

TOWN OF NANTUCKET BOARD OF HEALTH REGULATIONS DEFINITIONS

LOCAL REGULATION 50.00

50.01 DEFINITIONS.

For the purpose of the Town of Nantucket Board of Health Regulations, the following terms shall have the following meanings, unless the context clearly requires otherwise. Terms expressed in the singular shall be construed to incorporate the plural, and vice versa, unless the context otherwise requires.

1978 code - Title Five of the Massachusetts Environmental Code. 310 CMR 15.000, et seq., as revised and in effect as of 1978.

Acre - a unit of land measure equal to 40,000 square feet which is considered a buildable acre in accordance with standard real estate practices.

Agency - an agency, department, board, commission, or authority of the Commonwealth or of the Federal Government and any authority of any political subdivision which is specifically created as an authority under special or general law. The term shall not include housing authorities permitted pursuant to M.G.L. c. 40A.

Alternative / Innovative Systems. - systems designed to provide or enhance on-site sewage disposal which either do not contain all of the components of an on-site disposal system constructed in accordance with 310 CMR 15.001 through 15.293 or which contain components in addition to those specified in 310 CMR 15.100 through 15.293 and which are proposed to the local approving authority and/or the Department for remedial, pilot, provisional, or general use approval pursuant to 310 CMR 15.280 through 15.289.

Approving Authority. - A local approving authority as defined in 310 CMR 15.002; or the Department with regard to systems owned or operated by an agency of the Commonwealth or of the federal government, or on a case by case basis as determined by the

Department to be necessary to carry out the purposes of 310 CMR 15.000.

ASTM. - The American Society of Testing and Measures.

BATHROOM – A room containing a sink, toilet facility, and a shower or tub.

Bedroom. Shall be considered any habitable space in a structure suitable for living and sleeping that exists in a structure as a room separated from adjacent space by a wall extending from the ceiling to the floor with or without doorways and windows that consists of the following:

- (a) floor space of no less than 70 square feet;
- (b) for new construction, and for existing houses and new and existing mobile homes, a ceiling height of no less than 7’
- (c) an electrical service and ventilation; and
- (d) at least one window.

Dining rooms, living rooms, kitchens, halls, bathrooms, closets, unfinished cellars, storage and utility space are not considered bedrooms. For the purpose of septic system design, Single family dwellings shall be presumed to have at least three bedrooms. Where the total number of rooms for a single family dwelling exceeds eight, the number of bedrooms presumed shall be calculated by dividing the total number of rooms by two then rounding down to the next lowest whole number.

An undivided room area greater than 50 % of the floor area of any single level, exclusive of dining rooms, kitchens, halls, bathrooms, and closets, and greater than 400 square feet in area will be equivalent to two bedrooms for design flow calculation purposes.

Biological Mat - A layer composed of microorganisms and organic material located below a soil absorption system which forms on the infiltrative surface of soil and which provides biological treatment of septic tank effluent.

Blackwater - Wastewater from toilets, urinals, and any drains equipped with garbage grinders.

Board of Health – Town of Nantucket Board of Health

Bordering Vegetated Wetlands - Shall mean any land or surface area so defined by the Massachusetts Wetlands Protection Act M.G.L. c.131, ss40 and 310 CMR 10.55(2).

Building - A structure enclosed within exterior walls or firewalls, built, erected, or framed of any material, weather portable or fixed, having a roof, to form a structure for the shelter of persons, animals, or property.

Building Sewer - A pipe which begins outside the inner face of a building wall and extends to an on site system or municipal, or private sewer.

Campground - A facility regulated pursuant to 105 CMR. 430.00 or 105 CMR 440.00 and any campground operated by the Department of Environmental Management in a State Park.

Cellar/ foundation Wall - That portion of the outside surface of the supporting wall enclosing a full basement which is above the cellar floor and below the ground surface.

Certificate of Compliance or Certificate - A certificate issued by the approving authority to the owner or operator of a system in accordance with 310 CMR 15.021 indicating that an on site system has been constructed or upgraded, and inspected, as necessary in compliance with 310 CMR 15.00.

Certified System - An alternative system which has been approved by the Department for specified uses or site conditions pursuant to 310 CMR 15.288. Systems which have been certified may be approved for use by the Board without further Departmental review but subject to any limitations on their use imposed by the Department in 310 CMR 15.00.

Certified Vernal Pool - A surface water body that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool in accordance with the 'Vernal Pool Certification Guidelines' pursuant to the Massachusetts Natural Heritage and Endangered Species Program administered by the Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement at the time a permit application is submitted to the approving authority.

Cesspool - A pit with open jointed linings or tiles in the bottom and/or sidewalls into which raw sewage is discharged the liquid portion of the sewage being disposed of by seeping or leaching into the surrounding soils, and the solids or sludge being retained in the pit. A Cesspool shall be considered a failed system by definition.

Coastal Beach - Unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats, as more fully defined in M.G.L. c.131 ss 40 and 310 CMR 10.27 (2).

Commercial Sewage Waste - Non-toxic non-hazardous wastewater generated in a trade, occupation, or business, including transient residential facilities as defined in Section 139-2 of the Nantucket Code, but excluding private residential uses.

Cover Materials - The soils placed on top of a soil absorption system to bring the area to finish grade.

Crown - The top of the internal cross section of a pipe or fitting.

Deep Observation Hole - An open pit excavated to a minimum depth of 12 feet—to permit examination of the soils and to obtain data relative to the depth to groundwater.

Department - The Massachusetts Department of Environmental Protection.

Depth to Groundwater – The groundwater/water table elevations shall be determined by:

- 1) direct observation of highest groundwater elevation (including seasonal perched and tidally influenced groundwater) in a test pit excavation;
- 2) direct observation of mottling (redoximorphic features) in a test pit excavation;

and

- 3) by calculation using the USGS Frimpter High Ground Water Adjustment Method (reference “Probable High Groundwater Levels in Massachusetts USGS Water Resources Investigation Open File Report 80 – 1205) Reference available in Health Department.

The actual recorded depth to groundwater shall be the highest groundwater elevation determined by 1, 2, and 3 (based on National Geodetic Vertical Datum) as subtracted from the existing ground elevation at the test pit excavation.

Design Flow - The quantity of sanitary sewage, expressed in gallons per day (gpd) for which a system must be designed in accordance with 310 CMR 15.203.

Designer - A registered Sanitarian or a Professional Engineer registered in the Commonwealth Of Massachusetts.

Disposal Area - The subsurface environment in which a soil absorption system or reserve area is located.

Disposal System - See on site system.

Disposal System Construction Permit or Permit - Written approval issued by the Board in accordance with 310 CMR 15.020 authorizing the construction, upgrade or expansion of a n on site system.

Disposal System Installer - A person licensed in accordance with 310 CMR 15.019, who constructs, repairs, or replaces an on site subsurface sewage disposal system.

Disposal System Installers Permit - A permit issued in accordance with 310 CMR 15.0109.

Distribution Box - A level, watertight structure which receives septic tank effluent and distributes it in substantially equal portions to distribution lines in a soil absorption system.

Distribution Line - A pipe which provides dispersion of septic tank effluent within a soil absorption system.

Dosing Chamber - A watertight structure placed between a septic tank and either a distribution box or a soil absorption system which is equipped with a pump designed to discharge septic tank effluent at a predetermined rate to a soil absorption system.

Dry Well - A pit with open jointed lining or holes through which storm water drainage from roofs, basement floors, foundations or other areas seep into the surrounding soil.

Dune - A coastal dune, as defined in M.G.L. c.131 ss 40 and 310 CMR 10.28(2).

Dwelling - A building which is used, intended, or designed for human habitation, including but not limited, to houses, hotels, motels, apartments, mobile and modular homes and condominiums.

Effective Capacity - The liquid volume of a tank below the liquid level line.

Effluent - Sanitary sewage/ septage discharged into the environment, whether or not treated.

Emergency Repairs - The repair of a system which is necessary to prevent sewage backup into a building, surface breakout of sewage, or to alleviate an imminent danger to public health, safety or the environment in accordance with 310 CMR 15.353.

Facility – Any on site sewage/septage disposal system. Reference “onsite sewage disposal system ” definition.

Failed Subsurface Sewage Disposal System or Failed System - A system which fails to protect public health and safety or the environment as set forth in 310 CMR 15.303 (6) (a) 1-6), 310CMR 15:303 (1) (c) and 310 CMR 15 303(2) and as documented on the Town of Nantucket, Septic System Inspection Form.

Fill - The clean, uncontaminated, nonindigenous soil placed beneath, above, and/or around a soil absorption system, as specified in 310 CMR 15.201 through 15.293.

Grease Trap - A water tight structure located on a building sewer before a septic tank in which grease and oils are separated from other solid and liquid constituents of sewage and accumulated in accordance with 310 CMR 15.230.

Graywater - Any putrescible wastewater discharge from domestic activities including but not limited to washing machines, sinks,

showers, bath tubs, dishwashers, or other source except toilets, urinals, and any drains equipped with garbage grinders.

Groundwater – All subsurface water contained within a zone of saturation including perched groundwater.

Groundwater Quality Standards - The Massachusetts Groundwater Quality Standards - 314 CMR 6.00.

Half Bath – A room containing a sink and toilet facilities.

Housing for the Elderly - A facility restricted to use of adults over 55 years of age (in accordance with 42 USC 3601 *et seq.* As referenced in M.G.L. c. 151B subsection 4, paragraph 7.).

H - 20 Wheel Loading - Standard H - 20 truck loading as specified by the American Association of State Highway Officials.

Humus / Composting Toilet - A self contained system consisting of a composter with a separate toilet fixture from which no liquid or solid waste materials are discharged to the surface or subsurface environment and from which a humus / compost - like end product is produced. Such systems may be approved for use only in accordance with the provisions of 310 CMR 15.280 through 15.289.

Hydraulic Failure – The backflow of effluent within an underground soil absorption system as demonstrated by fluids and/or the observance of fluid levels above the top of the outlet of the distribution box and/or septic tank. The flow or leakage of effluent to the surface of a property above the underground soil absorption system, and/or the backflow of effluent into any structure shall also be considered as hydraulic failure.

Impervious - material having a percolation rate greater than 60 minutes per inch for reasons including, but not limited to, the presence of bedrock, schist, peat, ledge, unconsolidated material, organic matter or topsoil or subsoil.

Industrial Waste - Any water and or waste generated from any process or industry, manufacture, trade, business, or activity listed in 310 CMR 15.004.

Interim Wellhead Protection Area (IWPA) - An interim well-head protection area, as defined in Massachusetts drinking water regulations, 310 CMR 22.02. Generally, this is the half mile radius for sources whose approved pumping rate is 100,000 or greater. For smaller sources, the radius in feet is determined by multiplying the approved pumping rate in gallons per minute by 32, and adding 400

Invert - The lowest portion of the internal cross section of a pipe or fitting.

Irrigation Well - Any on-site source of groundwater not certified as a potable water supply by the local Board of Health or the Department in accordance with M.G.L. c. 111 subsection 122A and 160 or 310 CMR 22.00.

Local Approving Authority - The Board of Health or its authorized agent or an agent of the Health district constituted pursuant to M.G.L. c. 111 subsection 27 acting on behalf of the applicable board of health.

Local Upgrade Approval - An approval granted by the local approving authority allowing the owner or operator of a nonconforming system to perform an upgrade of the nonconforming system to the maximum feasible extent, all in accordance with the provisions of 310 CMR 15.401 through 15.405.

Long-Term Acceptance Rate (LTAR) - The stable rate of effluent acceptance through the biological mat of the soil absorption system measured in gallons per day per square foot (gpd/sf).

Maintenance - All activities required to assure the effective and continuous operation and performance of an on-site system including, but not limited to, solids and scum removal from the septic tank, re-leveling the distribution box, and the upgrade of one or more of the system components, exclusive of leaching facilities, all as more fully described in 310 CMR 15.201 through 15.422.

Mobile Home - A single transportable structure on a chassis designed to be used, with or without a permanent foundation, as a dwelling. The support system of a mobile home is constructed so that the mobile home may be moved from time to time.

Modular Home - A prefabricated building designed and constructed to be used as a dwelling and to be transported in two or more

sections to a site where the sections are permanently connected and installed on a permanent foundation.

Mottling/Redoximorphic Features - A color pattern in soil consisting of contrasting high and low chroma colors which shall be used as an indicator of depth to groundwater.

Multiple Compartment Tank - A septic tank containing more than one settling compartment in series.

Munsell System - The system of classifying soil color consisting of an alpha-numeric designation for hue, value and chroma together with a descriptive color name accepted by 310 CMR 15:00 and USDA/NRCS as a standard procedure in soil classification.

N.G.V.D. - National Geodetic Vertical Datum.

Naturally Occurring Pervious Material - Soil Exhibiting a percolation rate of 60 minutes or less per inch which was deposited on a site by natural causes and not by human action.

New Construction - The construction of a new building and or addition of enclosed square footage to an existing building for which an occupancy permit is required or an increase in the actual or design flow to any nonconforming system or to any other system above the existing approved capacity. New construction shall not include replacement or repair of an existing building totally or partially destroyed or demolished if there is no increase in flow above the existing approved capacity to any system.

Nitrogen Sensitive Area -

Areas have been determined by the Nantucket Board of Health to be particularly sensitive to the discharge of pollutants from on site sewage disposal systems, including nitrogen, nitrogen as nitrate, phosphorous and pathogens. Such areas are depicted on a plan entitled "Board of Health Nitrogen Sensitive Areas" which is hereby incorporated by reference herein, and as such warrant the imposition of the loading restrictions set forth below. All existing lots shall, by right, be allowed to discharge 220 gallons per day

A. Nantucket Nitrogen, Phosphorous and/or Pathogen Sensitive Areas:

- 1) Interim Wellhead Protection Areas for public drinking water supply wells (N).

- 2) **Water Recharge Areas to the following embayments and water bodies.**
- a. **Nantucket Harbor & its estuaries (N)**
 - b. **Sesachacha Pond (N)**
 - c. **Madaket Harbor area including Hither Creek(N)**
 - d. **Hummock Pond (P)**
 - e. **Long Pond & North Head of Long Pond (P)**
 - f. **Miacomet Pond (P)**

Nonconforming System - Any system which is not in full compliance with the standards and requirements of 310 CMR 15.00 and for which a variance or local upgrade approval has not been obtained. Nonconforming systems include, but are not limited to , cesspools, privies, failed systems, and systems with a design flow above 10,000 gpd.

Observed Ground - Water Elevation - That elevation below the ground surface at which water is observed weeping, flowing from the walls of, or standing in a deep observation hole.

On-site System or Disposal System or On-site Subsurface Sewage Disposal System or System. - A system or series of systems for the treatment and disposal of sanitary sewage.

- a) The standard components of a system include but are not limited to; a building sewer; a septic tank to retain solids and scum; a distribution box; a soil absorption system containing effluent distribution lines to distribute and treat septic tank effluent prior to discharge to appropriate subsurface soils; and a reserve area.
- b) The terms “On-site or Disposal System or On-site Subsurface Sewage Disposal System or System” also include tight tanks, shared systems, alternative systems and other on-site systems as defined in 310 CMR 15.00.

Open Drain - Any uncovered ditch, swale or culvert used for the conveyance of surface water runoff or groundwater. A culvert that carries a water course or intermittent stream is not an open drain.

Operate - To use or occupy a facility served by an on-site system or to own a facility where such use or occupation exists.

Operator - A person who alone or together with other persons has charge or control of any system.

Owner - A person who, alone or together with other persons, has legal title to any facility served by a system or control of the facility, including but not limited to any agent, executor, administrator, trustee, lessee, or guardian of the estate for the holder of legal title.

Percolation Test - A field test to assess the suitability of soils in a defined area for the subsurface disposal of sanitary sewage as described at 310 CMR 15.106 and 15.107.

Person - Any individual, partnership, firm, association, authority, trust or group, including, but not limited to, a city, town, county, the Commonwealth and its agencies, the Nantucket Land Bank, and the federal government.

Portable or Temporary toilet facilities - A structure used for the disposal or temporary storage of human waste with or without water transport consisting of a self contained shelter with a sealed cleanable and reusable effluent vault.

Privy - A structure used for the disposal of human wastes without water transport consisting of a shelter built over an unlined pit or vault in the ground into which waste is deposited. A privy is a non-conforming system.

Regulatory Flood Zone – Coastal areas of special flood hazard (V and A FEMA flood zones) which extends from the mean low water line to the inland limit of the 100 year floodplain supporting waves greater than three feet in height (V zone) and flood depths of one to three feet (A zone). The boundary of these flood zones shall be determined by reference to the National Flood Insurance Program (currently administered by the federal Emergency Management Agency – FEMA) flood data and Flood Insurance rate Maps for the Town of Nantucket.

Reserve Area - An area of land with demonstrated capacity for subsurface sewage disposal upon which no permanent structure shall be constructed and which is intended for replacement of the existing leaching facility should it fail.

Retirement Mobile Home Park - A facility upon which two or more mobile homes, restricted to use by adults over 55 years of age (in accordance with 42 USC 3601 *et seq.*) are located on a continual or seasonal non-recreational basis, regardless of whether a charge is made therefore.

Sanitary Sewage or Sewage - Greywater and blackwater from domestic, commercial and other non-industrial sources.

Saturated Zone - Any portion of the earth below the land surface where available openings (pores, fissures, joint or solution cavity) are filled with water.

Sanitary Sewer - Any system of pipes, conduits, pumping stations, force mains and all other structures and devices used for collecting and conveying wastewater to a public or private treatment works facility.

Scum - A mass of light solids, such as hair, grease, oils and soaps, floating on the surface on the wastewater in a septic tank.

Seasonal – A time period not exceeding 180 cumulative days in any given calendar year.

Separation Distance - The distance between the components of an on-site system, structure, drainage facilities, and property boundary lines .

Septage - Material physically removed from any part of an on-site system, including, but not limited to, the solids, semi solids, scum, sludge and liquid contents of a septic tank, privy, chemical toilet, cesspool, holding tank, or other sewage waste receptacle. It does not include any material which is hazardous waste.

Septic System Additive - Any solid or liquid material or biological agent intended or used primarily for cleaning, treating, degreasing, unclogging, disinfecting, deodorizing, or otherwise effecting the performance of any component of an on-site system.

Septage Hauler - A person Licensed by an approving authority to remove septage from on site sewage desposal systems and

transport it to an approved disposal location in accordance with 310 CMR 15.500.

Septage Hauler Permit - A permit issued pursuant to the authority of M.G.L. c. 111, subsection 31 and 310CMR 15.500 entitling a person to transport septage within the Commonwealth.

Septic Tank - A watertight receptacle to receive sewage from a building sewer which is designed and constructed to permit sufficient retention of wastewater to allow for the separation of scum and sludge and the partial digestion of organic matter before discharge of the liquid portion to a soil absorption system.

Septic Tank Effluent - The liquid portion of settled sewage which is discharged from the outlet of a septic tank to distribution lines in a soil absorption system.

Sewage – Material including but not limited to solids, semi-solids, scum, sludge, and liquid waste from sanitary facilities. The term sewage does not include an material which is considered hazardous waste.

Soil Absorption System - A system of trenches, galleries, chambers, pits, field(s) or Bed(s) together with effluent distribution lines and aggregate which is installed in appropriate soils to receive effluent from a septic tank and transmit it to a soil interface for treatment in a biological mat and disposal to the underlying soils.

Soil Evaluator - A person certified by the Department pursuant to 310 CMR 15.101 as capable of determining the suitability of a specific site for the use of an on-site subsurface sewage disposal system in compliance with 310 CMR 15.000.

Soil Texture - The relative proportions of sand, silt and clay in a given soil matrix as defined by the USDA-SCS.

Studio – A building or a room or rooms that include or has direct physical access to a bathroom and/or half bath facilities. Each such room complying with the requirements for a studio shall be calculated as a bedroom.

Subsurface Drain - Any underground conduit used for the underground conveyance of surface or groundwater, including, but not limited to, stormwater culverts, curtain drains and French drains.

Surface Water - All waters other than groundwaters within the jurisdiction of the Commonwealth, including without limitation, rivers, streams, lakes, ponds, springs, reservoirs, impoundments, (except man-made lined ponds) estuaries, wetlands, coastal waters and certified vernal pools.

Surface Water Supply - Any lake, pond, reservoir, or impoundment designated as a public water supply in the Massachusetts Surface Water Quality Standards 314 CMR 4.00.

System - see on-site system.

System Inspector - A person certified by the Massachusetts Department of Environmental Protection pursuant to 310 CMR 15.340 as capable of appropriately assessing the condition of an on-site systems in accordance with 310 CMR 15.000 and under the Nantucket Board of Health Regulations 64.00 & 68.00.

Temporary –
Reference “seasonal” definition.

Tight Tank – A water tight vessel having an inlet to receive raw sewage but no outlet and which is designed and used to collect and store sewage until it is removed for disposal.

Title Five of the State Environmental Code, 310 CMR 15.000 – as amended and in effect as of March 31, 1995. December 27,1996 and as updated January 4, 2004.

Toilet Facility – Disposal apparatus used for the removal of human waste products including the room or rooms utilized to house such apparatus.

Transient Residential Facility - Hotels, motels, inns, rooming, lodging, guest houses, dormitories, and time-sharing or time-interval ownership dwelling units or dwelling, dwelling units or dwellings.

Treatment Works – Any and all devices, processes, and properties, real or personal, used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation or reuse of waterborn pollutants, including septage receiving facilities but not including any works receiving a hazardous waste from off the site of

the works for the purpose of treatment, storage or disposal. Treatment works must be permitted by Ma. Department of Environmental Protection pursuant to the authority of M.L.G. c. 21 subsections 27 through 52 and regulations thereunder.

USDA/SCS(NRCS) – The United States Department of Agriculture, Soil Conservation Service(Natural Resources Conservation Service)

USGS – The United States Geological Survey, within the United States Department of the Interior.

UPGRADE – The modification of one or more components of an on-site system or the design and construction of a new on-site system which is intended to bring a nonconforming or failed system into conformation with 310 CMR 15.000 to the maximum feasible extent. An emergency repair is not an upgrade.

Waters of the Commonwealth or waters or water bodies – All waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds springs, impoundments, (except man-made lined ponds) wetlands, estuaries, coastal waters, groundwaters, and vernal pools.

Watershed/Water Recharge Area – Any geographic area on which or under which surface and/or groundwater flows into a stream, a body of impounded surface water, (except man-made ponds) a coastal embayment or a water supply well as defined on the Horsley, Whitten & Heggemin ground water contour maps, the United States Geologic Survey maps, “Water Resources of Nantucket Island, Massachusetts Atlas HA – 615, or a more detailed map duly adopted by the Board at a Public Hearing.

Water Supply Well – Any public or private source of groundwater used for human consumption, including but not limited to, a source approved for such use by the Nantucket Board of Health or the Department in accordance with M.G.L. c. 111 subsection 122A or 310 CMR 22.00.

Wetland Resource Area –

All freshwater and coastal wetlands as defined in the Town of Nantucket Wetlands Protection Bylaw (Chapter 136) and accompany regulations, and as defined in the Massachusetts Wetland Protection Act (M.G.L. c.131 subsection 40) and 310CMR10:00 and as follows. Coastal wetlands are any bank; beach; dune; barrier beach; ocean;

bay; estuary; tidally dominated river, stream, or creek; marsh; swamp; salt meadow; flat or lowland subject to tidal action or coastal storm flowage from the ocean; bay or an estuary. Freshwater wetlands are any inland bank; bordering vegetated wetland (marsh, wet meadow, bog swamp), creek, river, stream, pond, or lake, beach, isolated land subject to flooding, isolated vegetated wetland, bordering land subject to flooding and/or certified vernal pool. Verification of the delineation of wetland resource areas falls within the jurisdiction of the Nantucket Conservation Commission.

Zone I – The protective radius required around a public drinking water drinking supply well or drinking water supply well field, as defined in Massachusetts drinking water regulations, 310 CMR 22.00 and Nantucket Board of Health drinking water regulations.

Zone II – That area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can realistically be anticipated, as defined in Massachusetts drinking water regulations, 310 CMR 22.00.

Approved: December 1, 2004

Whitey Willauer - Chairman

Michael Kopko

Michael Glowacki

Brian Chadwick

Douglas Bennett

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