmental resources. A basic step in the model is choosing what nitrate standard to use in the calculation of lot size. The NJGS model uses the DEP statewide groundwater anti-degradation standard of 5.2 mg/l. This standard is strictly health-based and does not take critical resource protection into account.

The Recharge-Based Nitrate Dilution Model Technical Guidance advises that in selecting the recharge-based water quality target or standard, you should consider water resource policies, standards and requirements. The nitrate target can be revised to reflect local considerations. Well records or surface water quality data may provide information for a stricter nitrate standard than the DEP's. For example, since discharge from septic fields contributes to base stream flows, if a stream is capable of supporting trout, a nitrate standard of 2.5 may be warranted. Reservoir watersheds and aquatic habitat areas for threatened and endangered species are examples where a stricter standard is deemed appropriate. Because of model assumptions, NJGS recommends a target value that incorporates safety factors. In other words, the target standard might be stricter to take into account nitrate pollution from sources other than septic systems, like fertilizer from lawns or agriculture. Another factor to be considered is poor dilution that occurs during periods of drought. The target may vary depending on land use and location.

Models are tools that can estimate the results of a given action over time; they do not tell us what the results will actually be. The assumptions and parameters in the model are only estimates and we need to understand the uncertainties inherent in the model. The model formula itself is also an estimate – simplifying what may be a very complex process in order to estimate potential impacts.

Model Septic Management Ordinance

Under a contract with the DEP, ANJEC conducted a survey of the state's municipalities to document municipal use of septic management ordinances in New Jersey. Working with an attorney, ANJEC developed the model ordinance found on page 7. The ordinance requires residents to pump septic tanks at regular intervals. Municipalities interested in enacting septic management ordinances need to evaluate their administrative capacity and the availability of licensed septic pumping companies or individuals.

Municipalities with septic management ordinances report that the most important aspect of implementing the ordinance is extensive

education and outreach to residents. Septic ordinances are difficult to enforce unless residents understand the benefit to them and the environment.

Septic Management Makes Good \$ Sense

Municipalities that require septic management are helping their residents dependent on septic systems. Properly functioning septic systems are an essential part of residential infrastructure and add to the value of a property. Like any other part of a residence, keeping the septic system in good repair is important, especially if or when sale of the property is considered. It is common practice for lending institutions to require proof that a property owner's septic system is in good order before they will consider issuing a mortgage to a buyer. Unfortunately, homeowners may be unaware of problems with their septic until the problem reaches a crisis – septic overflow, back-up or other malfunction.

Ordinances that Complement Septic Management Ordinances

To better serve our members, ANJEC has developed a database of environmental and land use ordinances from municipalities throughout New Jersey. These ordinances are examples of approaches that have worked in other municipalities. The user should modify them to reflect local environmental conditions, current regulations, and state-of-the art knowledge in the environmental field.

Aquifer Recharge Area Protection ordinances control uses on lands that provide recharge for water supply.

Clustering is a design technique that allows development to be clustered on a part of a site while requiring preservation of the site's open space; the density should not exceed that allowed under the conventional zone designation.

Floodplain Protection ordinances prohibit certain uses or development in the 100-year floodplain.

Impervious Cover ordinances limit the amount of land that can be covered by buildings, roads and other impervious uses to allow infiltration of precipitation.

Limestone Protection offers special protections to groundwater in limestone areas.

Lot Size Averaging allows lots to be of variable size so that critical environmental areas can be avoided.

Septic System Design ordinances have stricter standards than the state minimum standards. For example, local ordinances can require greater distances between septic systems and water courses or can require reserve septic fields to insure replacement if septic fields fail.

Shade Tree Protection ordinances require shade tree protection and replacement to maintain the evapotranspiration function so important to the water cycle and to prevent erosion.

Steep Slope ordinances protect slopes over 15%, with prohibition of use above 25% to minimize erosion and sedimentation.

Stormwater Management ordinances require structural and non-structural methods to control stormwater runoff.

Stream Corridor ordinances protect land along stream corridors to provide natural filtration of pollutants, prevent erosion and subsequent sedimentation, and provide important wildlife habitat. Stream corridors are an easier and more economic way to protect water than dealing with stream corridor degradation impacts.

Useable Lot Area ordinances require during subdivision that a certain area of a proposed new lot be free of environmentally critical areas – steep slopes, wetlands, floodplains and easements.

Well Head Protection ordinances establish allowed and prohibited uses in the land area influencing wells.

Some On-line Resources

- Ordinances and other information for municipalities www.anjec.org/html/waterresources.htm
- Information on nonpoint source pollution www.epa.gov/owow/info/NewsNotes/
- Issue reports on wastewater needs research funded by the U.S. EPA www.nesc.wvu.edu/nsfc/
- NJ Stormwater Web Page www.njstormwater.org
- NJ Nitrate Dilution Model www.state.nj.us/dep/njgs/geodata/dgs02-6.htm
- Homeowners Manual www.state.nj.us/dep/dwq/septicmn.htm
- Realty Improvement Sewerage & Facilities Act N.J.S.A. 58:11-23 to -48 (Septic System Regulations) www.state.nj.us/dep/dwq/pdf/njac79a.pdf

MODEL SEPTIC MANAGEMENT ORDINANCE

In consultation with NJDEP and an attorney, ANJEC developed this model ordinance.

This model ordinance regulates only the operation and maintenance of on-site sewage disposal systems, not the siting and construction of such systems.

AN **ORDINANCE** TO AMEND THE CODE OF THE BOARD OF HEALTH OF THE (INSERT NAME OF JURISDICTION) TO ESTABLISH REQUIREMENTS FOR THE OPERATION AND MAINTENANCE OF ON-SITE SEWAGE DISPOSAL SYSTEMS.

BE IT ORDAINED by the Board of Health of the (INSERT NAME OF JURISDICTION) in the County of (Insert Name of County) and State of New Jersey as follows:

SECTION ONE

A. FINDINGS

It is found and declared that:

1. Individual and non-individual on-site subsurface sewage disposal systems are in use within the (insert name of jurisdiction).
2. Existing subsurface sewage disposal systems have malfunctioned even when the systems have been designed, constructed, and sited in accordance with applicable standards, largely due to lack of proper system management or improper operation and maintenance. These malfunctions have been shown to adversely affect public health and welfare and the environment. Such systems constitute a potential source of pollution of ground and surface waters, contamination of potable water supplies, foul odors, nuisance problems and other hazards to public health.
3. It is determined to be in the interest of public health, safety and welfare to establish provisions to regulate the management of such systems to protect the public against system failures and resultant pollution.
4. The licensing provisions contained in this Ordinance are necessary to protect the public health safety and welfare and it is therefore necessary to exceed the provisions contained in N.J.A.C. 7:9A-1 et seq. This is hereby declared to be a "special ordinance" in accordance with N.J.A.C. 7:9A-3.1(b) and shall be forwarded to the New Jersey Department of Environmental Protection within 10 days of adoption.

OR

A. PURPOSE

In addition to the purposes set forth in N.J.A.C. 7:9A-1.1, it is the purpose of this ordinance:

1. To establish a management program for individual and non-individual subsurface sewage disposal systems in the (insert name of jurisdiction) in order to ensure the proper operation and maintenance of such systems. This ordinance requires existing, new and proposed individual and non-individual subsurface sewage disposal systems to be pumped out at least once every three years in order to minimize future malfunctions of such systems.
2. To regulate individual and non-individual subsurface sewage disposal systems in the program area in such a way as to protect public health and welfare and the environment, and to provide for a means of educating owners/operators, as defined herein, in the characteristics of such systems and the proper procedures for altering, operating and maintaining them.
3. To develop a management program to maintain records and manage systems in the program area.
4. To promote and assure the proper management and maintenance of individual and non-individual sewage disposal systems through time.

SECTION TWO. TITLE

This Ordinance shall be known as the Subsurface Sewage Disposal System Management Ordinance of the (insert name of jurisdiction.)

SECTION THREE. DEFINITIONS

All definitions given in Subchapter 2 (N.J.A.C. 7:9A-2.1 et. seq.) of the New Jersey Department of Environmental Protection (NJDEP) Standards for the Construction of Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A-1.1 et seq., and any amendments thereto ("NJDEP Regulations") are hereby incorporated into this article, with the following additions:

ACTIVE USE – For initial licenses, this term shall mean: "The use or direction of waste water to a system after the adoption date of this ordinance." For renewal licenses, this term shall mean: "The use or direction of waste water to a system at any time during the period of the license."

BOARD OF HEALTH – The Board of Health of the (insert name of jurisdiction)

EDUCATION PROGRAM – An educational program prepared and administered by the Board of Health regarding the fundamentals of individual and non-individual subsurface sewage disposal systems and the proper procedures for the operation and maintenance of such systems. The educational program shall be deemed to be in accordance with N.J.A.C. 7:9A-3.14.

ENFORCING OFFICIAL – The (Insert name of officer) of the (insert jurisdiction) or his designee.

INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM – An individual subsurface sewage disposal system, as defined at N.J.A.C. 7:9A-2.1, serving a single family detached residential housing unit.

LICENSED SEPTIC SLUDGE REMOVAL OPERATOR – Any person, firm or corporation which has been duly examined by the enforcing official and found qualified to pump out an individual or non-individual subsurface sewage disposal system, and who has been issued a license.

MANAGEMENT DISTRICT – (This definition is necessary if the ordinance is to be applied only to a portion of a jurisdiction. The definition must be developed locally and specifically describe the geographic area to be subject to the ordinance.)

NON-INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM – An on-site subsurface sewage disposal system serving a property other than a single family home. Such systems include but are not limited to those systems defined in N.J.A.C. 7:9A-1.8(c)2. Typical examples include but are not limited to: commercial buildings, restaurants, food establishments, commercial/residential mixed uses, and systems servicing multiple units.

OPERATOR'S LICENSE – A license issued to an applicant pursuant to this ordinance for the operation of an individual or non-individual subsurface sewage disposal system.

OWNER OR OPERATOR – The person who owns or leases the realty upon which an individual or non-individual subsurface sewage disposal system is located and/or the person who uses or operates said system. The owner of the realty and the operator of the system, if different, are jointly and severally liable for the obligations imposed by this ordinance.

PLOT PLAN – A sketch drawn by the owner/operator, or agent on their behalf, showing the type (if known) and location of the individual or non-individual subsurface sewage disposal system servicing the property, as well as the location and type of any on-site water supply. All plots shall be drawn to scale and list the dimensions used.

RETAIL FOOD ESTABLISHMENT – Any fixed or mobile restaurant; coffee shop; cafeteria; short order cafe; luncheonette; grill; tearoom; sandwich shop; soda fountain; tavern; bar; cocktail lounge; night club; roadside stand; industrial feeding establishment; private, public, or nonprofit organization, institution, or group preparing, storing or serving food; catering kitchen; commissary; box lunch establishment; retail bakery; meat market; delicatessen; grocery store; public food market, or any similar place in which food or drink is prepared for retail sale or service on the premises or elsewhere, and any other retail eating or drinking establishment or operation where food is served, handled or provided for the public with or without charge.

SYSTEM – An individual or non-individual subsurface sewage disposal system, including all of the component parts thereof.

SECTION FOUR. SCOPE, APPLICABILITY AND EXEMPTIONS

- A. SCOPE.** The owner and/or occupant of any realty improvement serviced by an individual or non-individual on-site subsurface sewage disposal system located in the (Option One – Management District) (Option Two – insert name of jurisdiction) shall be subject to all of the requirements of this chapter.
- B. APPLICABILITY.** No person within the (insert name of jurisdiction) area shall operate an individual or non-individual subsurface sewage disposal system unless such construction, installation, alteration, maintenance or operation is in accordance with all applicable sanitary regulations and this ordinance.
- C. EXEMPTIONS.** Any system not in active use shall be exempted from this Ordinance. The Board of Health may require an owner or operator of a system seeking exemption under this section to submit proof in the form acceptable to the Board so as to qualify for this exemption.

SECTION FIVE. LICENSE TO OPERATE

- A. REQUIREMENT FOR LICENSE:** On and after (insert effective date) no owner or occupant of a property in the (insert name of jurisdiction) upon which an individual or non-individual subsurface sewage disposal system is located shall use or operate the system unless a currently valid license to operate the system has been issued by the Board of Health in accordance with the schedule herein to the owner of the property on which the system is located.
 - 1. The Board of Health or its designee may issue a license to operate and educational information relative to the proper operation and maintenance practices (pursuant to N.J.A.C. 7:9A-3.14) to the owner and occupant of a property upon one or more of the following events:
 - a. Issuance of a certificate of compliance for a new system.
 - b. Issuance of a certificate of compliance for the alteration of a system
 - c. Upon the sale or transfer of a premises.
 - d. For all existing individual and non-individual sewerage disposal systems in accordance with the following schedule
 - Option 1 – Immediate effective date for all systems
 - Option 2 – Deferred effective date for all systems
 - Option 3 – Phased in date for existing systems
 - 2. All licenses issued pursuant to this section shall be on a form provided by the Board of Health. Once issued, a license shall be transferable upon change of ownership or occupancy of the premises for which the license has been issued. A fee as provided in section eleven of this ordinance thereof shall accompany each application for a license or renewal. The initial application for a license shall include a plot plan showing the location of the septic system (both the tank and the disposal area) and of any private water source on the property. The plot plan shall also include the general location, if known, of any wells, and septic systems on adjoining properties.
- B. EXPIRATION/RENEWAL:** The license to operate shall expire three (3) years after issuance. The Board of Health shall notify the licensee or its designee at least (INSERT REASONABLE TIME) before the license expires and shall be directed to apply for a renewal of the license. The renewal notice shall include educational materials relative to the proper operation and maintenance practice for such systems in accordance with N.J.A.C. 7:9A-3.14.

1. Requirements for Renewal: The Board of Health or its designee shall not renew the license unless the licensee has submitted the following to the Board of Health or its designee:

JURISDICTIONS SHOULD CHOOSE EITHER OPTION 1 OR OPTION 2

OPTION 1

- a. Evidence that the septic tank (or in the case of an alternate system, the comparable component of such system) has been pumped by a licensed septic sludge removal operator as required by Section Seven of this Ordinance; or
- b. Submission of a Septic System Inspection* Report on a form approved by the Board of Health indicating that the system has been maintained, is not in need of pumping, and is functioning in conformance with the requirements of this chapter. Said form shall be prepared, completed and certified by:
 - i) A staff member of the Board of Health;
 - ii) A licensed septic installer;
 - iii) A NJDEP registered inspector;
 - iv) A NJDEP registered waste hauler;
 - v) A licensed professional engineer;
 - vi) A licensed health officer or sanitarian;
 - vii) Insert local option, if any); or
 - viii) Other person acceptable to the Board of Health.

Any such inspection under this section, shall include but not be limited to the following:

- i) A complete walkover of the septic field;
- ii) Measurement of the effluent in inspection ports, (if any) and a reading of the groundwater monitoring port when such ports were included in the original septic design; and
- iii) An inspection of baffles and internal integrity of the tank.

OPTION 2

Submission of a Septic System Inspection* Report only as required in OPTION 1 on this page (Section Five B1b).

** Any such inspection shall be conducted in accordance with any NJDEP approved protocol, guidance or regulations.*

If the inspection indicates that a pumpout of the tank or other maintenance, alteration, or repair of the system is necessary, the Board of Health shall issue a notice of pumping, alteration or repair. Following pumpout or other maintenance, alteration or repair of the system, the owner /operator shall submit to the Board of Health a completed alteration/pumpout report prepared and signed by the person performing the required work.

No person shall test an individual or non-individual subsurface sewage disposal system in a manner that will adversely affect the functioning of the system. Hydraulic loading shall not be applied in excess of the design flow capacity. All solids shall have been removed from the septic tank and/or grease trap prior to testing unless the hydraulic loading is applied at a point that will bypass the septic tank and/or grease trap.

2. Renewal Term: Any license renewed under section B.1.a (Actual pumping) shall be renewed for a period of three years. Any license renewed under Option 2 (Inspection) shall be renewed for period of (insert term) years.

3. As a condition precedent to a license renewal, the owner/operator shall pay the fee required by section eleven herein.

C. SUSPENSION OF LICENSE: The Board of Health or its designee may suspend or revoke the license to operate in the following circumstances:

1. It has been determined that the system is malfunctioning based upon criteria provided for in N.J.A.C. 7:9A-3.4(a) and the licensee fails to take steps to correct said malfunction as directed by the Board of Health or its designee;
2. The owner or occupant of the premises served by the system violates any provision of this chapter with respect to operation and maintenance of the system; or
3. The owner or occupant of the premises served by the system denies the right of entry to the Board of Health or its designee, or to the New Jersey Department of Environmental Protection (NJDEP), as required in N.J.A.C. 7:9A-3.19, or in any way interferes with the administration or enforcement of this ordinance.

D. MODIFIED TERM OF LICENSE: The Board of Health may on its own motion, upon notice and opportunity to the property owner or operator for a hearing, or upon application of a property owner or system operator, alter the time period of a license to operate. The Board of Health may consider the following factors in determining that a more frequent licensing renewal or pumping/inspection schedule may be necessary:

1. Limited size of the septic tank or disposal field;
2. The fact that the existing system may be a cesspool;
3. The age of the system;
4. Past history of malfunction or other non-compliance;
5. Location of the existing system in a flood hazard, wetland area, wetland transition zone or other environmentally sensitive area as defined in (insert reference);
6. Proximity of the system to a well or water body.

E. SPECIAL LICENSING PROVISIONS FOR RETAIL FOOD HANDLING ESTABLISHMENTS:

The license to operate for a retail food handling establishment shall expire one year after issuance or one year from the date of the documented pumpout, whichever comes first. The owner of said establishment shall have the right to apply to the Board of Health for a longer license renewal period, but in no case shall the license renewal period exceed three years.

In considering any such application the Board of Health may consider the establishment's demonstrated compliance history with management of the system.

SECTION SIX. STANDARDS ON THE USE OF SUBSURFACE SEWAGE DISPOSAL SYSTEMS

A. GENERAL

1. The subsurface sewage disposal system shall be used only for the disposal of wastes of the type and origin provided for in the approved engineering design. No permanent or temporary connection shall be made to any source of wastes, waste water or clean water other than those plumbing fixtures which are normally present within the type of facility indicated in the approved engineering design.
2. Drainage from basement floors, footings or roofs shall not enter the sewage disposal system and shall be diverted away from the area of the disposal field.
3. As set forth in N.J.S.A. 58:10A-17, no person shall use or introduce or cause any other person to use or introduce into any sewage water disposal system any sewage system cleaner containing any restricted chemical material.
4. Disposal of materials containing toxic substances into a subsurface sewage disposal system is prohibited. Materials containing toxic substances include, but are not limited to, waste oil (other than cooking oil), oil based or acrylic paints, varnishes, photographic solutions, pesticides, insecticides, paint thinners, organic solvents or degreasers and drain openers.
5. Inert or non-biodegradable substances should not be disposed of in the subsurface sewage disposal system. Such substances include, but are not limited to, disposable diapers containing plastic, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet-strength paper towels.
6. Large quantities of cooking greases or fats shall not be discharged into systems not equipped with a grease trap designed and constructed as prescribed in N.J.A.C. 7:9A-8.1.
7. Major plumbing leaks shall be repaired promptly to prevent hydraulic overloading of the system.
8. Vehicle traffic and vehicular parking shall be kept away from the aspects of the system, unless the system has been specifically designed to support vehicular traffic.

B. DISPOSAL FIELD MAINTENANCE

1. The area of the disposal field shall be kept free of encroachments from decks, pools, sprinkler systems, driveways, patios, accessory buildings, additions to the main building and trees or shrubbery whose roots may cause clogging of any part of the system
2. Grading shall be maintained in a condition that will promote run-off of rainwater and prevent ponding.
3. All drainage from roofs, footing drains, ditches or swales shall be diverted away from the disposal field.
4. Vegetation shall be maintained to prevent soil erosion.
5. Vehicle traffic and vehicular parking shall be kept away from the area of the disposal field, unless the disposal field has been specifically designed to support vehicular traffic.

C. ABANDONED SYSTEMS

1. When it is necessary to abandon a system or components of a system, all septic tanks, dosing tanks, seepage pits, dry wells and cesspools which are to be abandoned shall be emptied of wastes and removed or filled completely with sand, gravel, stones or soil material in a manner which is acceptable to the Board of Health or its designee.
2. Except when done as part of or in conjunction with an alteration, a permit must be obtained from the Board of Health prior to abandoning a septic system or component of a septic system.

D. ADDITIONAL INSPECTION AND MAINTENANCE REQUIREMENTS FOR SYSTEMS WITH GREASE TRAPS

1. Grease traps shall be inspected and cleaned out at a frequency adequate to prevent the volume of grease from exceeding the grease retention capacity. Grease shall be removed whenever seventy-five percent (75%) of the grease retention capacity has been reached.
2. Pumping of grease traps shall be performed by a solid waste hauler registered with the NJDEP in accordance with the requirements of N.J.A.C. 7:26-3.1
3. Equipment used in the pumping of grease traps shall meet the following requirements:
 - a. Mobile tanks shall be securely mounted on trucks or trailers, shall be watertight and provided with a leak-proof cover and shall be vented to permit the escape of gases but not the liquid or solid contents of the tank.
 - b. Pumps and hoses shall be maintained and operated in a condition that will prevent the leakage of sewage.
 - c. Equipment shall be available to permit accurate measurement of the volume of grease in relation to the grease retention capacity of the grease trap.
 - d. Pumping of grease traps shall be conducted in such a manner that the entire contents of the grease trap including both liquids and solids are removed.
 - e. Pumping shall be carried out in a manner that will prevent spillage of sewage onto the ground. If any spillage occurs, the solid portion shall be immediately removed and disposed of in a sanitary manner and the area of the spill shall be disinfected using a suitable chlorine-bearing compound.
 - f. Grease and other waste materials removed from grease traps shall be disposed of in accordance with the requirements of the Statewide Sludge Management Plan adopted pursuant to N.J.S.A. 13:1E-1 et seq. and N.J.S.A. 7:11A-1 et seq., as well as any other applicable State or local rules, regulations, ordinances or directives.

E. MAINTENANCE OF DOSING TANKS

1. Dosing tanks and associated pumps, siphons, switches, alarms, electrical connections and wiring shall be maintained in proper working order.
2. Any solids that accumulate in the dosing tank shall be removed and disposed of in a sanitary manner.

SECTION SEVEN. REMOVAL OF SEPTIC TANK SLUDGE

- A.** Any person, partnership, firm or corporation who empties, relieves or pumps out all or a portion of an individual or non-individual sewage disposal system within the (insert jurisdiction) shall first apply to the Board of Health to become a licensed septic sludge removal operator. The applicant shall have the following qualifications: (Insert qualifications.) Any such license shall be for a term of (insert time period) and shall be subject to the payment of a fee as provided in section eleven of this ordinance.
- B.** Prior to emptying, relieving or pumping out all or a portion of any individual or non-individual subsurface sewage disposal system within the (insert name of jurisdiction), the licensed septic sludge removal operator shall obtain a septic sludge removal permit from the Board of Health.
- C.** The septic sludge removal operator shall complete all information on the septic sludge removal permit and deliver one (1) copy to the property owner and one copy to the Board of Health within 72 hours of the time that the individual or non-individual sewage disposal system is pumped. Failure to deliver said report within the required time frame shall be considered to be a violation of this ordinance.
- D.** In addition to the license required under section A above, the pumping of septic tanks shall be performed by a solid waste hauler registered with the NJDEP in accordance with the requirements of N.J.A.C. 7:26-3.c.
- E.** The Board of Health may suspend or refuse to renew the license of any septic sludge removal operator who fails to comply with this ordinance.
- F.** Equipment used in the pumping of septic tanks shall meet the following requirements:
 1. Mobile tanks shall be securely mounted on trucks or trailers, shall be watertight and provided with a leak-proof cover and shall be vented to permit the escape of gases but not the liquid or solid contents of the tank.
 2. Pumps and hoses shall be maintained and operated in a condition that will prevent the leakage of sewage.
 3. Equipment shall be available to permit the accurate measurement of the sludge and scum levels in relation to the bottom of the outlet baffle.
- G.** Pumping of septic tanks shall be conducted in such a manner that the entire contents of the septic tank including both liquids and solids are removed.
- H.** Pumping shall be carried out in a manner that will prevent spillage of sewage onto the ground. If any spillage occurs, the solid portion shall be immediately removed and disposed of in a sanitary manner and the area of the spill shall be disinfected using a suitable chlorine-bearing compound.
- I.** Septage shall be disposed of at a sewage treatment plant designated in accordance with District and/or State Solid Waste Management Plans pursuant to the Statewide Sludge Management Plan adopted pursuant to N.J.S.A. 13:1E-1 et seq. and N.J.S.A 58:1A-1 et seq.

SECTION EIGHT. APPEAL TO BOARD OF HEALTH

Any person aggrieved by any decision of a designee of the Board of Health made pursuant to this chapter shall have the right to appeal that decision to the Board of Health. Any aggrieved person seeking a hearing under this section shall make application to the Board in writing within 30 days of the decision to be appealed. The Board of Health shall schedule the matter for a hearing within 45 days thereafter. The hearing shall be conducted at a meeting held pursuant to the Open Public Meetings Act.

SECTION NINE. ENFORCEMENT

A. NUISANCES TO BE CORRECTED

1. Any on-site sewage disposal system or component thereof that is found to be malfunctioning (as defined in N.J.A.C. 7:9A-2.1 and 3.4) shall constitute a nuisance and shall be repaired, modified or replaced pursuant to an order of the Board of Health or its designee to correct the condition caused by the malfunction. Alterations shall be performed in accordance with "Standards for the Construction of Individual Subsurface Sewage Disposal Systems" as adopted and implemented by the Board of Health by virtue of this Code and any amendments thereto.
2. Any individual or non-individual subsurface sewage disposal system which has not been maintained in accordance with N.J.A.C. 7:9A:12.3, Septic Tank Maintenance, is hereby declared a nuisance.
3. Any individual or non-individual subsurface sewage disposal system which is constructed, installed, altered, operated or maintained in violation of this section, the DEP Regulations, any rule or regulation promulgated pursuant to this ordinance or any permit, certificate or license issued pursuant to this ordinance is hereby declared to be a nuisance.
4. In addition the powers provided for in N.J.A.C. 7:9A-1.1 et seq., the Board of Health retains its authority to abate any nuisance in accordance with the provisions of N.J.S.A. 26:3-45 et seq.

B. MALFUNCTIONING SUBSURFACE SEWAGE DISPOSAL SYSTEM: INSPECTIONS OF SYSTEM; REVOCATION OF LICENSE

1. The Board of Health shall have the right to inspect any system which shows evidence of any malfunction. Such evidence may include, but not be limited to, foul odors, leakage to ground surface, or soggy ground over system. Water and/or soil samples may be taken to confirm the existence of a malfunctioning system.

2. The Board of Health may require that any malfunctioning system be corrected by servicing or by replacement or alteration of the system.
3. Until any necessary replacement or alteration of a system has been accomplished, the Board of Health may require pumping and the removal of the entire contents of the septic tank for the system (both liquids and solids) at intervals specified by the Board.
4. No provision to this Ordinance shall be interpreted as precluding the Board of Health from revoking a license issued by the Board for the operation of a system in the event that the Board shall determine that such action is necessary and appropriate for the enforcement of this Ordinance. Any such revocation shall be upon Notice to the owner/operator, with an opportunity to comment or appeal.

SECTION TEN. RIGHT OF ENTRY

In furtherance of the rights granted to the Board of Health in N.J.S.A. 26:3-45 et seq. and N.J.A.C. 7:9-3.19, the (insert name of enforcing official) or his designee, upon presentation of identification, shall have the right to enter upon property where an individual or non-individual subsurface sewage disposal system is located for the purpose of observation, inspection, monitoring and/or sampling of the on-site sewage disposal system. This authority is exercised by virtue of N.J.S.A. 26:3-31 as a necessary and reasonable method of furthering the duties of the Board of Health as enumerated therein.

SECTION ELEVEN. FEES

- A. Initial License
- B. Renewal License
- C. Board of Health Inspection at time of license renewal
- D. Septic Sludge Removal Operator
- E. Septic Sludge Removal Permit

SECTION TWELVE. VIOLATIONS AND PENALTIES

- A. A person who violates any provision of this article, or any term or condition of any certificate or license issued hereunder, shall be liable for one or more of the following penalties [N.J.S.A. 40:69A-29(b)].
 1. A fine of not less than one hundred dollars (\$100.00) nor more than \$1,000.
 2. A period of community service not to exceed 90 days.
- B. Each separate day and each violation of any provision or this article, any term or condition of any certificate or license or any notice or order issued by the Board of Health shall constitute a separate and distinct violation under this ordinance.
- C. Nothing in this section shall be construed as limiting the remedies of the Board of Health for violation of this article. The Board of Health may proceed under any other remedy available at law or in equity for any violation of this article or any term or condition of any certificate or license issued by the Board or Health or for any failure to comply with any notice or order issued by the Board of Health or its enforcement official under this ordinance.

SECTION THIRTEEN. REPEAL OF INCONSISTENT ORDINANCES.

All ordinances, codes or parts of same inconsistent with any of the provisions of this ordinance are hereby repealed to the extent of such inconsistency

SECTION FOURTEEN. EFFECTIVE DATE

This ordinance shall take effect thirty (30) days after adoption and publication of a Notice of Adoption in accordance with New Jersey law.

SECTION FIFTEEN. SEVERABILITY

In the event that any provision of this Ordinance or its application to any person is held invalid for any reason, such invalidity shall not affect any other provision of this Ordinance and to this end, the provisions of this Ordinance are severable.

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