

TOWN OF SANDWICH

BOARD OF HEALTH

REGULATIONS, POLICIES AND
CLARIFICATION OF POLICIES

DECEMBER 10, 2003

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REGULATIONS

ALTERNATIVE SEPTIC TECHNOLOGIES

In considering the permitting and use of various alternative septic treatment technologies in the Town of Sandwich, the Board of Health of the Town of Sandwich recognizes that there may be specific local circumstances which warrant the Board to require more stringent conditions for the installation and monitoring of these alternative systems than may be required by the Massachusetts department of Environmental Protection. As allowed under Massachusetts General Laws Chapter 111, Section 31 and as required by the revised 310 CMR Section 15.285 (2d), 15.286 (5) and 15.288 (4), the Board of Health of the Town of Sandwich hereby reserves the right to impose any additional conditions or monitoring requirements it views as necessary to ensure the safe performance of any alternative onsite septic system which the Board agrees to permit in the Town of Sandwich.

Adopted May 22, 2000

BATHROOM FACILITIES REGULATION

SECTION I – AUTHORITY

To ensure the protection of public health, it is required that municipal and school buildings provide adequate operable and accessible bathroom facilities as is required in the regulations for the Board of Examiners of Plumbers and Gas Fitters, 248 CMR, Section 2.10, Table 1, Minimum Facilities for Building Occupancy. Therefore, these regulations are adopted pursuant to Massachusetts General Laws, Chapter 111, Section 31, as reasonable health regulations designed to protect and improve the health of the residents of Sandwich.

SECTION II – REQUIREMENTS

All existing future proposed municipal and school buildings are required to provide and maintain operable and accessible existing and/or proposed bathroom facilities. Existing bathroom facilities are to be kept operable and accessible to the population, which said facilities were designed to accommodate.

Adopted: November 16, 1998

RULES AND REGULATIONS FOR BODY ART ESTABLISHMENTS AND PRACTITIONERS

1. Purpose

Whereas body art is becoming prevalent and popular throughout the Commonwealth; and whereas knowledge and practice of universal precautions, sanitation, personal hygiene, sterilization and aftercare requirements on the part of the practitioner should be demonstrated to prevent the transmission of disease or injury to the client and/or practitioner; now, therefore the Board of Health of the Town of Sandwich passes these rules and regulations for the practice of body art in the Town of Sandwich as part of our mission to protect the health, safety and welfare of the public.

2. Authority

These regulations are promulgated under the authority granted to the Board of Health under Massachusetts General Law 111, section 31.

3. Definitions

Aftercare means written instructions given to the client, specific to the body art procedure(s) rendered, about caring for the body art and surrounding area, including information about when to seek medical treatment, if necessary.

Applicant means any person who applies to the Board of Health for either a body art establishment permit or practitioner permit.

Autoclave means an apparatus for sterilization utilizing steam pressure at a specific temperature over a period of time.

Autoclaving means a process which results in the destruction of all forms of microbial life, including highly resistant spores, by the use of an autoclave for a minimum of thirty minutes at 20 pounds of pressure (PSI) at a temperature of 270 degrees Fahrenheit.

Bloodborne Pathogens Standard means OSHA Guidelines contained in 29 CFR 1910.1030, entitled "Occupational Exposure to Bloodborne Pathogens."

Board of Health or Board means the Board of Health that has jurisdiction in the community in which a body art establishment is located including the Board or officer having like powers and duties in towns where there is no Board of Health.

Body Art means the practice of physical body adornment by permitted establishments and practitioners using, but not limited to, the following techniques: body piercing, tattooing, cosmetic tattooing, branding, and scarification. This definition does not include practices that are considered medical procedures by the Board of Registration in Medicine, such as implants under the skin, which procedures are prohibited.

Body Art Establishment or Establishment means a location, place, or business that has been granted a permit by the Board, whether public or private, where the practices of body art are performed, whether or not for profit.

Body Art Practitioner or Practitioner means a specifically identified individual who has been granted a permit by the Board to perform body art in an establishment that has been granted a permit by the Board.

(Body Art Regulations – Cont.)

Body Piercing means puncturing or penetrating the skin of a client with presterilized single-use needles and the insertion of presterilized jewelry or other adornment into the opening. This definition excludes piercing of the earlobe with a presterilized single-use stud-and-clasp system manufactured exclusively for ear-piercing.

Braiding means the cutting of strips of skin of a person, which strips are then to be intertwined with one another and placed onto such person so as to cause or allow the incised and interwoven strips of skin to heal in such intertwined condition.

Branding means inducing a pattern of scar tissue by use of a heated material (usually metal) to the skin, making a serious burn, which eventually becomes a scar.

Cleaning area means the area in a Body Art Establishment used in the sterilization, sanitation or other cleaning of instruments or other equipment used for the practice of body art.

Client means a member of the public who requests a body art procedure at a body art establishment.

Contaminated Waste means waste as defined in 105 CMR 480.000: Storage and Disposal of Infectious or Physically Dangerous Medical or Biological Waste, State Sanitary Code, Chapter VIII and/or 29 Code of Federal Regulation part 1910.1030. This includes any liquid or semi-liquid blood or other potentially infectious material; contaminated items that would release blood or other potentially infectious material in a liquid or semi-liquid state if compressed; items on which there is dried blood or other potentially infectious material and which are capable of releasing these materials during handling; sharps and any wastes containing blood or other potentially infectious materials.

Cosmetic Tattooing, also known as permanent cosmetics, micro pigment implantation or dermal pigmentation, means the implantation of permanent pigment around the eyes, lips and cheeks of the face and hair imitation.

Disinfectant means a product registered as a disinfectant by the U.S. Environmental Protection Agency (EPA).

Disinfection means the destruction of disease-causing microorganisms on inanimate objects or surfaces, thereby rendering these objects safe for use or handling.

Ear piercing means the puncturing of the lobe of the ear with a pre-sterilized single-use stud-and-clasp ear-piercing system following the manufacturer's instructions.

Equipment means all machinery, including fixtures, containers, vessels, tools, devices, implements, furniture, display and storage areas, sinks, and all other apparatus and appurtenances used in connection with the operation of a body art establishment.

Exposure means an event whereby there is an eye, mouth or other mucous membrane, non-intact skin or parental contact with the blood or bodily fluids of another person or contact of an eye, mouth or other mucous membrane, non-intact skin or parenteral contact with other potentially infectious matter.

(Body Art Regulations – Cont.)

Hand Sink means a lavatory equipped with hot and cold running water under pressure, used solely for washing hands, arms, or other portions of the body.

Hot water means water that attains and maintains a temperature 110°-130°F.

Instruments Used for Body Art means hand pieces, needles, needle bars, and other instruments that may come in contact with a client's body or may be exposed to bodily fluids during any body art procedure.

Invasive means entry into the client's body either by incision or insertion of any instruments into or through the skin or mucosa, or by any other means intended to puncture, break, or otherwise compromise the skin or mucosa.

Jewelry means any ornament inserted into a newly pierced area, which must be made of surgical implant-grade stainless steel; solid 14k or 18k white or yellow gold, niobium, titanium, or platinum; or a dense, low-porosity plastic, which is free of nicks, scratches, or irregular surfaces and has been properly sterilized prior to use.

Light colored means a light reflectance value of 70 percent or greater.

Minor means any person under the age of eighteen (18) years.

Mobile Body Art Establishment means any trailer, truck, car, van, camper or other motorized or non-motorized vehicle, a shed, tent, movable structure, bar, home or other facility wherein, or concert, fair, party or other event whereat one desires to or actually does conduct body art procedures.

Operator means any person who individually, or jointly or severally with others, owns, or controls an establishment, but is not a body art practitioner.

Permit means Board approval in writing to either (1) operate a body art establishment or (2) operate as a body art practitioner within a body art establishment. Board approval shall be granted solely for the practice of body art pursuant to these regulations. Said permit is exclusive of the establishment's compliance with other licensing or permitting requirements that may exist within the Board's jurisdiction.

Person means an individual, any form of business or social organization or any other non-governmental legal entity, including but not limited to corporations, partnerships, limited-liability companies, associations, trusts or unincorporated organizations.

Physician means an individual licensed as a qualified physician by the Board of Registration in Medicine pursuant to M.G.L. c. 112 § 2.

Procedure surface means any surface of an inanimate object that contacts the client's unclothed body during a body art procedure, skin preparation of the area adjacent to and including the body art procedure, or any associated work area which may require sanitizing.

Sanitary means clean and free of agents of infection or disease.

(Body Art Regulations – Cont.)

Sanitize means the application of a U.S. EPA registered sanitizer on a cleaned surface in accordance with the label instructions.

Scarification means altering skin texture by cutting the skin and controlling the body's healing process in order to produce wounds, which result in permanently raised wheals or bumps known as keloids.

Sharps means any object, sterile or contaminated, that may intentionally or accidentally cut or penetrate the skin or mucosa, including, but not limited to, needle devices, lancets, scalpel blades, razor blades, and broken glass.

Sharps Container means a puncture-resistant, leak-proof container that can be closed for handling, storage, transportation, and disposal and that is labeled with the International Biohazard Symbol.

Single Use Items means products or items that are intended for one-time, one-person use and are disposed of after use on each client, including, but not limited to, cotton swabs or balls, tissues or paper products, paper or plastic cups, gauze and sanitary coverings, razors, piercing needles, scalpel blades, stencils, ink cups, and protective gloves.

Sterilize means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Tattoo means the indelible mark, figure or decorative design introduced by insertion of dyes or pigments into or under the subcutaneous portion of the skin.

Tattooing means any method of placing ink or other pigment into or under the skin or mucosa by the aid of needles or any other instrument used to puncture the skin, resulting in permanent coloration of the skin or mucosa. This term includes all forms of cosmetic tattooing.

Temporary Body Art Establishment means the same as Mobile Body Art Establishment.

Three dimensional "3D" Body Art or Beading or Implantation means the form of body art consisting of or requiring the placement, injection or insertion of an object, device or other thing made of matters such as steel, titanium, rubber, latex, plastic, glass or other inert materials, beneath the surface of the skin of a person. This term does not include Body Piercing.

Ultrasonic Cleaning Unit means a unit approved by the Board, physically large enough to fully submerge instruments in liquid, which removes all foreign matter from the instruments by means of high frequency oscillations transmitted through the contained liquid.

(Body Art Regulations – Cont.)

Universal Precautions means a set of guidelines and controls, published by the Centers for Disease Control and Prevention (CDC), as "Guidelines for Prevention of Transmission of Human Immunodeficiency Virus (HIV) and Hepatitis B Virus (HBV) to Health-Care and Public-Safety Workers" in Morbidity and Mortality Weekly Report) (MMWR), June 23, 1989, Vo1.38 No. S-6, and as "Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures" in MMWR, July 12,1991, Vo1.40, No. RR-8. This method of infection control requires the employer and the employee to assume that all human blood and specified human body fluids are infectious for HIV, HBV, and other blood pathogens. Precautions include hand washing; gloving; personal protective equipment; injury prevention; and proper handling and disposal of needles, other sharp instruments, and blood and body fluid-contaminated products.

4. Exemptions

- (A) Physicians licensed in accordance with M.G.L. c. 112 § 2 who perform body art procedures as part of patient treatment are exempt from these regulations.
- (B) Individuals who pierce only the lobe of the ear with a presterilized single-use stud-and-clasp ear-piercing system are exempt from these regulations.

5. Restrictions

- (A) No tattooing, piercing of genitalia, branding or scarification shall be performed on a person under the age of 18.
- (B) Body piercing, other than piercing the genitalia, may be performed on a person under the age of 18 provided that the person is accompanied by a properly identified parent, legal custodial parent or legal guardian who has signed a form consenting to such procedure. Properly identified shall mean a valid photo identification of the adult and a birth certificate of the minor.
- (C) No body art shall be performed upon an animal.
- (D) The following body piercings are hereby prohibited: piercing of the uvula; piercing of the tracheal area; piercing of the neck; piercing of the ankle; piercing between the ribs or vertebrae; piercing of the web area of the hand or foot; piercing of the lingual frenulum (tongue web); piercing of the clitoris; any form of chest or deep muscle piercings, excluding the nipple; piercing of the anus; piercing of an eyelid, whether top or bottom; piercing of the gums; piercing or skewering of a testicle; so called "deep" piercing of the penis – meaning piercing through the shaft of the penis, or "trans-penis" piercing in any area from the corona glandis to the pubic bone; so called "deep" piercing of the scrotum – meaning piercing through the scrotum, or "transcrotal" piercing; so called "deep" piercing of the vagina.
- (E) The following practices hereby prohibited unless performed by a medical doctor licensed by the Commonwealth of Massachusetts: tongue splitting; braiding; three dimensional/beading/implementation, tooth filing/fracturing/removal/tattooing; cartilage modification; amputation; genital modification; introduction of saline or other liquids.

(Body Art Regulations – Cont.)

6. Operation of Body Art Establishments

Unless otherwise ordered or approved by the Board, each body art establishment shall be constructed, operated and maintained to meet the following minimum requirements:

(A) Physical Plant

- (1) Walls, floors, ceilings, and procedure surfaces shall be smooth, durable, free of open holes or cracks, light-colored, washable, and in good repair. Walls, floors, and ceilings shall be maintained in a clean condition. All procedure surfaces, including client chairs/benches, shall be of such construction as to be easily cleaned and sanitized after each client.
- (2) Solid partitions or walls extending from floor to ceiling shall separate the establishment's space from any other room used for human habitation, any food establishment or room where food is prepared, any hair salon, any retail sales, or any other such activity that may cause potential contamination of work surfaces.
- (3) The establishment shall take all measures necessary to ensure against the presence or breeding of insects, vermin, and rodents within the establishment.
- (4) Each operator area shall have a minimum of 45 square feet of floor space for each practitioner. Each establishment shall have an area that may be screened from public view for clients requesting privacy. Multiple body art stations shall be separated by a dividers or partition at a minimum.
- (5) The establishment shall be well ventilated and provided with an artificial light source equivalent to at least 20 foot candles 3 feet off the floor, except that at least 100 foot candles shall be provided at the level where the body art procedure is being performed, ~~and~~ where instruments and sharps are assembled and all cleaning areas.
- (6) All electrical outlets in operator areas and cleaning areas shall be equipped with approved ground fault (GFCI) protected receptacles.
- (7) A separate, readily accessible hand sink with hot and cold running water under pressure, preferably equipped with wrist- or foot-operated controls and supplied with liquid soap, and disposable paper towels stored in fixed dispensers shall be readily accessible within the establishment. Each operator area shall have a hand sink.
- (8) There shall be a sharps container in each operator area and each cleaning area.

(Body Art Regulations – Cont.)

- (9) There shall be a minimum of one toilet room containing a toilet and sink. The toilet room shall be provided with toilet paper, liquid hand soap and paper towels stored in a fixed dispenser. A body art establishment permanently located within a retail shopping center, or similar setting housing multiple operations within one enclosed structure having shared entrance and exit points, shall not be required to provide a separate toilet room within such body art establishment if Board-approved toilet facilities are located in the retail shopping center within 300 feet of the body art establishment so as to be readily accessible to any client or practitioner.
- (10) The public water supply entering a body art establishment shall be protected by a testable, reduced pressure back flow preventor installed in accordance with 142 Code of Massachusetts Regulation 248, as amended from time to time.
- (11) At least one covered, foot operated waste receptacle shall be provided in each operator area and each toilet room. Receptacles in the operator area shall be emptied daily. Solid waste shall be stored in covered, leakproof, rodent-resistant containers and shall be removed from the premises at least weekly.
- (12) At least one janitorial sink shall be provided in each body art establishment for use in cleaning the establishment and proper disposal of non-contaminated liquid wastes in accordance with all applicable Federal, state and local laws. Said sink shall be of adequate size equipped with hot and cold running water under pressure and permit the cleaning of the establishment and any equipment used for cleaning.
- (13) All instruments and supplies shall be stored in clean, dry, and covered containers. Containers shall be kept in a secure area specifically dedicated to the storage of all instruments and supplies.
- (14) The establishment shall have a cleaning area. Every cleaning area shall have an area for the placement of an autoclave or other sterilization unit located or positioned a minimum of 36 inches from the required ultrasonic cleaning unit.
- (15) The establishment shall have a customer waiting area, exclusive and separate from any workstation, instrument storage area, cleaning area or any other area in the body art establishment used for body art activity.
- (16) No animals of any kind shall be allowed in a body art establishment except service animals used by persons with disabilities (e.g., Seeing Eye dogs). Fish aquariums shall be allowed in waiting rooms and nonprocedural areas.
- (17) Smoking, eating, or drinking is prohibited in the area where body art is performed, with the exception of non-alcoholic fluids being offered to a client during or after a body art procedure.

(Body Art Regulations – Cont.)

(B) Requirements for Single Use Items Including Inks, Dyes and Pigments

- (1) Single-use items shall not be used on more than one client for any reason. After use, all single-use sharps shall be immediately disposed of in approved sharps containers pursuant to 105 CMR 480.000.
- (2) All products applied to the skin, such as but not limited to body art stencils, applicators, gauze and razors, shall be single use and disposable.
- (3) Hollow bore needles or needles with cannula shall not be reused.
- (4) All inks, dyes, pigments, solid core needles, and equipment shall be specifically manufactured for performing body art procedures and shall be used according to manufacturer's instructions.
- (5) Inks, dyes or pigments may be mixed and may only be diluted with water from an approved potable source. Immediately before a tattoo is applied, the quantity of the dye to be used shall be transferred from the dye bottle and placed into single-use paper cups or plastic cups. Upon completion of the tattoo, these single-use cups or caps and their contents shall be discarded.

(C) Sanitation and Sterilization Measures and Procedures

- (1) All non-disposable instruments used for body art, including all reusable solid core needles, pins and stylets, shall be cleaned thoroughly after each use by scrubbing with an appropriate soap or disinfectant solution and hot water, (to remove blood and tissue residue), and shall be placed in an ultrasonic unit sold for cleaning purposes under approval of the U.S. Food and Drug Administration and operated in accordance with manufacturer's instructions.
- (2) After being cleaned, all non-disposable instruments used for body art shall be packed individually in sterilizer packs and subsequently sterilized in a steam autoclave sold for medical sterilization purposes under approval of the U.S. Food and Drug Administration. All sterilizer packs shall contain either a sterilizer indicator or internal temperature indicator. Sterilizer packs must be dated with an expiration date not to exceed six (6) months.
- (3) The autoclave shall be used, cleaned, and maintained according to manufacturer's instruction. A copy of the manufacturer's recommended procedures for the operation of the autoclave must be available for inspection by the Board. Autoclaves shall be located away from workstations or areas frequented by the public.
- (4) Each holder of a permit to operate a body art establishment shall demonstrate that the autoclave used is capable of attaining sterilization by monthly spore destruction tests. These tests shall be verified through an independent laboratory. The permit shall not be issued or renewed until documentation of the autoclave's ability to destroy spores is received by the Board. These test records shall be retained by the operator for a period of three (3) years and made available to the Board upon request.

(Body Art Regulations – Cont.)

- (5) All instruments used for body art procedures shall remain stored in sterile packages until just prior to the performance of a body art procedure. After sterilization, the instruments used in body art procedures shall be stored in a dry, clean cabinet or other tightly covered container reserved for the storage of such instruments.
- (6) Sterile instruments may not be used if the package has been breached or after the expiration date without first repackaging and resterilizing.
- (7) If the body art establishment uses only single-use, disposable instruments and products, and uses sterile supplies, an autoclave shall not be required.
- (8) When assembling instruments used for body art procedures, the operator shall wear disposable medical gloves and use medically recognized sterile techniques to ensure that the instruments and gloves are not contaminated.
- (9) Reusable cloth items shall be mechanically washed with detergent and mechanically dried after each use. The cloth items shall be stored in a dry, clean environment until used. Should such items become contaminated directly or indirectly with bodily fluids, the items shall be washed in accordance with standards applicable to hospitals and medical care facilities, at a temperature of 160°F or a temperature of 120°F with the use of chlorine disinfectant.

(D) Posting Requirements

The following shall be prominently displayed:

- (1) A Disclosure Statement, a model of which shall be available from the Board. A Disclosure Statement shall also be given to each client, advising him/her of the risks and possible consequences of body art procedures.
- (2) The name, address and phone number of the Sandwich Board of Health.
- (3) An Emergency Plan, including:
 - (a) a plan for the purpose of contacting police, fire or emergency medical services in the event of an emergency;
 - (b) a telephone in good working order shall be easily available and accessible to all employees and clients during all hours of operation; and
 - (c) a sign at or adjacent to the telephone indicating the correct emergency telephone numbers.
- (4) An occupancy and use permit as issued by the local building official.
- (5) A current establishment permit.
- (6) Each practitioner's permit.

(Body Art Regulations – Cont.)

(E) Establishment Recordkeeping

The establishment shall maintain the following records in a secure place for a minimum of three (3) years, and such records shall be made available to the Board upon request:

- (1) Establishment information, which shall include:
 - (a) establishment name;
 - (b) hours of operation;
 - (c) owner's name and address;
 - (d) a complete description of all body art procedures performed; an inventory of all instruments and body jewelry, all sharps, and all inks used for any and all body art procedures, including names of manufacturers and serial or lot numbers, if applicable. Invoices or packing slips shall satisfy this requirement;
 - (e) Material Safety Data Sheet, when available, for each ink and dye used by the establishment; and
 - (f) copies of waste hauler manifests
 - (g) copies of commercial biological monitoring tests
 - (h) Exposure Incident Report (kept permanently)
 - (j) a copy of these regulations.

- (2) Employee information, which shall include:
 - (a) full legal names and exact duties;
 - (b) date of birth;
 - (c) home address;
 - (d) home /work phone numbers;
 - (e) identification photograph;
 - (f) dates of employment;
 - (g) Hepatitis B vaccination status or declination notification; and
 - (h) training records

- (3) Client Information, which shall include:
 - (a) name;
 - (b) age and valid photo identification
 - (c) address of the client;
 - (d) date of the procedure;
 - (e) name of the practitioner who performed the procedure(s);
 - (f) description of procedure(s) performed and the location on the body;
 - (g) a signed consent form as specified by 7(D)(2); and,
 - (h) if the client is a person under the age of 18, proof of parental or guardian identification, presence and consent including a copy of the photographic identification of the parent or guardian.

Client information shall be kept confidential at all times.

(Body Art Regulations – Cont.)

(4) Exposure Control Plan

Each establishment shall create, update, and comply with an Exposure Control Plan. The Plan shall be submitted to the Board for review so as to meet all of the requirements of OSHA regulations, to include, but not limited to, 29 Code of Federal Regulation 1910.1030 OSHA Bloodborne Pathogens Standards et seq, as amended from time to time. A copy of the Plan shall be maintained at the Body Art Establishment at all times and shall be made available to the Board upon request.

- (F) No person shall establish or operate a Mobile or Temporary Body Art Establishment.

7. Standards of Practice

Practitioners are required to comply with the following minimum health standards:

- (A) A practitioner shall perform all body art procedures in accordance with Universal Precautions set forth by the U.S Centers for Disease Control and Prevention.
- (B) A practitioner shall refuse service to any person who may be under the influence of alcohol or drugs.
- (C) Practitioners who use ear-piercing systems must conform to the manufacturers directions for use, and to applicable U.S. Food and Drug Administration requirements. No practitioner shall use an ear piercing system on any part of the client's body other than the lobe of the ear.
- (D) Health History and Client Informed Consent. Prior to performing a body art procedure on a client, the practitioner shall:
- (1) Inform the client, verbally and in writing that the following health conditions may increase health risks associated with receiving a body art procedure:
- (a) history of diabetes;
 - (b) history of hemophilia (bleeding);
 - (c) history of skin diseases, skin lesions, or skin sensitivities to soaps, disinfectants etc.;
 - (d) history of allergies or adverse reactions to pigments, dyes, or other sensitivities;
 - (e) history of epilepsy, seizures, fainting, or narcolepsy;
 - (f) use of medications such as anticoagulants, which thin the blood and/or interfere with blood clotting; and
 - (g) any other conditions such as hepatitis or HIV.
- (2) Require that the client sign a form confirming that the above information was provided, that the client does not have a condition that prevents them from receiving body art, that the client consents to the performance of the body art procedure and that the client has been given the aftercare instructions as required by section 7(K).

(Body Art Regulations – Cont.)

- (E) A practitioner shall maintain the highest degree of personal cleanliness, conform to best standard hygienic practices, and wear clean clothes when performing body art procedures. Before performing body art procedures, the practitioner must thoroughly wash their hands in hot running water with liquid soap, then rinse hands and dry with disposable paper towels. This shall be done as often as necessary to remove contaminants.
- (F) In performing body art procedures, a practitioner shall wear disposable single-use gloves. Gloves shall be changed if they become pierced, torn, or otherwise contaminated by contact with any unclean surfaces or objects or by contact with a third person. The gloves shall be discarded, at a minimum, after the completion of each procedure on an individual client, and hands shall be washed in accordance with section (E) before the next set of gloves is put on. Under no circumstances shall a single pair of gloves be used on more than one person. The use of disposable single-use gloves does not preclude or substitute for handwashing procedures as part of a good personal hygiene program.
- (G) The skin of the practitioner shall be free of rash or infection. No practitioner affected with boils, infected wounds, open sores, abrasions, weeping dermatological lesions or acute respiratory infection shall work in any area of a body art establishment in any capacity in which there is a likelihood that that person could contaminate body art equipment, supplies, or working surfaces with body substances or pathogenic organisms.
- (H) Any item or instrument used for body art that is contaminated during the procedure shall be discarded and replaced immediately with a new disposable item or a new sterilized instrument or item before the procedure resumes.
- (I) Preparation and care of a client's skin area must comply with the following:
 - (1) Any skin or mucosa surface to receive a body art procedure shall be free of rash or any visible infection.
 - (2) Before a body art procedure is performed, the immediate skin area and the areas of skin surrounding where body art procedure is to be placed shall be washed with soap and water or an approved surgical skin preparation. If shaving is necessary, single-use disposable razors or safety razors with single-service blades shall be used. Blades shall be discarded after each use, and reusable holders shall be cleaned and autoclaved after use. Following shaving, the skin and surrounding area shall be washed with soap and water. The washing pad shall be discarded after a single use.
 - (3) In the event of bleeding, all products used to stop the bleeding or to absorb blood shall be single use, and discarded immediately after use in appropriate covered containers, and disposed of in accordance with 105 CMR 480.000.

(Body Art Regulations – Cont.)

- (J) Petroleum jellies, soaps, and other products used in the application of stencils shall be dispensed and applied on the area to receive a body art procedure with sterile gauze or other sterile applicator to prevent contamination of the original container and its contents. The applicator or gauze shall be used once and then discarded.
- (K) The practitioner shall provide each client with verbal and written instructions on the aftercare of the body art site. The written instructions shall advise the client:
 - (1) on the proper cleansing of the area which received the body art;
 - (2) to consult a health care provider for:
 - (a) unexpected redness, tenderness or swelling at the site of the body art procedure;
 - (b) any rash;
 - (c) unexpected drainage at or from the site of the body art procedure; or
 - (d) a fever within 24 hours of the body art procedure; and
 - (3) of the address, and phone number of the establishment.

A copy shall be provided to the client. A model set of aftercare instructions shall be made available by the Board.

- (L) Contaminated waste shall be stored, treated and disposed in accordance with 105 CMR 480.000: Storage and Disposal of Infectious or Physically Dangerous Medical or Biological Waster, State Sanitary Code, Chapter VIII.

8. Exposure Incident Report

An Exposure Incident Report shall be completed by the close of the business day during which an exposure has or might have taken place by the involved or knowledgeable body art practitioner for every exposure incident occurring in the conduct of any body art activity.

Each Exposure Incident Report shall contain:

- (1) A copy of the application and consent form for body art activity completed by any client or minor client involved in the exposure incident;
- (2) A full description of the exposure incident, including the portion of the body involved therein;
- (3) Instrument(s) or other equipment implicated;
- (4) A copy of body art practitioner license of the involved body art practitioner;
- (5) Date and time of exposure;
- (6) A copy of any medical history released to the body art establishment or body art practitioner; and
- (7) Information regarding any recommendation to refer to a physician or waiver to consult a physician by persons involved.

(Body Art Regulations – Cont.)

9. Injury and/or Complication Reports

A written report of any injury, infection complication or disease as a result of a body art procedure, or complaint of injury, infection complication or disease, shall be forwarded by the operator to the Board which issued the permit, with a copy to the injured client within five working days of its occurrence or knowledge thereof. The report shall include:

- (A) the name of the affected client;
- (B) the name and location of the body art establishment involved;
- (C) the nature of the injury, infection complication or disease;
- (D) the name and address of the affected client's health care provider, if any;
- (E) any other information considered relevant to the situation.

10. Complaints

- (A) The Board shall investigate complaints received about an establishment or practitioner's practices or acts, which may violate any provision of the Board's regulations.
- (B) If the Board finds that an investigation is not required because the alleged act or practice is not in violation of the Board's regulations, then the Board shall notify the complainant of this finding and the reasons on which it is based.
- (C) If the Board finds that an investigation is required, because the alleged act or practice may be in violation of the Board's regulations, the Board shall investigate and if a finding is made that the act or practice is in violation of the Board's regulations, then the Board shall apply whatever enforcement action is appropriate to remedy the situation and shall notify the complainant of its action in this manner.

11. Application for Body Art Establishment Permit

- (A) No person may operate a body art establishment except with a valid permit from the Board.
- (B) Applications for a permit shall be made on forms prescribed by and available from the Board. An applicant shall submit all information required by the form and accompanying instructions. The term "application" as used herein shall include the original and renewal applications.
- (C) An establishment permit shall be valid from the date of issuance and renewable by January 1st of each year unless revoked by the Board.

(Body Art Regulations – Cont.)

- (D) The Board shall require that the applicant provide, at a minimum, the following information in order to be issued an establishment permit:
 - (1) Name, address, and telephone number of:
 - (a) the body art establishment;
 - (b) the operator of the establishment; and
 - (c) the body art practitioner(s) working at the establishment;
 - (2) The manufacturer, model number, model year, and serial number, where applicable, of the autoclave used in the establishment;
 - (3) A signed and dated acknowledgement that the applicant has received, read and understood the requirements of the Board's body art regulations;
 - (3) A drawing of the floor plan of the proposed establishment to scale for a plan review by the Board, as part of the permit application process; and,
 - (4) Exposure Report Plan
 - (5) Such additional information as the Board may reasonably require.
- (E) The annual fee for the Body Art Establishment Permit shall be \$500.00 for each establishment per year and \$100.00 per practitioner per year. The Board reserves the right to review the fees annually.
- (F) A permit for a body art establishment shall not be transferable from one place or person to another.

12. Application for Body Art Practitioner Permit

- (A) No person shall practice body art or perform any body art procedure without first obtaining a practitioner permit from the Board. The Board shall set a reasonable fee for such permits.
- (B) A practitioner shall be a minimum of 18 years of age.
- (C) A practitioner permit shall be valid from the date of issuance and shall expire no later than one year from the date of issuance unless revoked sooner by the Board.
- (D) Application for a practitioner permit shall include:
 - (1) name;
 - (2) date of birth;
 - (3) residence address;
 - (4) mailing address;
 - (5) phone number;
 - (6) place(s) of employment as a practitioner; and
 - (7) training and/or experience as set out in (E) below.

(Body Art Regulations – Cont.)

(E) Practitioner Training and Experience

- (1) In reviewing an application for a practitioner permit, the Board may consider experience, training and/or certification acquired in other states that regulate body art.
- (2) Training for all practitioners shall be approved by the Board and, at a minimum, shall include the following:
 - (a) bloodborne pathogen training program (or equivalent) which includes infectious disease control; waste disposal; handwashing techniques; sterilization equipment operation and methods; and sanitization, disinfection and sterilization methods and techniques; and
 - (b) Current certification in First Aid and cardiopulmonary resuscitation (CPR).

Examples of courses approved by the Board include "Preventing Disease Transmission" (American Red Cross) and "Bloodborne Pathogen Training" (U.S. OSHA). Training/courses provided by professional body art organizations or associations or by equipment manufacturers may also be submitted to the Board for approval.

- (3) The applicant for a body piercing practitioner permit shall provide documentation, acceptable to the Board, that s/he completed a course on anatomy and physiology with a grade of C or better at a college accredited by the New England Association of Schools and Colleges, or comparable accrediting entity. This course must include instruction on the system of the integumentary system (skin).
 - (4) The applicant for a tattoo, branding or scarification practitioner permit shall provide documentation, acceptable to the Board, that s/he completed a course on anatomy and physiology with a grade of C or better at a college accredited by the New England Association of Schools and Colleges, or comparable accrediting entity. This course must include instruction on the system of the integumentary system (skin). Such other course or program as the Board shall deem appropriate and acceptable may be substituted for the anatomy course.
 - (5) The applicant for all practitioners shall submit evidence satisfactory to the Board of at least two years actual experience in the practice of performing body art activities of the kind for which the applicant seeks a body art practitioner permit to perform, whether such experience was obtained within or outside of the Commonwealth.
- (F) A practitioner's permit shall be conditioned upon continued compliance with all applicable provisions of these rules and regulations.

(Body Art Regulations – Cont.)

13. Grounds for Suspension, Denial, Revocation, or Refusal to Renew Permit

- (A) The Board may suspend a permit, deny a permit, revoke a permit or refuse to renew a permit on the following grounds, each of which, in and of itself, shall constitute full and adequate grounds for suspension, denial, revocation or refusal to renew:
- (1) any actions which would indicate that the health or safety of the public would be at risk;
 - (2) fraud, deceit or misrepresentation in obtaining a permit, or its renewal;
 - (3) criminal conduct which the Board determines to be of such a nature as to render the establishment, practitioner or applicant unfit to practice body art as evidenced by criminal proceedings resulting in a conviction, guilty plea, or plea of nolo contendere or an admission of sufficient facts;
 - (4) any present or past violation of the Board's regulations governing the practice of body art;
 - (5) practicing body art while the ability to practice is impaired by alcohol, drugs, physical disability or mental instability;
 - (6) being habitually drunk or being dependent on, or a habitual user of narcotics, barbiturates, amphetamines, hallucinogens, or other drugs having similar effects;
 - (7) knowingly permitting, aiding or abetting an unauthorized person to perform activities requiring a permit;
 - (8) continuing to practice while his/her permit is lapsed, suspended, or revoked; and
 - (9) having been disciplined in another jurisdiction in any way by the proper permitting authority for reasons substantially the same as those set forth in the Board's regulations.
 - (10) other just and sufficient cause which the Board may determine would render the establishment, practitioner or applicant unfit to practice body art;
- (B) The Board shall notify an applicant, establishment or practitioner in writing of any violation of the Board's regulations, for which the Board intends to deny, revoke, or refuse to renew a permit. The applicant, establishment or practitioner shall have seven (7) days after receipt of such written notice in which to comply with the Board's regulations. The Board may deny, revoke or refuse to renew a permit, if the applicant, establishment or practitioner fails to comply after said seven (7) days subject to the procedure outlined in Section 15.
- (C) Applicants denied a permit may reapply at any time after denial.

(Body Art Regulations – Cont.)

14. Grounds for Suspension of Permit

The Board may summarily suspend a permit pending a final hearing on the merits on the question of revocation if, based on the evidence before it, the Board determines that an establishment and/or a practitioner is an immediate and serious threat to the public health, safety or welfare. The suspension of a permit shall take effect immediately upon written notice of such suspension by the Board.

15. Procedure for Hearings

The owner of the establishment or practitioner shall be given written notice of the Board's intent to hold a hearing for the purpose of suspension, revocation, denial or refusal to renew a permit. This written notice shall be served through a certified letter sent return receipt requested or by constable. The notice shall include the date, time and place of the hearing and the owner of the establishment or practitioner's right to be heard. The Board shall hold the hearing no later than 21 days from the date the written notice is received.

In the case of a suspension of a permit as noted in Section 13, a hearing shall be scheduled no later than 21 days from the date of the suspension.

16. Severability

If any provision contained in the model regulations is deemed invalid for any reason, it shall be severed and shall not affect the validity of the remaining provisions.

17. Fine for Violation

The fine for a violation of any provision of these Rules and Regulations shall be \$100.00 per offense. Each day that a violation continues shall be deemed to be a separate offense.

18. Non-criminal Disposition

In accordance with MGL chapter 40, section 21D and [*the local enabling legislation*] whoever violates any provision of these Rules and Regulations may be penalized by non-criminal disposition.

19. Effective Date

These rules and regulations shall be effective as of May 22, 2001.
Adopted May 21, 2001.

BURIAL OF DECEASED PERSONS REGULATION

In accordance with the provisions of Chapter 114, Section 37, of the Massachusetts General Laws, the Board of Health of Sandwich enacted the following regulations in regard to the burial of deceased persons in any cemetery or burial place within the Town of Sandwich on January 5, 1982.

REGULATION – 1

The minimum acceptable excavation for the placement of a burial vault shall be three feet in width, eight feet in length and of sufficient depth so as to provide a minimum of two feet of cover material over the vault.

REGULATION – 2

Backfilling of a grave after placement of a vault shall be done in such a manner; by proper tamping of the soil, so as to minimize settlement.

REGULATION – 3

As provided in the provisions of Chapter 114, Section 42 as amended shall be in effect. Whoever uses as a means of passage from one point to another, not being thereupon at the time for any other purpose, the premises of a cemetery or burial place, in any other parts thereof than the defined ways, paths and walks, shall be punished by a fine of not more than twenty dollars.

REGULATION – 4

Chapter 114, Section 42A, Visitation Hours – No cemetery exempted from taxation under the provisions of Section 5 of Chapter 59 shall be closed for visitations between the hours of eight o'clock ante meridian and sunset, except during the months of June, July, August and September when such cemeteries shall remain open until the hour of seven o'clock post meridian; provided, however, that the provisions of this section shall not apply on Saturdays if the cemetery is owned or used exclusively by a religious denomination which observes the Sabbath on Saturday. It shall be deemed to be a violation of this section if entrance to or exit from any such cemetery by motor vehicles is prevented during said hours, if said cemetery has accessible roads for motor vehicles; provided, however that access by motor vehicles may be prevented on the second Sunday in May, the last Monday in May, and on Easter Sunday. Whoever willfully violates this section shall be punished by a fine of not more than one hundred dollars.

The above regulations shall be administered for the Town of Sandwich by the Selectmen of the Town of Sandwich, and by their legally appointed agent and by the administrators of privately owned cemeteries or burial grounds.

COASTAL: BEACHES, DUNES, BANKS, AND BARRIER BEACH REGULATION

Notice is hereby given that the following regulation has been adopted by the Town of Sandwich Board of Health, under the provisions of Massachusetts General Law, Chapter 111, Section 31 and Section 127A, at its meeting on March 24, 1986.

Having determined that coastal: beaches, dunes, banks, and barrier beach systems, are highly dynamic areas subject to ongoing erosion, overwash process, and a highly responsive groundwater table, be it enacted that no newly constructed Title V septic system shall be permitted/installed except to repair a system for an existing dwelling, (The term, "existing dwelling" shall mean a dwelling that was in existence within the two-year period prior to receipt by the Board of Health of an application for permission to repair a septic system located on the same building lot as the subject dwelling and that was used to serve said dwelling.) ** nor shall existing system be expanded to accommodate an increase in flow (additional bedrooms) in any of the following areas:

* Coastal Beaches, to include any 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. Coastal beaches extend from the mean low water line landward to the dune line, coastal bank line or the seaward edge of existing man-made structures, when these structures replace one of the above lines, which ever is closest to the ocean.

Coastal Dunes, to include any natural hill, mound or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal dune also means sediment deposited by artificial means and serving the purpose of storm damage prevention or flood control.

Barrier Beaches, to include any low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is separated from the mainland by a narrow body of fresh, brackish or saline water or a marsh system. A barrier beach may be joined to the mainland at one or both ends.

Coastal Banks, composed of unconsolidated sediment, to include the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland. These banks are exposed to vigorous wave action and through that action serve as a major continuous source of sediment for beaches, dunes, and barrier beaches as well as other landforms caused by coastal processes. Coastal banks with previously existing man-made structures such as seawalls, rip rap, revetments and bulkheads are exempt from this provision.

* - Amended May 10, 1999

** - Amended May January 10, 2000

COMPOSTING MANAGEMENT REGULATION

- I. Purpose and Authority
- II. Definitions
- III. Applicability
- IV. Existing Operations
- V. Exemptions
- VI. Permits
- VII. Minimum Standards
- VIII. Composting Management Plan
- IX. Recordkeeping & Reporting
- X. Compliance and Penalties
- XI. Severability

I. Purpose and Authority

(1) Purpose

The Composting Management Regulation of the Town of Sandwich has been adopted to provide management practices that ensure that composting operations conducted within the boundaries of the Town of Sandwich are operated in such a manner as to prevent the occurrence of a public health threat or nuisances.

(2) Authority

The Composting Management Regulation of the Town of Sandwich has been adopted pursuant to Massachusetts General Law Chapter 111, Section 31.

II. Definitions

Backyard Composting means the composting of organic solid waste, such as grass clippings, leaves or brush generated by a homeowner or tenant of a single-family or duplex residential unit where composting occurs at that dwelling place. This term also means composting that is associated with the operation of a stable as licensed under the authority of the Sandwich Board of Health Stable Regulation which authorizes composting for the maintenance of manure and bedding material. This term does not include the composting of organic solid waste received from an off-site location.

Board means the Town of Sandwich Board of Health.

Compostable Material means an organic material, excluding wastewater treatment residuals, that has the potential to be composted, which is pre-sorted and not contaminated by toxic substances. This term includes the following:

- food material;
- vegetative material;
- yard waste;
- manure and animal bedding material;
- clean newspaper and cardboard; and
- clean compostable (i.e., thin) shells and clean bones.

This term does not include dead animals or dead animal parts or feedstocks likely to support human pathogens. This term also does not include domestic sewage, sewage sludge, or septage.

(COMPOSTING MANAGEMENT REGULATION – Cont.)

Composting means a process of accelerated biodegradation and stabilization of organic material under controlled conditions yielding a product which can safely be used.

Existing Composting Operations means those composting operations that are in existence as of the date upon which the Composting Management Regulation is adopted by the Board.

Food Material means source-separated material produced from human food preparation and consumption activities at homes, restaurants, cafeterias, or dining halls which consists of fruits, vegetables and grains, animal products and byproducts, and soiled paper unsuitable for recycling. This term does not include fish or fish byproducts.

Person means a natural person, firm, partnership, company, corporation or business trust.

Pre-Sort means to segregate a material for reuse, recycling or composting by preventing the material from being commingled with solid waste at the point of generation or to separate and recover the material from solid waste at a processing facility. Pre-sorting does not require the recovery or separation of non-recyclable components that are integral to a recyclable product (e.g., insulation or electronic components in white goods).

Vegetative Material means source-separated material which consists solely of vegetative waste such as fruits, vegetables and grains, that is produced from food preparation activities, but not limited to, grocery stores, fruit or vegetable canning, freezing or preserving operations, and food or beverage processing establishments.

Windrow means an elongated pile of compostable material that is no more than eight feet in height and no more than twelve feet in width.

Yard Waste means deciduous and coniferous seasonal deposition (e.g., leaves), grass clippings, weeds, hedge clippings, garden materials and brush.

III. Applicability

The Composting Management Regulation applies to all composting operations conducted within the boundaries of the Town of Sandwich unless exempted pursuant to Section V of this regulation.

IV. Existing Operations

Existing composting operations shall comply with all conditions of the Composting Management Regulation and apply to the Board for a permit within 60 days of the Board's adoption of the Composting Management Regulation.

V. Exemptions

Backyard composting, as defined in Section II of this regulation, is not subject to the Composting Management Regulation provided the operation incorporates good management practices, is carried out in a manner that prevents an unpermitted discharge of pollutants to air, water or other natural resources of the Town of Sandwich, and results in no public health nuisance.

VI. Permits

All composting operations subject to the Composting Management Regulation shall obtain a permit from the Board prior to conducting composting operations. To obtain a permit, the applicant shall submit to the Board the following information:

- the applicant's name, address, and telephone number;
- the address of the proposed composting operation site;
- a site locus; and
- a Composting Management Plan containing the information specified in Section VIII of this regulation.

Such permits shall be issued for a period of time not to exceed one calendar year and may be renewed.

Permit applications shall be submitted to the Health Department for review by the Sandwich Board of Health at a regularly scheduled public meeting. Renewals shall require the submittal of material as specified in Section IX.

The permit fee shall be three hundred dollars (\$300.00) per year.

VII. Minimum Standards

All composting operations shall adhere to the management practices described below.

(1) Carbon to Nitrogen (C:N) Ratio

The carbon to nitrogen ratio of all windrows shall be maintained between 25:1 and 30:1 as specified in *Leaf and Yard Waste Composting Guidance Document* published by the Massachusetts Department of Environmental Protection.

(2) Moisture

The moisture content of all windrows shall be maintained between 40% and 60% (i.e., the material should be damp but not dripping) as specified in *Leaf and Yard Waste Composting Guidance Document* published by the Massachusetts Department of Environmental Protection.

(3) Temperature

The temperature of all windrows shall be maintained between 100 and 140 degrees Fahrenheit as specified in *Leaf and Yard Waste Composting Guidance Document* published by the Massachusetts Department of Environmental Protection.

(4) Soils

All composting operations shall not be conducted in areas where the underlying soil permeability is too great or too low. Soil type shall be based on the Soil Textural Triangle and shall consist of a Class I soil with a relative proportion of sand no greater than 85% but not less than 70% and clay no greater than 20% but not less than 15%.

(COMPOSTING MANAGEMENT REGULATION – Cont.)

(5) Drainage

All composting operations shall provide adequate slope or other drainage measures to prevent the accumulation of standing water. A drainage system shall be designed to maintain rainwater runoff on-site and provide leaching for such.

(6) Compostable Material Pile Construction and Identification

All composting operations shall pile compostable material into windrows as defined in Section II of this regulation. All windrows shall be constructed parallel to the slope of the site (i.e., perpendicular to the topographical fall line) to allow rainwater to runoff between the windrows rather than through them. Adequate spacing between windrows shall be provided to allow for the operation of equipment. All windrows shall be adequately identified by a system that allows the matching of recorded data (recorded pursuant to Section IX of this regulation) and the windrow from which the data was obtained.

(7) Composting Pad

All composting operations shall be conducted on an adequate composting pad that is designed to drain runoff away from the compost windrow(s) and support heavy equipment during all seasons and prevent the formation of ruts caused from the operation of equipment or machinery. The composting pad shall also be permeable enough to allow water to percolate through the soil and prevent standing water or “ponding”.

(8) Access Control

All composting operations shall provide adequate access control to the site to prevent unauthorized dumping.

(9) Odor Control

All composting operations shall prevent the off-site emission of odors that are foul, putrid, or otherwise offensive or obnoxious in nature.

VIII. Composting Management Plan

All Composting Management Plans shall specify the information listed below.

(1) A description and plan prepared by a Massachusetts Licensed Surveyor of the composting site that includes the following information:

- the total acreage of the site;
- the location of the composting pad on the site;
- the location of the windrows on the composting pad;
- the topographic contour lines of the site;
- the distance of the site from any surface waters, wetlands, floodplains, public and private drinking water wells, schools, residences, parks, and hospitals;
- a description of the soils and slope of the site;
- the depth to the seasonal high groundwater and bedrock in the area where composting will occur;
- the direction of the prevailing winds at the site;
-

(COMPOSTING MANAGEMENT REGULATION – Cont.)

- the layout of access and egress roads of the site; and
 - proposed drainage to maintain runoff on-site and away from composting.
- (2) The quantities (i.e., per day or per week) and types of compostable material received at the site, including each material's carbon to nitrogen ratio.
- (3) The mixing ratios of compostable materials received.
- (4) The identification system used for the windrows.
- (5) A description of the following:
- the methods used to monitor temperature, moisture, and carbon to nitrogen ratio;
 - the equipment and staffing of the operation;
 - the schedule of operations including the days and hours of operation;
 - the methods by which windrows are deemed to be finished;
 - the method by which compostable materials are mixed;
 - the manner in which compostable materials are received and the operational procedures followed upon receipt of such materials;
 - the method by which windrows are deemed in need of aeration and the method by which they are aerated; and
 - the method by which moisture is added to the windrows if needed.
- (6) Copies of the format to be used for the recordkeeping logs required pursuant to Section IX of this regulation.
- (7) The practices or procedures by which odors will be controlled.

IX. Recordkeeping and Reporting

(1) Recordkeeping

(A) Receiving Log

All composting operations shall maintain on-site and accessible a log to record the receipt of all compostable material. Said log shall include the following information:

- the amount of the material received;
- the date and time the material was received;
- the type of material received;
- the identification of the windrow into which the material was placed; and
- the origin of the material received.

(COMPOSTING MANAGEMENT REGULATION – Cont.)

(B) Temperature Log

All composting operations shall maintain on-site and accessible a daily log to record the temperature readings of all active windrows. Said log shall include the following information:

- the temperature measured;
- the date and time the temperature reading was obtained; and
- the identification of the windrow from which the temperature reading was obtained.

(C) Finished Material Log

All composting operation shall maintain on-site and accessible a log recording the disposition of all finished compost material. Said log shall include the following information:

- the identification of the windrow deemed to be finished;
- the date on which the windrow was deemed to be finished; and
- the date on which the material was removed off-site or used on-site.

(2) Reporting

Receiving Logs, Temperature Logs, and/or Finished Material Logs shall be submitted to the Board upon request.

X. Compliance and Penalties

Any person who fails to comply with any provision of the Composting Management Regulation may be punished by a fine not to exceed two hundred (\$200.00) dollars per day per violation as set by the Board (Section 157, Chapter 111, Massachusetts General Laws) depending on the severity of the violation, and may be subject to suspension or revocation of their composting permit. Every composting operation shall permit the Board or its Agent or other Town Authorities acting in an official capacity to inspect the composting operation during normal business hours.

XI. Severability

If any provision of the Composting Management Regulation is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.

EMPLOYMENT OF OUTSIDE CONSULTANTS

Pursuant to Massachusetts General Law Chapter 44, Section 53g, the Board of Health imposes on all applicants, when it determines that it is necessary, reasonable fees for the employment of outside consultants to review plans and/or permit applications.

1. The Board of Health, when it determines that it is necessary, shall require any applicant to establish a special account with the Town Treasurer equal to an amount determined by the Board of Health to be sufficient to hire outside consultants to review and report on applications under this regulation.

(EMPLOYMENT OF OUTSIDE CONSULTANTS-cont.)

2. All funds deposited with the Town Treasurer, may be expended by the Board of Health without, Town Meeting appropriation, or consulting fees only. Any principal and interest remaining in the account upon approval or disapproval of the plan or permit shall be repaid to the applicant; at the conclusion of the review process.
3. The Town Accountant shall submit an annual report to the Board of Selectmen and the Town Executive Secretary, for review. Each account under this section shall be published in the annual report, and be provided by the Town Treasurer to the Bureau of Accounts.
4. The applicant may appeal the selection of any particular consultant to the Board of Selectmen on the grounds of a conflict of interest, or that the consultant does not possess minimum required qualifications.
 - a. Minimum required qualifications shall consist of an educational degree in the field at issue, or a closely related field, or three or more years of practice in the field at issue or a related field.
 - b. The Board of Selectmen may act on any appeal under this regulation within 28 days of the filing of an appeal.
 - c. In the event that no decision is made by the board of Selectmen within 28 days of the filing of an appeal, the selection made by the Board of Health shall stand.

Adopted: September 9, 1991

EXPOSURE TO TOXIC PEST CONTROL MATERIALS REGULATION

In order to protect the citizens of Sandwich from undue and unwanted exposure to toxic pest control materials, the Sandwich Board of Health, under the provisions of Massachusetts General Laws, Chapter 111, Section 31 and Section 127A, adopted the following regulation at its meeting on June 9, 1986.

No aerial or wide area ground application of a control material shall be made unless the following conditions are met:

1. Submission to the Board of Health, no later than ten (10) days prior to application, written proof of notification of both the local Supervisor of Insect Pest Control and the Department of Food and Agriculture Pesticide Board.
 2. Publication of a Notice of Intent no later than ten (10) days prior to application in a local newspaper of general circulation normally used by this municipality for legal notices. The notice shall include the purpose of the control program, the mode of application, the general location of the control area, the control material to be used, the anticipated commencement date and time of the control program, the location where maps delineating the control area may be viewed, the locations where marking materials for aerial control programs will be distributed and the name and telephone number of an individual from whom further information can be obtained.
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FLOOR DRAIN REGULATION

Whereas toxic and hazardous substances entering the ground may cause contamination of public and private water supply wells and;

Whereas floor drains within industrial/commercial buildings which connect to leaching structures and/or septic systems provide a path to groundwater for toxic and hazardous substances;

The Sandwich Board of Health acting under Massachusetts General Laws, Chapter 111, Sections 31 and 122 and provisions of the Commonwealth's Groundwater Discharge Regulations hereby requires:

1. The disconnection and removal or destruction of all leaching structures and associated plumbing connected to interior floor drains;
2. The disconnection and removal of all plumbing connecting floor drains and/or gasoline traps to septic systems;
3. The permanent sealing of all floor drains within structures or;
4. The connection of floor drain to a D.E.P. approved and permitted holding tank, the contents of which shall be disposed of by a licensed hazardous waste hauler. Waste manifest copies to be submitted to this Board.

All alterations to existing drains and drainage systems are to be witnessed by an agent of this Board.

Owners of property affected by this regulation shall comply with all of its provisions within 90 days of publication.

Failure to comply with provisions of this Regulation will result in the levy of fines of not less than two hundred dollars (\$200.00). Each day's failure to comply shall constitute a separate violation.

All new construction within the Town of Sandwich shall comply with the provisions of this regulation.

Adopted: June 11, 1990

Effective: June 20, 1990

FOOD ESTABLISHMENT REGULATION

Sandwich Board of Health Amendments to the Commonwealth of Massachusetts 105 CMR 590.000 – 595.000 Vending Machines and State Sanitary Code for Food Establishments

The Board of Health held a public hearing on October 28, 1996 and adopted the following amended regulation pursuant to Massachusetts General Laws, Chapter 111, Section 31 as reasonable health regulations designed to protect and improve the health of the residents of the Town of Sandwich:

No person shall operate a food establishment; meaning any food service establishment, retail food store, bed and breakfast operation, or residential kitchen where food is prepared or offered for the distribution to or consumption by the public, and/or sells tobacco products unless that individual operating a food establishment is a holder of a valid food service/tobacco product permit issued by the Board of Health.

Amended: November 30, 1998
Effective: January 11, 1999

FUEL STORAGE SYSTEM REGULATION

Whereas, leaking fuel storage systems pose an immediate and serious threat to Cape Cod's sole source aquifer, and,

Whereas, the Town of Sandwich does not have records to locate all such systems installed within the Town,

Therefore, under Chapter 111, Section 31, of the Massachusetts General Laws, the Sandwich Board of Health hereby adopts the following regulations to protect the ground and surface waters from contamination with liquid toxic or hazardous materials.

DEFINITION: "Toxic or hazardous materials" shall be defined as all liquid hydrocarbon products including, but not limited to, gasoline, fuel and diesel oil, and any other toxic or corrosive chemicals, radioactive materials or other substance controlled as being toxic or hazardous by the Division of Hazardous Waste of the Commonwealth of Massachusetts, under the provisions of Massachusetts General Laws, Chapter 21C, Section 1, et. Seq.

The following regulations apply to all toxic or hazardous materials storage:

Section 1., Installation of Fuel Storage Tanks

- 1-1. Following the effective date of this regulation, the installation of all underground fuel, gasoline, or other chemical storage tanks shall conform with the following criteria: In that the United States Environmental Protection Agency designated the Town of Sandwich as overlying a sole source aquifer, secondary containment of tank and piping and an approved in-tank and interstitial space monitoring system shall be required for new or replacement tanks.

(FUEL STORAGE SYSTEM REGULATION – Cont.)

- 1-2. Following the effective date of this regulation, all tanks installed above ground outside shall be of material approved for outside use. All tanks shall be properly installed as per Massachusetts Fire Regulations and manufacturer's specifications, under the direction of the head of the Fire Department. Tanks shall be approved design and protected from internal and external corrosion. The following tank construction systems are considered to provide adequate corrosion protection: all fiberglass construction; steel with bonded fiberglass or enamel coating and internal lining; and the Steel Tank Institute 3-Way Protection System. Any other system must be shown to provide equivalent protection.
- 1-3. All tank installations within four feet of maximum high water table or within one hundred feet of a surface water body or wetland shall be of fiberglass construction. The Fire Chief and the Board of Health Shall determine if additional protective measures are necessary.
- 1-4. Underground storage tanks shall not be installed within Water Resource Districts or Zones of Contributions of Public Water Supply Wells or within 150 feet of a private well.

Section 2., Tank Registration

The following regulations shall apply to A) all underground tanks containing toxic or hazardous materials as defined above which are not currently regulated under 527 CMR 9.26 – Tanks and Containers, to B) all tanks containing fuel oil, whose contents are used exclusively for consumption on the premises, and to C) farm and residential tanks of 1,100 gallon capacity or less, used for storing motor fuel for non-commercial purposes.

- 2-1. Owners shall file with the Board of Health, within 30 days of the date of publishing of this regulation, the size and type, age and location of each tank, and the type of fuel or chemical stored in them. Evidence of date of purchase and installation, including Fire Department permit, if any, shall be included along with a sketch map showing the location of such tanks on the property. Upon registering the tank with the Board of Health, the tank owner will receive a permanent metal or plastic tag, embossed with a registration number unique to that tank. This registration tag must be affixed to the fill pipe or in such a location as to be visible to any distributor when filling the tank and to any inspector authorized by the Town.
- 2-2. Within 30 days of the date of the publishing of this regulation, every petroleum and other chemical distributor, when filling an underground storage tank, shall note on the invoice or bill for the product delivered, the registration number appearing on the tag affixed to the tank which was filled. Every petroleum and other chemical distributor shall notify the Board of Health of the existence and location of any unregistered or untagged tank which they are requested to fill. Such notification must be completed within two (2) working days of the time the distributor discovers that the tank registration tag is not present.
- 2-3. Prior to the sale of a property containing an underground storage tank, the Fire Department must receive from the current owner a change of ownership form for the registration of the underground storage tank. Such form can be obtained from the Fire Department.

(FUEL STORAGE SYSTEM REGULATION – Cont.)

Section 3., Testing

- 3-1. The tank owner shall have each tank and its piping tested for tightness fifteen and twenty years after installation and annually thereafter. A tank shall be tested for any final or precision test, not involving air pressure, that can accurately detect a leak of 0.05 gal/hr, after adjustment for relevant variables, such as temperature change and tank end deflection, or by any other testing system approved by the Board of Health, as providing equivalent safety and effectiveness. Piping shall be tested hydrostatically to 150 percent of the maximum anticipated pressure of the system. Certification of the testing shall be submitted to the Board of Health by the owner, at the owner's expense. Those tanks subject to the testing requirements of this regulation shall submit the certification of testing to the Board. Tanks which are currently tested under the provisions of 527 CMR 9.13 are exempt from this section. For purposes of this section, tanks of unknown age are assumed to be twenty (20) years of age. All tanks and piping within water resource protection districts or zones of contribution of public water supply wells shall be subject to the above testing procedure ten (10) years after installation and annually thereafter. Certification of testing shall be submitted to the Board of Health by the owner, at the owner's expense.
- 3-2. Owner's of tanks for which evidence of installation date is not available shall, at the order of the Board of Health, have such tanks tested or uncovered for inspection. If, in the opinion of the agent of the Board of Health or head of the Fire Department, the tank is not product tight, it shall be removed.
- 3-3. Owner's of all commercial subsurface fuel storage facilities shall submit quarterly to the Board of Health a statement certifying that daily inventory records have been maintained and reconciled.

Section 4., Maintenance of Fuel Storage System

- 4-1. All underground fuel lines which do not have secondary containment shall be replaced with an approved double-containment system at which time any service to the system requiring a permit is performed.
- 4-2. All above-ground elements of a fuel storage system shall be maintained free of leaks and visible rust.
- 4-3. All in-tank or interstitial-space monitoring systems shall be checked on a monthly basis to verify system integrity. Records of these checks shall be sent to the Board of Health on an annual basis.

Section 5., Report of Leaks or Spills

- 5-1. Any person who is aware of a spill, loss of product, or unaccounted for increase in consumption which may indicate a leak shall report such spill, loss or increase immediately to the head of the Fire Department and to the Board of Health.
- 5-2. All leaking tanks must be emptied within 12 hours of leak detection, and removed in a time period to be determined by the Fire Chief and the Board of Health.
- 5-3. All tanks shall be removed or secured as per Fire Department specifications at the owner's expense within six months following discontinuation of use.

(FUEL STORAGE SYSTEM REGULATION – Cont.)

Section 6., Tank Removal

- 6-1. All fuel, gasoline or other chemical tanks not regulated under 527 CMR 9.00 (farm or residential tanks of 1,100 gallons or less and underground tanks storing fuel for consumptive use at the property) in service on the effective date of this regulation, shall be removed thirty (30) years after the date of installation. If the date of installation is unknown, the tank shall be assumed to be twenty (20) years old. All underground storage tanks currently subject to the removal regulation (30 years or older) must be removed within 90 days of the date the publishing of this regulation.
- 6-2. Prior to the removal of an underground storage tank governed by this regulation, the owner of shall first obtain permit from the head of the Fire Department, pursuant to M.G.L., 148.
- 6-3. Any person granted a permit by the Marshall or the head of a local Fire Department to remove a tank under the provisions of M.G.L., C. 148 or 527 CMR 9.00, shall within 72 hours provide the permit granting authority with a receipt for delivery of said tank to the site designated on the permit.
- 6-4. Before any person is granted a permit by the Marshall or the head of a local Fire Department to remove a tank under the provisions of M.G.L., C. 148 or 527 CMR 9.00, and said tank is not being transported to an approved tank yard, the person requesting the permit shall provide the permit-granting authority with written approval from the owner/manager of the disposal site. (Reference: 502 CMR 3.00 for tank removal and disposal procedure).

Section 7.0., Costs

- 7-1. In every case, the owner shall assume responsibility for costs incurred necessary to comply with this regulation.

Section 8.0., Variances

- 8-1. Variances from this regulation may be granted by the Board of Health after a hearing at which the applicant establishes the following: (1) the enforcement thereof would do manifest injustice: and (2) installation or use of an underground storage tank will not adversely affect public or private water resources. In granting a variance, the Board will take into consideration the direction of the groundwater flow, soil conditions, depth to groundwater, size, shape and slope of the lot, and existing and known future water supplies.

Section 9.0., Severability

- 9-1. Provisions of this regulation are severable and if any provision hereof shall be held invalid under any circumstances, such invalidity shall not affect any other provisions or circumstances.
- * A failure to comply with any element of this regulation will result in the levy of a fine of \$50.00. Each 24-hour period of non-compliance shall constitute a separate offense.

Adopted: February 11, 1991

Effective: February 20, 1991

* Amendment adopted March 25, 1991, effective April 3, 1991.

GROUNDWATER ELEVATION REGULATION

Notice is hereby given that the following regulation has been adopted by the Sandwich Board of Health, under the provisions of Massachusetts General Laws, Chapter 111, Section 31 and Section 127A, at its meeting on March 24, 1986.

No newly constructed septic system shall be installed in any area where the distance from naturally occurring ground elevation, measured as the existing ground surface (exclusive of all fill materials), to corrected high ground water elevation is less than 6 feet.

This restriction is based upon currently available observed and researched geohydrologic characteristics for these areas and may only be overcome by submission from the project proponent of site specific information developed by qualified geohydrologic personnel that detail as a minimum:

1. Five (5) groundwater quality analyses of existing conditions including but not limited to: levels of total & fecal coliform, nitrate, phosphate, sodium, turbidity and conductivity.
2. Groundwater elevation contours entering, crossing, and leaving the site. These shall be maximum high elevations observed over the spring high tides.
3. Projected groundwater quality impact resulting from proposed project including nitrate loading, and travel time of effluent from proposed site of system to nearest surface water body, coastal or inland wetland or area of critical environmental concern. *Travel time shall be in excess of 100 days.
4. Any other information deemed necessary by the Board of Health, its agents and/or consultant.

* Amendment adopted August 27, 1990

* Effective: September 5, 1990

HERBICIDE REGULATION

The Board of Health of the Town of Sandwich has, in accordance with the provisions of Chapter 111, Section 31 of the Massachusetts General Laws as amended, adopted the following regulation concerning Herbicides on May 19, 1982.

1. The purpose of this regulation is to protect the public health of the Town from the use of herbicides, as herein-after provided. This regulation is adopted pursuant to the power of the Board of Health conferred in Section 31 of Chapter 111 of the Massachusetts General Laws and under the Home Rule powers of a town.
2. The use of any Public Utility (including electric companies) of herbicides on their easements, rights of way or other property is prohibited, unless the Board of Health approves a written application for such use in accordance with the provisions of Paragraph 3 hereof.

(HERBICIDE REGULATIONS – Cont.)

3. Any Public Utility desiring to use said herbicides may submit to the Board of Health an application for the approval of such uses, which shall have with it evidence to establish that the said use will not create any public health hazard, either by way of the contamination of the public or private water supply within the Town or by the air or by other contact with people in the Town. Said evidence shall consist of tests made of the proposed herbicides by a laboratory certified by the Environmental Protection Agency as being qualified and competent to determine whether the proposed use of such herbicides will or will not create the said public health hazards; among the tests must be bacterial tests such as the Ames Salmonella Test for mutagenicity and also tests of chronic exposure of one or more varieties of laboratory animals.
4. The prohibited use of said herbicides on each one-half acre shall be a separate violation of this regulation.

INDOOR AIR QUALITY REGULATION

SECTION I – AUTHORITY

There exists evidence that the condition of indoor air quality causes respiratory diseases, allergies and irritations to the eyes, nose, and throat to occupants of structures. Therefore, these regulations are adopted pursuant to Massachusetts General Laws, Chapter III, Section 31, as reasonable health regulations designed to protect and improve the health of the residents of the Town of Sandwich.

SECTION II – REFERENCE

Implementation of an Indoor Air Quality Program shall rely on the Environmental Protection Agency's Action Kit, Tools for Schools. Such a program can be utilized in all public municipal government buildings and schools.

SECTION III – REQUIREMENTS

The Town of Sandwich and the Town of Sandwich School Department shall appoint an individual in each Town building and school respectively to be the Indoor Air Quality Coordinator for said building or school. The Indoor Air Quality Coordinator shall utilize the E.P.A. Program, Indoor Air Quality, Tools for Schools, Action Kit and implement said program in the appointed individual buildings. The I.A.Q. Coordinator shall report all complaints and follow-up results to the office of the Sandwich Board of Health.

Adopted: November 2, 1998

MASSAGE AND BATH REGULATION

1. **POLICY:**

Whereat it has been determined by the Board of Health of the Town of Sandwich that the unregulated operation of massage and bath establishments would be contrary to the public interest, therefore, the Board of Health has determined that the licensing and regulation of such businesses, or establishments, is required to properly protect the public health, safety and general welfare of the citizens of the community.

(MASSAGE AND BATH REGULATION – Cont.)

2. DEFINITIONS:

EMPLOYEE: Any person, other than a masseur, who renders any service in connection with the operation of a massage business and receives compensation from the operator of a massage business or patrons.

MASSAGE: Any method of treating the external superficial parts of a patron for medical, hygienic, exercise, or relaxation purposes, including but not limited to, rubbing, stroking, kneading, tapping, pounding, vibrating or stimulating with the hands or any instrument, or by the application of air, liquid, or vapor baths or any kind whatsoever, alcohol rub or similar treatment, electric or magnetic treatment, physiotherapy or manipulation.

MASSEUR: Any person who engages in the practice of massage as herein defined. The use of the masculine gender shall include in all cases the feminine gender as well.

PATRON: Any person who receives a massage.

PERSON: Any individual, firm, partnership, corporation, company, association, joint-stock association or legal entity of whatsoever kind or nature.

RECOGNIZED SCHOOL: Any school or educational institution licensed to do business as a school or educational institution in the state in which it is located, or any school recognized by or approved by or affiliated with the American Massage and Therapy Association, Inc. and which has for its purposes the teaching of the theory, method, profession, or work of massage, which school requires a resident course of study before the student shall be furnished with a diploma or certificate of graduation from such school or institution of learning following the successful completion of such course of study or learning.

3. LICENSES REQUIRED:

A. BUSINESS LICENSES REQUIRED: No person shall engage in or carry on the business of massage unless he or she has a valid massage business license issued by the Town pursuant to the provisions of this regulation for each and every separate office or place of business conducted by such person.

B. MASSEUR'S LICENSE REQUIRED: No person shall practice massage as a masseur, employee or otherwise, unless he or she has a valid and subsisting masseur's license issued to him or her by the Town pursuant to the provisions of this regulation.

C. EXISTING ESTABLISHMENTS: Upon application, the Board of Health shall issue a temporary massage business license to any applicant who was, upon the effective date of this regulation, the owner or operator of such an establishment in the Town of Sandwich. Such temporary license shall remain in effect for a period of forty-five (45) days or until the issuance of the permanent license, whichever is sooner. If the application for the license is denied, said temporary license shall immediately expire and be of no further force and effect.

(MESSAGE AND BATH REGULATION – Cont.)

4. REQUIREMENTS FOR LICENSE OF A BUSINESS:

Every establishment for giving of a massage or vapor, pool, shower, or other baths must meet the following standards:

- A. All rooms shall be well lighted, ventilated, and maintained in a sanitary manner at all times.
- B. All rooms used for the giving of vapor baths or body massage shall be provided with an ample supply of hot and cold water.
- C. Adequate means shall be provided for the cleaning and sterilization of all instruments and utensils.
- D. All instruments and devices used by persons licensed to practice under this regulation for direct applications to any parts of the bodies of patrons, or for holding materials to be applied to any parts of the bodies, shall, so far as practicable, be such as can readily be kept clean and as sterile as circumstances permit.
- E. Robes, sheets, blankets, pillow cases, towels, and napkins which come into direct contact with the bodies of patrons shall, after having been used once and before being used again, be laundered in such a manner as to insure effective sterilization.
- F. No unsterilized part of a percusser, vibrator, or other mechanical appliance shall be applied directly to the skin of the patron, but the part of the body being treated shall be covered with a clean towel or else the instrument shall be covered in a similar manner.
- G. No sponge, nor stick alum, nor any other article liable to convey infection shall be used to make application directly to the skin or to any cut or wound.
- H. No person licensed under this act shall treat as a patron any person afflicted with any skin eruption or infection.
- I. Every person licensed to practice body massage shall thoroughly cleanse his/her hands by washing immediately before serving any patron.
- J. No establishments licensed under this act shall be kept open except between the hours of 8:00 A.M. to 10:00 P.M., unless specially authorized by the Board of Health.
- K. Every licensed person, when requested, shall show such license to a legally authorized public official.
- L. A license is not transferable without the permission of the Board of Health.
- M. All rooms of the establishment and furniture and equipment therein shall be kept clean at all times.
- N. There shall be approved toilet, washing, and bathing facilities within the premises, readily available to the patrons and affording sufficient privacy and separation of both sexes.
- O. All rooms used for reception and treatment of patrons shall be arranged so as to afford adequate fire protection and shall have satisfactory means of egress in case of fire as approved by the Sandwich Building Inspector and the Sandwich Fire Department.

(MESSAGE AND BATH REGULATION – Cont.)

- P. No food or alcoholic beverages shall be served or consumed on the premises.
- Q. Every licensed establishment must display in a conspicuous location all licenses required by the Town of Sandwich Regulations.

5. APPLICATION FOR MESSAGE BUSINESS LICENSE:

Any person desiring a message business license shall file a written application with the Board of Health on a form furnished by the Board. The applicant shall accompany the application with a tender of the correct license fee to the Town as hereinafter provided, and shall, in addition, furnish the following:

- A. The type of ownership of the business, i.e., whether individual, partnership, corporation or otherwise.
- B. The name, style and designation under which the business or practice is to be conducted.
- C. The business address and all telephone numbers where the business is to be conducted.
- D. A complete list of the names and residence addresses of all masseurs and employees in the business and the names and residence addresses of the manager or other person principally in charge of the operation of the business.
- E. The message or similar business history and experience, including but not limited to whether or not such person in previously operating in this or any other town, city or state under license or permit, has had such license or permit denied, revoked or suspended and the reason therefor, and the business activities or occupations subsequent to such action of denial, suspension or revocation.
- F. A diploma, certificate or other proof of graduation from a recognized school by the person who shall be directly responsible for the operation and management of the message business.
- G. Authorization for the Town, its agents and employees to seek information and conduct an investigation into the truth of the statements set forth in the application and the qualifications of the applicant for the permit.
- H. Written declaration by the applicant, under penalty of perjury, that the foregoing information contained in the application is true and correct, said declaration being duly dated and signed in the town.

6. REQUIREMENTS FOR PERSONAL LICENSE:

No person shall be licensed to practice message or give message, vapor, pool, shower, or other baths unless he/she meets the following regulation requirements:

- A. Be eighteen years of age or older.
- B. Submit to the Board of Health a completed application form containing all information requested by said form.

(MESSAGE AND BATH REGULATION – Cont.)

- C. Have completed an approved course of massage or have had two years experience in an approved massage establishment.
- D. Produce three character references, one which is a physician's.
- E. Furnish proof of having had a physical examination within forty-five (45) days prior to application or relicensing.
- F. No licensed person shall operate under any name or conduct his business under any designation not specified in his licensed.
- G. Supplies a list of former employers and places of employment.
- H. Produce certificates showing his qualifications to practice massage or give vapor baths.
- I. If the applicant has previously applied for and/or held a license for massage or vapor baths in this or another town or state and has had such license denied, revoked or suspended, state the reasons for which the license was denied, revoked or suspended.

7. APPLICATION FOR MASSEUR'S LICENSE:

Any person desiring a masseur's license shall file a written application with the Board of Health on a form to be furnished by the Board. The applicant shall tender with the application the correct license fee to the Board, as hereinafter provided, and shall in addition, furnish the following:

- A. The business address and all telephone numbers where the massage is to be practiced.
- B. The following personal information concerning the applicant:
 - 1. Name, complete residence address and mailing address, if different, and residence telephone numbers.
 - 2. The two (2) previous addresses immediately prior to the present address of the applicant.
 - 3. Written proof of age.
 - 4. The massage or similar business history and experience, including but not limited to whether or not such person in previously operating in this or another town or state under license or permit, has had such license or permit denied, revoked, or suspended and the reason thereof, and the business activities or occupations subsequent to such action of denial, suspension, or revocation.
 - 5. A diploma, certificate, or other written proof of graduation from a recognized school where the theory, method, profession, or work of massage is taught.
 - 6. A statement in writing, from a licensed physician in the state, that he has examined the applicant and believes the applicant to be free of all communicable diseases.

(MASSAGE AND BATH REGULATION – Cont.)

7. Authorization for the Town, its agents and employees to seek information and conduct an investigation into the truth of the statements set forth in the application and the qualifications of the applicant of the license.
8. Written declaration by the applicant, under penalty of perjury, that the foregoing information contained in the application is true and correct, said declaration being duly dated and signed in the town.

8. APPLICABILITY:

This regulation shall be construed to be applicable to all persons as defined herein, whether profit or non-profit in nature, except as hereinafter provided.

9. DISPLAY OF LICENSE:

The massage business licensees shall display his or her license, and that of each and every masseur employed in the establishment in an open and conspicuous place on the premises of the massage business.

10. LICENSE FEE:

- A. The license fee for a massage business shall be twenty-five dollars (\$25.00) per year, due and payable on the first day of January of each calendar year.
- B. The license fee for masseurs shall be twenty-five dollars (\$25.00) per year. There shall be no proration of a masseur's license fee regardless of when issued. In the event that a masseur's license is denied, there shall be no refund of the twenty-five dollars (\$25.00) fee referred to herein.
- C. The license and fees required herein shall not be in lieu of, but shall be in addition to, any licenses, taxes, or permits now required by the Commonwealth of Massachusetts, County, town or any administrative agency thereof.

11. TERM OF LICENSE:

- A. A massage business and masseur's license shall automatically expire on December 31 of each year.
- B. The application shall be made in accordance with the provisions of this regulation, and all provisions of this regulation shall apply to renewals in the same manner as they apply to original applications.

12. TRANSFERS:

- A. No massage business or masseur licenses are transferable, separate or divisible and such authority as a permit confers shall be conferred only on the licensee named therein.
- B. No massage business license shall be applicable to any other location other than that location set forth in the initial application under the terms of this regulation.

(MASSAGE AND BATH REGULATION – Cont.)

13. SANITATION AND SAFETY REQUIREMENTS:

- A. Floors shall be free from any accumulation of dust, dirt or refuse. All equipment used in the massage operation shall be maintained in a clean and sanitary condition. Towels, linen and items for personal use of operators and patrons shall be clean and freshly laundered. Towels, cloths and sheets shall not be used for more than one (1) patron. Heavy white paper may be substituted for sheets, provided that such paper is changed for every patron. No massage service or practice shall be carried on within any cubicle, room, booth, or any area within a massage establishment which is fitted with a door capable of being locked.
- B. Nothing contained herein shall be construed to eliminate other minimum requirements of state, county or town laws, by-laws or regulations pertaining or applicable to the maintenance, control and operation of said premises, nor to preclude any authorized inspections thereof by the Building Inspector, Board of Health or Fire Department or any other authorized inspections.
- C. The premises used by the licensees hereunder shall be subject to the right of entry and examination by members of the Police Department as provided in Massachusetts General Laws, Chapter 140, Section 52.

14. INSPECTIONS:

Every License shall permit the Board of Health or its Agent or other Town authorities acting in an official capacity to inspect his/her place of business and his/her work at any reasonable time.

15. HEARING IN CASE OF SUSPENSION OR REVOCATION OF LICENSE:

The Board of Health may suspend or revoke any license granted for such cause as it deems sufficient. A person whose license has been suspended or revoked may, within ten days of the suspension or revocation of his/her license request, in writing, a hearing upon the cause or causes of such suspension or revocation. The Board of Health shall set a time and place for said hearing.

16. VIOLATION AND PENALTIES:

Every person convicted of a violation of any provision of this regulation shall be punished by a fine, in accordance with Massachusetts General Laws, Chapter 140, Section 53, as well as local fine schedules.

17. INVALIDATION:

If any section, paragraph, sentence, clause or phrase of these rules and regulations should be decided invalid for any reason whatsoever, such decision shall not affect the remaining portions of these regulations, which shall remain in full force and effect; and to this end the provisions of these regulations are hereby declared severable.

Adopted: June 11, 1990
Effective: June 20, 1990
Amended: September 10, 1990
Effective: September 19, 1990

PIPING MATERIAL REGULATION

The Town of Sandwich Board of Health has adopted in accordance with the provisions of Section 31 and Section 127A of Chapter 111 of the General Laws the following regulation.

The minimum piping material to be used in any portion of a subsurface disposal system shall conform to the requirements of C.M.R. 2.06 – 2, N1, N2, N3, N4, N5, and N6 and to the requirements of C.M.R. 2.06, 0, 01-02, 03 and 04. The preceding C.M.R. regulations pertain to the standards for PVC, Polyvinyl chloride pipe and fittings schedule 40 and to ABS Acrylonitrile-Butadiene-Styrene schedule 40 pipe and fittings.

* - AMENDMENT “A”

Only the piping materials, referred to in this Piping Material Regulation, shall be allowed. Precast concrete inlet and outlet tees, as provided by the manufacturers of septic tanks, will not be allowed.

Effective: June 15, 1983

* Adopted March 20, 1991, effective March 27, 1991.

PRIVATE WELL REGULATION

Definitions:

Abandoned well: A well that has not been used for water supply for a period of one year or more, unless the owner declares his intention to use the well again for supplying water within one year.

Board of Health: The Board of Health or its agent.

Non-potable well: Any well supplying water not intended for human consumption.

Pollution: Adverse effect on water quality created by the introduction of any matter.

Private Potable Well: Any well supplying water for human consumption, bathing or washing purposes, which is not otherwise regulated as a “public water system” (community or non-community water supply) under 310 CMR 22.00

Rented or leased property: Any dwelling used for habitation or business purposes by an occupant other than the owner, for the use of which a fee is paid. This includes, but is not limited to, campgrounds, motels, bed and breakfast, inns, and other accommodations used on a transient basis, as well as community-type buildings which are rented to community groups.

Well: Any pit, pipe, excavation, spring, casing, drill hole, or other source of water to be used for any purpose of supplying water, and shall include dug wells, driven or tubular wells, drilled wells (artesian or otherwise) and springs, gravel packed, gravel walled wells, gravel developed and wash borings and as further described in the U.S. EPA Manual of Individual Water Supply Systems. For the purpose of these regulations, it shall include both private potable wells and non-potable wells.

Well Drillers: Any person, firm or corporation drilling, constructing, or destroying a water supply well.

(PRIVATE WELL REGULATION – Cont.)

Yield: Quantity of water delivered per unit time which may flow or be continuously pumped from the well.

Registration of Well Drillers:

1. All well drillers doing business in the Town of Sandwich shall annually file with the Board of Health a copy of their current well driller's registration certificate issued by the Commonwealth of Massachusetts under MGL, Chapter 21, Section 16.

Well Construction Permit:

1. No well shall be installed, altered or repaired until a permit has been obtained from the Board of Health. A permit so granted shall expire 6 months from date of issue unless construction has begun.
2. The fee for this permit shall be set by the Board of Health; the fee for each well construction permit shall be \$ 40.00.
3. An application for a water well construction permit shall be submitted by the drilling contractor or his agent to the Board of Health on forms furnished by the Board. The well driller is responsible for obtaining said permit prior to well construction.
4. The location and design of the water well must be approved by the Board of Health prior to issuance of a well construction permit. Prior to approval, the Board of Health requires the following information to be submitted:

For construction of a private potable well at a new building, the owner or his agent shall submit a site plan drawn by a registered professional engineer or registered sanitarian, showing the location of the well in relation to building foundations, property lines, building sewer lines, the subsurface sanitary disposal systems serving the lot, all other septic systems within 200 feet and any other known potential sources of contamination within 200 feet which could affect the well. Such sources of contamination shall include sanitary landfills; auto junk yards; municipal sewage treatment facilities with on site disposal of primary or secondary effluent; car washes; road salt stockpiles; dry cleaning establishments; boat and motor vehicle service and repair; cabinet making; electronic circuit assembly; metal plating, finishing, and polishing; motor and machinery service and assembly; commercial paint, wood preserving and furniture stripping; sites where pesticides and herbicides are regularly applied, including golf courses and cranberry bogs; photographic processing; printing; chemical and bacteriological laboratories; transportation terminals; funeral homes; any principal use involving the sale, storage or transportation of fuel or oil; and any use which involves as an activity the manufacture, storage, use, transportation or disposal of toxic or hazardous materials. To meet this requirement, well location may be shown on the same plot plan submitted to the Board of Health for approval of septic system installation.

A registered engineer, registered sanitarian or registered land surveyor must determine and mark the location of the well on the lot prior to its installation.

For emergency repair, alteration or replacement of an existing well, the Board of Health may waive the requirements that the site plan be submitted and that the location of the well be staked on the lot.

(PRIVATE WELL REGULATION – Cont.)

5. Permit Conditions: All permits issued shall be subject to the conditions that all facilities shown shall be constructed in the location approved by the Board of Health. All permits issued shall be subject to the requirements of these regulations and to such further conditions as the Board of Health shall prescribe.

Well Construction:

1. The Board of Health recommends that well construction meet the guidelines of the New England Water Well Driller's Association.
2. The top of a well shall be above ground that is higher than any surface sources of contamination and above any known conditions of flooding by drainage or runoff from the surrounding land, unless located in a flood-proofed well house.
3. Wells must be constructed so as to maintain existing natural protection against pollution of the groundwater and to exclude all known sources of pollution from entering the well.
4. In areas where salt water or other pollutant intrusion is known or likely to occur, the Board of Health, working with a designing engineer, may specify the well screen level, pumping rate, water storage capacity or any other construction parameter which must be used to ensure that water of adequate quality is obtained.

Well Driller's Report

1. Within 30 days after completion of the construction of any well, the well driller shall submit to the Board of Health a copy of the Water Well Completion Report. The Board of Health will not issue a Certificate of Approval for the well until this report has been received.

Well Destruction

1. Any abandoned well shall be filled and sealed with clean sand or other inert material in such a manner as to prevent it from acting as a channel for pollution to the groundwater.
2. Prior to destruction of any well, a well destruction permit must be obtained from the Board of Health. The Board of Health will require a site plan showing the well location prior to issuance of the well destruction permit.
3. Within 30 days after completion of the destruction of any private well, the well owner or well driller acting as agent for the well owner shall submit to the Board of Health a report containing the following:
 - a) The name of owner of the well;
 - b) The geographic location of the well;
 - c) Any preliminary cleaning or re-drilling;
 - d) Types, depths, and materials of seals used.

(PRIVATE WELL REGULATION – Cont.)

Well Location

1. In general, private potable wells shall be located as far as possible from potential sources of contamination. The following minimum distances are required:

Property Line	10 feet
Leaching catch basin/drywell	25 feet, 100 feet recommended
Utility Right of Way	50 feet minimum, 100 feet recommended
Septic Tank	50 feet
Septic Leaching Facility	100 feet, (150 feet on any lot subdivided after April 17, 1983)
Septic Distribution Box	50 feet
Building Sewer	50 feet

2. Where, in the opinion of the Board of Health, adverse conditions exist, the above distances may be increased. In certain cases, special means of protection may be provided. Where possible, the well shall be up the groundwater gradient from sources of contamination.

Water Quality

1. The Board of Health will not approve any new well for human consumption until its water has been tested for the following chemical and bacteriological standards and the Board of Health has determined that the water is potable. Water samples taken from the well will be submitted to a state certified testing laboratory for analysis with the cost to be borne by the applicant, and results of this analysis submitted to the Board of Health for approval of water quality. Water quality and potability will be evaluated by the Board of Health in light of the National Interim Primary and Secondary Drinking Water Standards and the U.S. EPA Minimum Contaminant Levels (MCLs).

Water Quality Standards

Total Coliform	0 Colonies/100 ml. MF
pH	Recommend pH above 5.0
Sodium	20 ppm
Conductivity	500
Iron (Amended*)	0.3 ppm
Nitrate	10 ppm

*Amendment – In view of the fact that the local average iron concentration is 0.55 ppm, the Board of Health may choose to waive the 0.3 ppm requirement for approval; the Board may recommend or require additional testing in cases of elevated iron content.

(PRIVATE WELL REGULATION – Cont.)

2. In locations where potential sources of contamination are believed to exist, or where geologic or hydrologic conditions require more restrictive or additional standards than those outlined above, additional water testing and special standards may be required by the Board of Health to ascertain that water meets the Minimum Contaminant Levels set for public water supplies by the U.S. EPA under the Safe Drinking Water Act (SDWA) and 1986 SDWA amendments. Such testing may include EPA methods 601, 602, 502, 503, 624, 625 analysis for purgeable halocarbons or pesticides or aromatics, analysis for petroleum hydrocarbons or pesticides or any other analysis the Board of Health deems necessary to ascertain water quality.

(A technical handout discussing water quality standards in more depth is included as Section 2 of these Regulations; various test methodologies for common contaminants are outlined in Section 3).

3. The Board of Health further recommends that all well owners have their wells tested at a minimum of every two years and at more frequent intervals when water quality problems are known to exist.

Yield Test

1. Before approval, every private potable well shall be pump tested to determine yield. The pump test shall include a draw down test at a minimum pumping rate of 5 gallons per minute per 1 hour.
2. In areas where the possibility of salt water intrusion is known to exist, the Board of Health may increase the requirements for the drawdown test, in order to obtain a sample which is representative of the actual sodium content which may be found in the well once it is put into use.

Submission of Well Water Test Results

1. For all private potable wells, the results of the above water quality and yield tests shall be submitted to the Board of Health. The owner of the property which the well will serve or the well driller acting as agent for the owner, shall certify, on a form provided by the Board of Health, the following:
 - a) The location, date the sample was taken and the laboratory at which it was analyzed;
 - b) That the water sample whose analysis results were submitted to the Board of Health was taken from the well for which approval is being sought;
 - c) The results of the yield test performed by the well driller.

(PRIVATE WELL REGULATION – Cont.)

Well Approval

1. New private potable wells shall not be placed into use for human consumption until the Board of Health has approved the potability and quantity of the water provided and issued a Certificate of Approval to the owner of the property which the well serves.
2. Any such approval given by the Board of Health shall indicate only that the water quality is within the parameters set forth in these regulations. By its approval, the Board of Health specifically does not assure to the well owner or any third party that the water so tested is free from all potential contaminants, and well owners are encouraged to conduct further testing if contamination is suspected.
3. Approval of the well will be based on the water meeting the water quality criteria outlined above on the well being shown to be able to provide a yield of 5 gallons per minute at 40 psi.
4. In addition, for private potable wells installed as newly constructed buildings, the Board of Health will require that a certified plot plan be submitted to the Board of Health by a registered land surveyor or registered professional engineer showing the actual location of the well on the lot after installation. This information may be included in the certified plot plan required by the building inspector which shows the location of the foundation on the lot.
5. The Board of Health shall not approve a Building Permit or a Certificate of Occupancy until it has issued a Certificate of Approval for the well serving that building.
6. Private potable wells which fail to meet some or all of the requirements in these regulations may be approved by the Board of Health after a hearing at which a variance from these standards may be granted.

Existing Wells Serving Rental Properties

1. Every private potable well serving property which is rented or leased must have its water tested for the above water quality parameters at a minimum of once every two years. Where water quality problems are known to exist, the Board of Health may require more frequent testing.
2. Results of water quality tests shall be made available to all tenants of the property.
3. In cases where the well water does not meet the water quality standards outlined above, the Board of Health may require the property owner to provide an alternative approved source of drinking water for the tenants.

(PRIVATE WELL REGULATION – Cont.)

Test of Water Quality Upon Transfer of Real Estate

1. Prior to selling, conveying or transferring title to real property in the Town of Sandwich, the owner thereof shall have tested the water of every private potable well serving that property. A water sample from each well shall be submitted to a State certified laboratory for testing for the parameters outlined under Water Quality. This water quality test shall be performed not more than 30 days prior to transfer of the property. Results of the water test shall be submitted to the Board of Health prior to property transfer on a form provided by the Board of Health on which the owner will certify that the sample was taken from the well serving the property being transferred.

In addition, a yield test shall be run to certify well as capable of providing a minimum of 5 gallons per minute for 1 hour. (Amended November 13, 1989)

2. In addition, the owner shall give copies of all water test results of which he has knowledge (regardless of age of results) for the private potable well in question to any buyer and/or broker identified with the transfer. In the event that there is no buyer at the time the water is tested, a copy of all water test results must be given by the owner to the buyer before the property is put under agreement.
3. This regulation shall not apply to the conveyance or devise of a property to a surviving spouse or to any of the heirs or devisees of the property owner, and further, shall not apply to a sale under power of sale in a bonafide mortgage affecting the property.

Variance and Enforcement Procedure

1. The Board of Health may vary the application of any provision of this article with respect to any particular case when, in its opinion the enforcement thereof would do manifest injustice; provided that the decision of the Board of Health shall not conflict with the spirit of these minimum standards nor with the protection of human health and environmental quality.
2. Every request for a variance shall be made in writing and shall state the specific variance requested and the reasons therefore. Any variance granted by the Board of Health shall be in writing. Any denial of a variance shall also be in writing and shall state the reasons for the denial. A copy of any variance granted shall be available to the public at all reasonable hours in the office of the Town Clerk or the Board of Health while it is in effect.
3. Any variance or other modification authorized to be made by these regulations may be subject to such qualifications, revocation, suspension or expiration as the Board of Health expresses in its grant. A variance or modification authorized to be made by these regulations may otherwise be revoked, modified or suspended, in whole or in part, only after the holder thereof has been notified in writing and has been given an opportunity to be heard in conformity with the requirements of 310 CMR 11.00 for orders and hearings.
4. As a condition of granting a variance, the Board of Health may require a restriction to be recorded in the Registry of Deeds when, in the opinion of the Board of Health, knowledge that the well does not meet minimum standards would benefit future potential consumers of water supplied by the well.

(PRIVATE WELL REGULATION – Cont.)

5. So far as the Board of Health may provide, each section of these rules and regulations shall be construed as separate. If any section, regulation, paragraph, sentence, clause, phrase, or word of these rules and regulations shall be declared invalid for any reason, the remainder of these rules and regulations shall remain in full force and effect.
6. The provisions of Title 1 of the State Environmental Code (310 CMR 11.00) shall govern the enforcement of these regulations.

Adopted December 14, 1987, effective February 1, 1988

CERTIFICATION OF WELL WATER TEST RESULTS

I _____, acting as agent
for _____, do certify, under
name of property owner

the penalty of perjury, that the following water taken from a well located at:

and serving property located at: _____

Name of Property/Well Owner: _____

Date Water Sample was taken: _____

Laboratory at which water was tested: _____
(Must be state certified laboratory)

Date water analysis performed: _____

Result of yield test performed by well driller or other agent of owner: _____ gal/min

Tested for _____ hours.

Signature

Date

Water Quality Test Results

<u>Parameter</u>	<u>Sample Result</u>
pH	_____
Conductivity	_____
Iron	_____
Nitrate Nitrogen	_____
Sodium	_____
Other: _____	_____

SCHEDULE OF FINES

The Sandwich Board of Health, at its regularly scheduled meeting on August 8, 1988 at 7:30 P.M., voted unanimously to adopt the following schedule of fines for the Non-Criminal Disposition of Violations to the Board of Health Regulations as reviewed and approved by the Town of Sandwich Board of Selectmen.

- | | | |
|---------|--|---------------------------------------|
| 1. | Overflow of subsurface disposal works- CMR 15.02 (20) | \$ 50.00 per day |
| 2. | Failure to comply with an order to repair an on-site subsurface disposal works -
M.G.L. 310 CMR 15.26 (1)
M.G.L. 310 CMR 15.26 (2) | \$ 50.00 per day
\$ 50.00 per day |
| 3. | Failure to abate a nuisance
M.G.L. Chapters. 122, 122A, 123, 124, 125 & 125A | \$ 20.00 per day |
| 4. | Operating a Food Service Establishment without a permit
M.G.L. Chapter 111, Section 5, Chapter 94, Section 305A | \$200.00 per day
of non-compliance |
| 5. | Improper disposal of rubbish – M.G.L. Chapter 270, Section 16 | \$200.00 per day |
| 6. | Operating the following without a license or permit: | |
| A. | Bed & Breakfast – Town of Sandwich
Board of Health Regulation | \$ 50.00 per day |
| B. | Transporting Offal or Rubbish -
M.G.L. Chapter 111, Section 31A and 310 CMR 15.02 (3) | \$100.00 per day |
| C. | Installing subsurface disposal system – CMR 15.02 (1) & (2) | \$ 50.00 per day |
| D. | Motel or Trailer Park – M.G.L. Chapter 140, Section 32 A | \$ 20.00 per day |
| E. | Swimming Pool | \$ 50.00 per day |
| F. | Cabins | \$ 50.00 per day |
| 7.* | Failure to repair a floor drain system in order to meet requirements of current Floor Drain Regulation (Chapter 111, Section 31 & 122) | \$200.00 per day |
| 8.** | Failure to comply with any element of the Fuel Storage System Regulation | \$ 50.00 per day |
| 9.*** | Failure to comply with the Subsurface Disposal Works Inspection prior to Sale Regulation | \$ 50.00 per day |
| 10.**** | Failure to comply with an edict, order or regulation of the Board of Health | \$ 50.00 per day |

- * Amended June 25, 1990
- ** Amended March 25, 1991
- *** Amended November 8, 1993
- **** Amended February 8, 1999

SLUDGE AND SEPTAGE CONTROL REGULATION

SECTION I – Authority:

This Board of Health Regulation is adopted pursuant to M.G.L. c. 111, s.31 and shall be known and may be cited as the “Sludge and Septage Control Regulation of the Town of Sandwich”.

SECTION II – Purpose:

The purpose of this Regulation is to promote the health, safety, and general welfare of the residents of the Town of Sandwich through the regulation and control of the disposal of certain waste materials.

SECTION III – Conflict:

This Regulation shall be construed to repeal and supersede any provisions which are currently in effect that are in conflict with this regulation.

SECTION IV – Definitions:

For the purpose of this Regulation, certain terms and works are hereby designed as follows:

- A. Sludge – The semi-solid or liquid residual generated from a municipal, commercial or industrial wastewater treatment plant.
- B. Stabilized Sludge – Liquid or dewatered sludge containing pathogens from a municipal, commercial, industrial wastewater treatment plant that has been treated by P.S.R.P.
- C. Septage – Waste, refuse, effluent, sludge and other materials from septic tanks, cesspools or any other similar facilities.
- D. P.S.R.P. – A process to significantly reduce pathogens.
- E. Pathogen – An organism, chiefly a microorganism, including viruses, bacteria, fungi and all forms of animal parasites and protozoa, capable of producing an infection or disease in a susceptible host.
- F. Stockpile – Loose bulk stockpiling of said material, not to include individual commercially packaged material.

SECTION V – Prohibition:

No municipal, commercial, or industrial wastewater treatment plant sludge, stabilized sludge or septage may be stockpiled or spread in the Town of Sandwich on municipal property.

SECTION VI – Violations:

The Board of Health shall institute or cause to be instituted, in the name, of the Town, any and all legal actions that may be necessary for enforcement of this Regulation.

Effective July 13, 1998

REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES

SECTION I - AUTHORITY

There exists conclusive evidence that tobacco smoke causes cancer, respiratory diseases, various cardiac diseases, negative birth outcomes, allergies, and irritations to the eyes, nose, and throat to both the smoker and nonsmoker exposed to secondhand smoke. Evidence further demonstrates that tobacco is extremely addictive. More than 80% of all smokers begin smoking before age eighteen, and more than 3,000 young people begin smoking every day in this nation. Massachusetts youths are beginning smoking at very young ages. Therefore, these regulations are adopted pursuant to Massachusetts General Laws, Chapter 111, Section 31, as reasonable health regulations designed to protect and improve the health of the residents of the Town of Sandwich.

SECTION II – DEFINITIONS

As used in this regulation:

Bar – means an area which is primarily dedicated to the selling of alcoholic beverages and in which the service of food is only incidental to the consumption of such beverages.

Employee - means any individual who performs services for an employer in return for wages or profit.

Employer – means any individual, partnership, association, corporation, trust, or other organized group of individuals, including the Town of Sandwich, or any agency thereof, which regularly uses the services of two (2) or more employees.

Enclosed – means a space bound by walls and under a ceiling, where the walls extend continuously in an unbroken fashion from the floor to the ceiling.

Nonsmoking Area – means any area that is designated and posted by the proprietor or person in charge as a place where smoking by patrons, employees or others is prohibited.

Public Place – means an enclosed, indoor area when open to and used by the general public, including but not limited to the following facilities: licensed childcare locations; educational facilities; elevators accessible to the public; clinics and nursing homes; inns, hotel and motel lobbies, stairwells, halls, entranceways, and public restrooms; libraries; schools; municipal buildings; museums; retail food establishments; indoor sports arenas; theaters; auditoriums; public transit facilities; and any rooms or halls when used for public meetings. A room or hall used for a private social function in which the sponsor of the private function and not the owner or proprietor has control over the seating arrangements shall not be construed as a public place.

Restaurant – means any establishment serving food for consumption on the premises which maintains tables for the use of its customers. This includes cafeterias and cafeterias in the workplace.

Retail Food Establishment – means any establishment commonly known as a supermarket or grocery store in which the primary activity is the sale of food items to the public for off-premise consumption.

Retail Store – means any establishment selling goods or articles or personal services to the public.

(REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES – Cont.)

Seating Capacity – means that capacity designated on the occupancy permit of a restaurant, theater or sports arena.

Smoking – means the lighting of any cigar, cigarette, pipe or other tobacco product or having possession of any lighted cigar, cigarette, pipe, or other tobacco product.

Indoor Sports Arena – means any sports pavilion, gymnasium, health spa, boxing arena, swimming pool, roller or ice hockey rink, bowling alley, or other similar place where members of the general public assemble to engage in physical exercise, participate in athletic competition or witness sporting events.

Workplace – means any area within a structure or portion thereof at which two (2) or more employees perform services for their employer. It also includes employee lounges, restrooms, conference rooms, hallways, stairways, and entranceways.

SECTION III – PROHIBITION ON SMOKING IN PUBLIC PLACES

No person shall smoke in any public place except that smoking shall be permitted in specifically designated smoking areas as hereinafter provided. No place governed by these regulations shall be designated as a smoking area in its entirety. Nothing in this section shall be construed to require the designation of smoking areas.

A. Restaurants & Bars

1. The prohibition on smoking in public places shall apply to all restaurants and bars, unless enclosed areas can be set aside that effectively prevent smoke from traveling from the smoking area to the non-smoking areas. Smoking shall be prohibited in any restaurant or bar that contains less than 800 square feet of seating space. Smoking areas may be designated by the proprietor(s) or other person(s) in charge of a restaurant or bar, except that restrooms and places in which smoking is prohibited by the fire marshall, law, or regulation, may not be designated as smoking areas.
2. Each restaurant and bar shall have and comply with a policy of asking seating preference of patrons.
3. Smoking areas shall comprise no more than fifty percent (50%) of the seating capacity of the restaurant. Seats at the bar shall be included when determining seating capacity for the purpose of calculating the size of the non-smoking area.

B. Museums, Libraries, Clinics, Nursing Homes, Auditoriums, Indoor Sports Arenas, Hotels, Municipal Buildings

Smoking areas may be designated in museums, libraries, inns, hotel, and motel lobbies, clinics, nursing homes, long-term care facilities, theaters, auditoriums, educational facilities, indoor sports arenas, and municipal buildings provided, however, that comparable non-smoking areas of sufficient size and capacity are available and provided, further, that physical barriers are used to segregate smoking areas from non-smoking areas. Hallways, elevators, entranceways, stairwells, restrooms, and waiting areas in all the above facilities may not be designated as smoking areas. Areas designated as smoking and non-smoking areas must be conspicuously marked.

(REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES – Cont.)

C. Public Transit Facilities

The prohibition on smoking in public places shall apply to buses, taxis, and other means of public mass transit while operating within the boundaries of the Town of Sandwich, and indoor platforms.

D. Retail Stores

The prohibition on smoking in public places shall apply to retail stores doing business with the general public. Smoking areas may be designated in portions of said stores not open to the public and all areas within retail tobacco stores.

E. Area Where Smoking is Optional

Notwithstanding any other provision of these regulations, the following areas shall not be subject to the smoking restrictions of the regulations:

1. Any business which has been declared by its owners, operator, manager or person in charge to be a non-smoking establishment;
2. Private residences;
3. Hotel and motel rooms rented to guests;
4. Retail tobacco stores;
5. Hotel and motel conference/meeting rooms, and public and private assembly rooms while these places are being used for private functions;
6. Private or semi-private rooms of nursing homes and long-term care facilities, occupied by one (1) or more patients, all of whom are smokers who have requested in writing on the facility admission form to be placed in rooms where smoking is permitted;
7. Limousines for hire, when the driver and all passengers affirmatively consent to smoking in such vehicle;
8. Performers upon the stage, provided that the smoking is part of a theatrical production.

Implementation

The proprietor(s) or other person(s) in charge of a place covered by this regulation shall prevent smoking in non-smoking areas by:

- A. Conspicuously posting a notice or sign at each entrance to a public place indicating smoking is prohibited therein except in specifically designated areas. In addition, conspicuously posting “Smoking” or “No Smoking” signs, or the international “No Smoking” symbol (consisting of a pictorial representation of a burning cigarette enclosed in a red circle with a red bar across it) in every area where smoking is permitted or prohibited by this ordinance;

(REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES – Cont.)

- B. Arranging seating so that existing physical barriers, ventilation systems and available space are utilized to minimize the exposure to smoke of persons in the non-smoking area. Non-smoking areas are to be situated near the fresh air intake vent of the building;
- C. Asking patrons who may be smoking in the non-smoking area either to refrain from smoking or to move to a smoking area;
- D. Using any other means which may be appropriate and reasonable to enforce these regulations.

SECTION IV – WORKPLACE

- A. It shall be unlawful for any person to smoke in any workplace except in specifically designated smoking areas as described in Section IV, (B).
- B. Each employer may specifically designate enclosed areas in which employees may smoke, provided, however, that comparable non-smoking areas of sufficient size and capacity are available and provided, further, that physical barriers and/or ventilation systems are used to segregate smoking areas from non-smoking areas. Hallways, elevators, entranceways, stairwells, restrooms and waiting areas in all the above facilities may not be designated as smoking areas. Areas designated as smoking and non-smoking areas must be conspicuously marked.
- C. Each person having control of premises upon which smoking is prohibited by this regulation, or his or her agent or designee, shall conspicuously display upon the premises an appropriate number of signs reading “Smoking Prohibited by Law”.
- D. It shall be unlawful for any person having control of any premises upon which smoking is prohibited by this regulation to knowingly permit, or for his or her agent to knowingly permit, a violation of this regulation.

SECTION V – PUBLIC PLACES/WORKPLACES ENFORCEMENT

- A. Any person who smokes in a non-smoking area shall be subject to a fine of not less than twenty dollars (\$20.00) nor more than fifty (\$50.00) for each violation.
- B. Any proprietor(s) or other person(s) in charge of a public place or workplace who fail(s) to comply with these regulations shall be subject to both:
 - 1. a fine of up to two hundred dollars (\$200.00) for each day a violation continues; and
 - 2. suspension of any license issued by the Board of Health for that public place for a period of up to two days for each day of non-compliance.
- C. In addition to the remedies provided by A and B above, the Board of Health or any person aggrieved by the failure of the proprietor or other person in charge of a public place or workplace to comply with any provision of this subsection may apply for injunctive relief to enforce the provisions of this subsection in any court of competent jurisdiction.

(REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES – Cont.)

- D. Any person aggrieved by the failure or refusal to comply with restrictions in any municipal building may complain in writing to the head of the department or agency occupying the area where the violation takes place. Said agency or department head shall respond in writing within fifteen days to the complainant that he has inspected the area described in the complaint and has enforced the provisions of this section as provided herein.

SECTION VI – OTHER APPLICABLE LAWS

These regulations shall not be interpreted or construed to permit smoking where it is otherwise restricted by other applicable health, safety or fire codes, regulations or statutes.

SECTION VII – TOBACCO SALES TO MINORS PROHIBITED

A. Sales to Minors

In conformance with Massachusetts General Laws Chapter 270, Section 6, whoever sells a cigarette, chewing tobacco, snuff, or any tobacco in any of its forms to any person under the age of eighteen or, not being his parent or guardian, gives a cigarette, chewing tobacco, snuff, or tobacco in any of its forms to any person under the age of eighteen, shall be punished by a fine of not less than one hundred dollars (\$100.00) for the first offense, not less than two hundred dollars (\$200.00) for the second offense, and not less than three hundred dollars (\$300.00) for any third or subsequent offense.

B. Posting State Law

In conformance with Massachusetts General Laws, Chapter 270, Section 7, a copy of Massachusetts General Laws Chapter 270, Section 6 shall be posted conspicuously by the owner or other person in charge thereof in the shop or other place used to sell cigarettes at retail. Such notice shall directly face the purchaser and shall not be obstructed from view or placed at the height of less than 4 feet or greater than 9 feet from the floor.

The Board of Health or its enforcement officer(s) shall enforce this regulation

Whoever violates this provision shall be punished by a fine of not more than fifty dollars (\$50.00). Any person unlawfully removing a copy so posted while said premises are used for the sale of cigarettes shall be punished by a fine of ten dollars (\$10.00).

** C. Self Service Free Standing Displays Prohibited

Displays designed/located to prohibit public access.

D. Sale by Persons Under Age 18

No person or entity selling tobacco products shall allow anyone under age eighteen (18) years of age to sell cigarettes or other tobacco products until such employee reads the Board of Health Regulations and state laws regarding sale of tobacco and signs a sworn statement, a copy of which will be placed on file in the office of the Board of Health, that (s)he understands and will uphold the regulations.

(REGULATIONS AFFECTING SMOKING IN CERTAIN PLACES – Cont.)

* E. Prohibit Cigarette Vending Machines

All sale of cigarette by machine is prohibited.

F. Sale or distribution of tobacco products in any form other than an original factory-wrapped package is prohibited. ** This prohibits free giveaways of tobacco products.

G. Any person or entity who fails to comply with C, D, E, and F of this section shall be punished by a fine of not less than one hundred dollars (\$100.00) nor more than two hundred dollars (\$200.00).

** SECTION VIII – FOOD SERVICE/TOBACCO PERMIT IS REQUIRED BY ANY ESTABLISHMENT SELLING OR DISTRIBUTING TOBACCO PRODUCTS.

SECTION IX – SEVERABILITY

If any provision of these regulations is declared invalid or unenforceable, the other provision shall not be affected thereby but shall continue in full force and effect.

SECTION X – EFFECTIVE DATE

The original version of these regulations was adopted by the Board of Health on November 25, 1991, with an effective date of December 4, 1991.

Amended November 23, 1992

* Amended September 27, 1993, effective November 1, 1993.

** Amended November 30, 1998, effective January 11, 1999

SOLID WASTE HAULERS' REGULATION

RATIONALE:

The participating communities of Mashpee, Falmouth, Sandwich, and the Massachusetts Military Reservation (MMR) in 1987 agreed to a joint solid waste disposal solution by jointly funding the cost to engineer, construct, operate and manage the Upper Cape Regional Transfer Station (UCRTS) located at the MMR. Under Chapter 40, Section 44 of the Massachusetts General Laws such regional, inter-municipal refuse disposal is strongly encouraged.

Continued landfilling of our solid wastes, although at first might appear the lesser expensive method of refuse disposal in those communities where space remains available, however, the side effects of landfilling is the potential contamination of groundwater. This has been documented in various Cape towns and the associated clean-up costs for outweigh the cost benefits of landfilling. Furthermore, landfills in the Commonwealth will soon be mandated to close.

The responsibility for the control of TRANSPORT and REMOVAL of solid wastes falls under the jurisdiction of local Boards of Health, M.G.L. Sections 31A and 31B of Chapter 111. Annual permits to transport garbage are issued by Boards of Health. Furthermore, these Sections grant local Boards of Health the authority to adopt and enforce regulations regarding such transport.

(SOLID WASTE HAULERS' REGULATION – Cont.)

The Upper Cape Transfer Station Board of Managers, following a public comment period, adopted a set of rules and regulations for the operation of the station in May 1989, with subsequent amendments adopted in August 1989 and in November 1990. Section 2 of these regulations instructs trash haulers, licensed by Boards of Health, which routes are to be taken to access the transfer station. Amendment #3 specifies penalties to be assessed to companies whose drivers fail to use the approved routes. All licensed trash haulers have received copies of the rules and regulations and subsequent amendments. In spite of this, certain companies are not complying.

THEREFORE, under the authority of M.G.L. 111:31B, the Board of Health of the Town of Sandwich hereby adopts the following regulations:

1. All trash haulers must be licensed by the Board of Health and must comply with all local Board of Health regulations and all the rules and regulations and subsequent amendments of the UCRTS Board of Managers.
2. All haulers licensed by the Board of Health in the Town of Sandwich must transport their refuse loads to the UCRTS which is a Board of Health approved site or other facility approved by the Board of Health and, in the case of the UCRTS, must follow the route specified in the UCRTS rules & regulations. No refuse loads may be disposed of at any site other than one approved by the Board of Health.
3. All haulers licensed by the Board of Health in the Town of Sandwich must submit a payment bond to the Town in the amount of \$10,000.00 or such lesser amount as determined by the Board of Health, or other Town department controlling the financial supervision of the UCRTS accounts, to be appropriate and consistent with the tonnage billed to the hauler.

Any violation of any of these regulations will result in the following:

1. Revocation or suspension of license to transport refuse in the Town of Sandwich.
2. Forfeiture of payment bond, in full or in part, depending on the nature of the violation(s) and their applicable fine(s).
3. Imposition of all other applicable fines as defined in M.G.L. 111:31B and in the UCRTS rules and regulations.

SEVERABILITY:

In the event any section of these regulations is judged invalid in a court of law, such section shall be severed from the remaining sections which shall remain in full force and effect.

These regulations have been adopted by the Sandwich Board of Health on June 10, 1991 and shall become effective upon publication.

LIVESTOCK/STABLE REGULATIONS

Authority: Massachusetts General Law, Chapter 111, Sections 31, 155, and 157.

DEFINITIONS

- HORSE:** Any horse, foal, pony, mule or burro.
- STABLE:** Any building or shelter, or any part of a building or shelter used to house livestock.
- PERSON:** A natural person, firm, partnership, company, corporation or business trust.
- PADDOCK:** A bare ground fenced in area for confining livestock. As used herein, said term shall include areas commonly referred to as corrals but not pastures.
- PASTURE:** A fenced in area for confining livestock, which is primarily covered by vegetation suitable for grazing.
- LIVESTOCK:** Any horse, sheep, goat, swine or bovine animal of any age or sex.
- MANURE STORAGE AREAS:** Includes areas that hold materials commonly referred to as manure, compost or bedding.
- WETLAND:** As defined by the Town of Sandwich Wetland Bylaw.

PERMITS

No person shall erect, occupy, maintain or use a stable within the Town of Sandwich without first Obtaining a permit from the Board of Health.

Such permits shall be issued for a period of time not to exceed one year and may be renewed.

Such permits are not transferable between person or persons.

The permit fee shall be Forty Dollars (\$40.00) per year.

MINIMUM SETBACKS

LOCATION

The following conditions must be met or exceeded before a new permit will be issued:

Stables shall be located not less than:

- a) Four hundred (400) feet from any public water supply;
- b) One hundred fifty (150) feet from any private well;
- c) One hundred (100) feet from any wetland as approved by the Conservation Commission or its agent;

NOTE: The stable location must meet the applicable Town of Sandwich Zoning Setback Requirements as determined by the Town of Sandwich Building Inspector.

(LIVESTOCK/STABLE REGULATIONS – Cont.)

Paddocks shall be located not less than:

- a) Ten (10) feet from adjoining property lot line or the line of any street, court or passageway;
- b) Four hundred (400) feet from any public water supply;
- c) One hundred fifty (150) feet from any private well;
- d) One hundred (100) feet from any wetland as approved by the Conservation Commission or its agent.

Pastures shall be located so as to prevent livestock from eating or damaging the shrubbery or property of any abutter.

Manure Storage Areas shall be located not less than:

- a) One hundred fifty (150) feet from an abutter's dwelling house;
- b) Twenty (20) feet from adjoining property lot lines or the line of any street, court or passageway;
- c) Four Hundred (400) feet from any public water supply;
- d) One hundred fifty (150) feet from any private well;
- e) One hundred (100) feet from any wetland as approved by the Conservation Commission or its agent;

CONSTRUCTION OF STABLE

Stables shall be of durable construction to protect the building from deterioration or damage by rodents, termites, and dampness. Stables intended for horses shall have shelter of adequate size so that a horse will have room to comfortably lie down or stand up.

Floor in shelter shall be made from materials approved by the Board of Health or the animal inspector, and shall be sloped to facilitate proper drainage of liquid waste and designed to permit easy cleaning.

Each stable shall be provided with adequate light and ventilation.

There shall be an adequate water supply for watering the animals, for fire control and for cleaning the premises. Private well water shall be tested for portability annually by a State certified laboratory, and a copy of the analysis shall be submitted to the Board of Health prior to the issue of a license.

STABLE, PADDOCK AND PASTURE MANAGEMENT

Stables shall not be for human habitation.

A stable or a stall within a stable must be provided for all livestock.

Grain feed shall be stored in covered metal or metal lined bins or containers.

An adequate means of fly and insect control shall be provided in the stable, the paddock, the manure storage areas, and any other area that breed flies or other insects.

All stables must be kept clean at all times and accumulated manure removed at least once each day. Any person allowing livestock to use a paddock shall remove waste matter from the paddock at least once per day in a manner commensurate with the area involved, or at the discretion of the Board of Health.

No manure or used bedding material shall remain outside the barn unless collected in compost piles or disposed of based on a schedule approved by the Board of Health. The manure or used bedding stockpiled for composting or disposal shall be adequately managed or covered to eliminate odor, flies or other nuisance.

Livestock shall be kept either in a stable, in a paddock, or in a pasture. Livestock shall not be permitted at large outside the premises. Livestock shall be deemed to be at large when it is off the premises and unaccompanied by the owner, agent or employee of the owner or caretaker.

Paddock areas should be gently sloping to minimize standing pools of surface liquids. Horses that are allowed to roam on the land shall be provided with adequate fences, constructed as the safely confine the animal and prevent the animal from eating shrubbery from abutter's land.

MANURE MANAGEMENT

Each applicant for permit shall calculate the nitrate loading of the proposed site in accordance with the examples shown in Appendix 1. If the calculated nitrate loading for the site equals 5 ppm or more in a recharge area of a public water supply or 7 ppm outside of the recharge area, then the applicant must employ a strict manure management that shall consist, at a minimum, the following practices:

- The use of sufficient absorbent material in stall to collect urine.
- The installation and use of a rubber pad ¼ inch minimum thickness and sized to cover the stall floor area.
- Daily collection of manure and soiled bedding from stalls and the paddock will be stored in covered containers or trailer;
- Weekly removal of collected manure and soiled bedding from the site; and
- Maintenance of a waste removal log to record the dates on which manure and soiled bedding is removed from the site.

Composting is prohibited on sites that exceed the calculated nitrate loadings in Appendix 1. Failure to comply with the aforementioned manure management practices at sites that exceed the calculated nitrate loadings can result in revocation of the Stable Permit and/or the issuance of an order to remove the livestock from the site.

(LIVESTOCK/STABLE REGULATIONS – Cont.)

VARIANCES

Upon written request, the Board of Health may vary the applicability of one or more of these regulations, if the Board finds that the regulation(s) causes undue hardship and that the granting of the variance(s) would not be detrimental to the public health. All variances granted shall be in writing and shall be subject to additional conditions as the Board of Health may deem necessary.

SANITARY CONDITIONS AND NUISANCES

The stable and its surroundings shall be maintained free of unsanitary conditions. Unsanitary conditions are those which, in the opinion of the Board of Health, result in, or are conducive to (i) the breeding of flies, (ii) creation of offensive odors, (iii) vermin (including flies, lice, mice, rats and mosquito infestation), (iv) liquid effluent, (v) excessive runoff, (vi) disease carriers in such concentration and such duration as to:

- (a) cause a nuisance; or
- (b) be injurious or potentially injurious to human health.

INSPECTION

Inspections will be conducted at least annually, and shall be expected during reasonable hours. The Board of Health, its Agent, or the Animal Inspector shall conduct the inspections. Failure to correct cited violations may result in revocation of the permit.

COMPLIANCE AND PENALTIES

Any person who fails to comply with these regulations may be punished by a fine not to exceed two hundred (\$200.00) dollars per day as set by the Board of Health (Section 157, Chapter 111, Massachusetts General Laws) depending on the severity of the violation, and may be subject to suspension or revocation of stable permit.

EXEMPTIONS

The keeping of livestock and horses at sites that preempts the Sandwich Board of Health Stable Regulation effective date of May 6, 1993 are not subject to the Location (set back requirements) requirements.

SEVERABILITY

If any provision of these regulations is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.

Adopted: April 26, 1993
Effective: May 6, 1993

APPENDIX 1 – EXAMPLES OF NITRATE LOADING CALCULATIONS

For the purpose of an example calculation the use of 1200 lbs for a horse is assumed for example only. For calculations of actual, the weight of the horse shall be determined based on the breed standard.

#1) 1 Horse on Unoccupied Land

Nitrate loading calculations should reflect the following conditions:

Horse: 1,200 lbs; 10% leaching of nitrogen as NO₃⁻; 0.027 lbs N/day/100 lbs of horse

No Home

Recharge Rate for Natural Areas: 17 "/year

CALCULATION

Lot Size: 1 Acre (43,560 ft²)

Horse

(1,200 lb horse)(0.00027 lbs N/day/lb horse)(0.1 leaching) (454 x 10³ mg/lb) = 14,710 mg NO₃⁻/d

Natural

(43,560 ft²) (1.42 ft/yr) (28.32 L/ft³) (1 yr/365 day) = 4799 L/day

Summary

$$14,710/4,799 = 3.06 \text{ ppm}$$

Thus on land without other nitrate loading sources, one horse will require:

In a recharge area (5 ppm max) $3.06/5 \times 43,560 \text{ ft}^2 = 26,659 \text{ ft}^2 = 0.61 \text{ acres}$

In a non-recharge area (7 ppm max) $3.06/7 \times 43,560 \text{ ft}^2 = 19,042 \text{ ft}^2 = 0.44 \text{ acres}$

#2) 3 Bedrooms Single Family Home + 1 Horse

Nitrate loading calculations should reflect the following conditions:

Sewage Flow: 110 gallons/ bedroom/day

Effective Nitrate Concentration in Disposal Works Effluent: 40 ppm

Nitrate Loading per Bedroom: 13.5 pounds/year

(LIVESTOCK/STABLE REGULATIONS – Cont.)

Lawns

Area: 5,000 ft²
Fertilizer: 3 lbs/1,000 ft²

Leaching: 25%

Horse: 1200 lbs; 10% leaching of nitrogen as NO₃ -; 0.027 lbs N/day/100 lbs of horse

Recharge Rate for Natural Areas: 17 ”/ year

Recharge

Impervious Surfaces: 40 inches/year
Road Runoff Concentrations: 1.5 ppm NO₃ -
Roof Runoff Concentrations: 0.75 ppm

CALCULATION

Three Bedroom Home

Lot Size: 2 Acres (87,120 ft²)

Natural Area: 84,620 ft² Lawn Area: 5,000 ft²

Impervious Surfaces: Roof Area: 2,000 ft² Paving Area: 500 ft²

Title V Flow: 110 gallons/day

Wastewater:

(3 Bedroom) (110 gallons/bedroom) (3.785 L/gal) = 1,249 L/day
(1,249 L/day) (40 mg NO₃ -/L) = 49,960 mg NO₃ -/day

Impervious Surfaces:

Roof: (2,000 ft²) (40 in/yr) (1 ft/12 in) (28.32 L/ft³) (1 year/365 days) = 517.3 L/day
(517.3 L/day) (0.75 mg NO₃ -/L) = 387.9 mg NO₃ -/day

Paving: (500 ft²) (40 in/yr) (1 ft/12 in) (28.32 L/ ft³) (1 year/365 days) = 129.3 L/day
(129.3 L/day) (1.5 mg NO₃ -/L) = 194 mg NO₃ -/day

(STABLE REGULATIONS-Cont.)

Lawn:

$$(5,000 \text{ ft}^2) (3 \text{ lbs}/1000 \text{ ft}^2/\text{year}) (1 \text{ yr}/365 \text{ days}) (454,000 \text{ mg}/\text{lb}) (0.25) = 4,664.4 \text{ mg NO}_3^-/\text{day}$$

Horse:

$$(1,200 \text{ lb horse})(0.00027 \text{ lbs N}/\text{day}/\text{lb horse})(0.1 \text{ leaching}) (454 \times 10^3 \text{ mg}/\text{lb}) = 14,710 \text{ mg NO}_3^-/\text{d}$$

Natural:

$$(84,620 \text{ ft}^2) (1.42 \text{ ft}/\text{yr}) (28.32 \text{ L}/\text{ft}^3) (1 \text{ yr}/365 \text{ day}) = 9,323 \text{ L}/\text{day}$$

Summary:

$$\frac{49,960 + 387.9 + 194 + 4,664.4 + 14,710}{1,249 + 517.3 + 129.3 + 9,323} = \frac{69,916 \text{ mg NO}_3^-}{11,219 \text{ L}/\text{day}} = 6.2 \text{ ppm}$$

to meet 5 ppm requires 13,983 l/day = natural area of 12,087 L/d = 109,710 ft² or a total lot size of 112,210 ft² = 2.5 acres.

to meet 7 ppm requires 9988 l/day = natural area of 8092 L/d = 73,447 ft² or a total lot size of 75,947 ft² = 1.75 acres.

APPENDIX 2 – ANIMAL NITROGEN PRODUCTION¹

<u>Animal</u>	<u>lbs/day of nitrogen per 100 lbs animal</u>
Dairy Cattle	0.040
Beef Cattle	0.034
Finishing Pig	0.045
Sow & Litter	0.060
Sheep	0.045
Horses	0.027
Chickens	0.087
Ducks	0.142

Per a Mass-Balance Nitrate Model for Predicting the Effects of Land Use on Groundwater Quality in Municipal Wellhead Protection Areas, The Cape Cod Aquifer Project (CCMP) (July 1988)

SUBSURFACE DISPOSAL WORKS INSPECTION PRIOR TO SALE REGULATION

The Sandwich Board of Health held a public hearing on August 14, 1995 at 7:15 P.M. at the Town Office Building, 16 Jan Sebastian Drive, Sandwich, MA to amend the Board of Health Subsurface Disposal Works Inspection Prior to Sale Regulation in accordance with the provisions of Section 31 and Section 127A of Chapter 111 of the Massachusetts General Laws.

The amended regulation:

1. Rescinds the portion of the regulation adopted 2-9-89, amended 11-18-93.
2. Adopts the 1995 Revised Title V 310 CMR 15.300 Subpart D: Inspection and Maintenance of Systems: In its entirety.
3. Reaffirms the amendments adopted November 8, 1993, effective November 18, 1993, as stated:

In order to protect the groundwater contained in the single source aquifer which underlies the Town of Sandwich, the Sandwich Board of Health had adopted a regulation dealing with the inspection of subsurface disposal works of properties at the time of sale or transfer. The intent of this regulation is to identify disposal works which have failed, and/or are defective.

The Sandwich Board of Health, at their regularly scheduled meeting of September 28, 1998 has voted to adopt the following amendments to the above mentioned regulation.

1. Properties that have cesspools serving as the subsurface disposal works are deemed automatically failed and must be upgraded to conform to the provisions of State and local regulations relative to the installation of subsurface disposal works within one (1) year of the transfer of property.
2. Subsurface septic system facilities that have, upon inspection, been found to have failed or are defective, shall be repaired in accordance with State and local regulations within one (1) year of the discovery of same, based upon the Title V Subsurface Sewage Disposal System Inspection.

A shorter period of time can be set by the Board of Health based upon the existence of an imminent health hazard.

3. Any person or persons, company or corporation that shall transfer any property or properties subject to this regulation without complying with the provisions of same shall be subject to a fine of not less than \$50.00 per day for each and every day of noncompliance.

This fine shall be computed from the date of sale of a property until such date of compliance.

4. A variance may be granted by the Board of Health with respect to any particular case, when in its opinion, some part of the regulation will impose undue hardship upon an applicant, and that the granting of the variance would not be detrimental to the public health.

Every request for a variance shall be in writing. Any variance granted by the Board shall be in writing after such request has been reviewed at a public meeting.

TESTING OF WATER SUPPLY REGULATION

Acting under authority of Chapter 111, Section 31 of the General Laws of the Commonwealth of Massachusetts the Board of Health of the Town of Sandwich hereby adopts the following amendments to the "Minimum Requirements for the Disposal of Sanitary Sewage in the Town of Sandwich, Massachusetts" as adopted by the Board of Health on September 5, 1972.

1. The following paragraph shall be added to Section 1 of said regulations:

Paragraph a, b, and c of this Section shall not affect subdivision or building lots approved by the Board of Health prior to September 15, 1972; said subdivisions or lots being governed by regulations in effect prior to said date.

2. Section 2 of said regulations is rescinded and the following shall be inserted in place thereof:

Section 2:

A Disposal Works Construction Permit shall not be issued until a supply of water either from a water system operated by a town, district, company or corporation or from an approved private domestic water supply, is available on the building lot to be served by the disposal works, provided the following requirements have been met:

- a. The private domestic water supply must be certified, in writing to the Board of Health, to be suitable for human consumption. The certification shall be made by an agency or company approved by the Massachusetts Department of Public Health to make such certifications, and the agency or company making the certification shall inspect the water supply and draw the sample as well as conduct all tests.
- b. The minimum distance from property lines for a private domestic water supply serving a building lot approved by the Board of Health after September 14, 1972, shall be 50 feet.

These amendments to the "Minimum Requirements for the Disposal of Sanitary Sewage in the Town of Sandwich, Massachusetts" having been adopted by the Board of Health of the Town of Sandwich on April 3, 1973 shall become effective on April 10, 1973.

TITLE V AMENDMENTS

At its regular meeting held on July 8, 1985, the Sandwich Board of Health voted, under authority of Chapter 111, Section 31, the following regulations:

A regulation concerning the conversion, change of use, replacement, addition to or alteration of existing structures within the Town of Sandwich.

"No building within the Town of Sandwich shall be converted or altered or repaired so as to enable its use year round nor shall its use be changed unless the present existing septic system complies with requirements of Title V, 310 CMR 15.00, or the system can be upgraded to comply with Title V. In addition, no building shall be remodeled, replaced or altered in any manner unless said septic system complies with Title V, 310 CMR 15.00, or written approval is obtained from the Board of Health."

(TITLE V AMENDMENTS – Cont.)

The Board of Health of the Town of Sandwich acting under the authority of Chapter 111, Section 127A of the General Laws of the Commonwealth of Massachusetts as amended hereby adopts the following rule and regulation applicable to Section 15.02, Paragraph 2 of the State Environmental Code Title V, Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, as follows:

15.02 – (2) Notwithstanding the general provisions of Section 15.02 (2) Disposal Works Installer’s Permit.

A disposal works installer’s permit shall not be issued to any person or firm unless such applicant for said permit is the owner of, a partner in, a member of a corporation duly approved by the Commonwealth of Massachusetts and be engaged in the business of installing and repair of subsurface disposal systems.

A list of equipment owned or under lease by said applicant shall be presented to the Board of Health prior to issuance of said permit.

Effective June 15, 1983

In accordance with the provisions of Section 31 and Section 127A of Chapter 111 of the General Laws, Regulation CMR 400:02 of Title I and Regulation CMR 15.03 of Title V of the State Environmental Code, and for the protection of the public health and for the protection of the sole source aquifer, the Town of Sandwich Board of Health adopts the following regulation:

The installation of a private water supply and a private sewage disposal system on a lot containing an area less than 40,000 square feet of buildable land is prohibited and in no case shall a private water supply and a private sewage disposal system be located within 150 feet of each other.

Variance to this regulation may be granted by the Board of Health, after a hearing, during which the applicant proves that the installation of the private sewage disposal system will not adversely affect surface or subsurface public or private water resources of:

1. The lot subject to the application
2. The adjacent land (whether developed or not) or
3. A defined aquifer recharge area.

In granting variances, the Board will take into consideration population density of the area, the size and shape of the lot, slope, the suitability of the soil for drainage and percolation, existing and known future water supplies, depth to groundwater and impervious material and area reserved for expansion of sewage system and relocation of water supply in case of failure.

This regulation takes effect on the date following publication, but does not apply to preliminary or definitive subdivision plans filed prior to publication.

Adopted April 8, 1983.

(TITLE V AMENDMENTS – Cont.)

The Board of Health of the Town of Sandwich acting under the authority of Chapter 111, Section 127A of the General Laws of the Commonwealth of Massachusetts as amended, hereby adopts the following rule and regulation applicable to Section 15:03:7 of the State Environmental Code, Title V Minimum Requirements for the Subsurface Disposal of Sanitary Sewage as follows:

15:03:7 notwithstanding the general provisions of Section 15:03:7 be it amended that no parts of a subsurface disposal system be located closer than one hundred feet (100 feet) to a marsh or wetland area as described in the Wetlands Protection Act of the Massachusetts General Laws, Chapter 131, Section 40.

Adopted October 3, 1984 and Effective October 10, 1984.

Notwithstanding the provisions of 310 CMR 15.00 the State Environmental Code, Title V, Paragraph 15.03.3 (deep observation holes) the Board of Health of the Town of Sandwich shall require that one deep observation hole be dug in the exact location of the primary leaching facility. Effective August 19, 1987

The Board of Health at its regularly scheduled meeting May 9, 1978 has voted that the minimum size septic tank for a four-bedroom home shall be not less than 1250 gallons. This order is effective immediately.

Effective May 17, 1978

The Board of Health of the Town of Sandwich has adopted, in accordance with the provisions of Chapter 111, Section 31 of the General Laws, the following regulation:

Notwithstanding the provisions of 310 CMR 15:06 (1) of the State Environmental Code, Title V Capacities;

A septic tank shall have an effective liquid capacity of not less than 150 percent of the design flow estimated, but in no case less than 1250 gallons.

Note: Individual cases (sensitive areas) could still have leaching areas designed to suit.

Adopted March 20, 1991

Effective March 27, 1991

TOXIC OR HAZARDOUS SEPTIC SYSTEM ADDITIVES REGULATION

Notice is hereby given that the following regulations has been adopted by the Sandwich Board of Health under the provisions of Massachusetts General Laws, Chapter 111, Section 31 and Section 127A, at its meeting on March 24, 1986.

Having determined that the health and welfare of the inhabitants and natural resources of the Town may be directly threatened by the use of toxic or hazardous septic system additives; the use and sale of any chemical additives including but not limited to mineral acids such as hydrochloric and sulfuric acid, or halogenated organic solvents such as tri and tetrachloroethane is prohibited within the Town of Sandwich.

This prohibition does not extend to non-toxic aqueous solutions of bacteria or enzymes providing such products possess Commonwealth of Massachusetts or Federal E.P.A. certification that they contain no toxic substances.

REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE OR SMALL WASTEWATER TREATMENT FACILITIES

AUTHORITY: The Board of Health of the Town of Sandwich, Commonwealth of Massachusetts, acting under the authority of Chapter 111, Section 31, of the Massachusetts General Laws and any amendments additional thereto, and by any other power thereto enabling, and acting thereunder in accordance therewith, have, in the interest of and for the preservation of the public health, duly made and adopted the following regulations effective upon publication.

PURPOSE: To protect the groundwater and surface waters (fresh and saline) of the Town from contamination by effluents originating from privately owned and operated Small Wastewater Treatments Plants (SWWTP).

These regulations herein do not and are not intended to cover all aspects of engineering design, operation and maintenance of SWWTPs. Rather they outline the specific Board of Health interests and policies that may not be adequately addressed in other existing regulations, policies and manuals. Where other regulations of the Board of Health or other Town agencies are more stringent those shall apply. Where regulations or specifications or guidelines of other political subdivision or agencies of jurisdiction or as included herein are more strict, they will prevail.

APPLICABILITY: To all SWWTP proposed for the Town and also all interim or temporary wastewater disposal systems that may be used at facilities that will eventually use SWWTPs.

1.00 PERMIT REQUIREMENTS:

1.10 DISPOSAL WORKS CONSTRUCTION PERMITS:

No system or facility used for treatment, neutralizing, stabilizing or disposing of wastewater from homes, public building, commercial or industrial buildings, or any type of establishment, shall be located, constructed, installed, operated, altered or repaired until a DISPOSAL WORKS CONSTRUCTION PERMIT for such shall have been issued by the Board of Health. No construction of any building or facility which relies upon such wastewater system or facility shall be allowed until a DISPOSAL WORKS CONSTRUCTION PERMIT shall have been issued by the Board of Health to the responsible party. Responsible party shall mean the developer, project proponent, partnership, association, corporation or any other legal entity or person approved by the Board of Health. Said responsible party must also be the owner of record of the property to

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

be served by the SWWTP system or facility; furthermore, this contract shall not be valid until recorded as part of the master deed, and this contract shall be a part of any deed which transfers ownership of any property which is served by the SWWTP or facility. Such system or facility as regulated herein shall include, but not be limited to, sewers serving such facility, wastewater pumping stations, wastewater treatment and management, disinfection, advanced waste treatment, subsurface disposal and land treatment, wastewater recycling and re-use.

Such system or facility as regulated herein shall include, but not be limited to sewers serving such facility, wastewater pumping stations, wastewater treatment works, all wastewater treatment operations, sludge treatment management, disinfection, advanced waste treatment, subsurface disposal and land treatment, wastewater recycling and re-use. Such system or facility as regulated herein shall be referenced as SMALL WASTEWATER TREATMENT PLANT (SWWTP).

1.20 CERTIFICATE OF COMPLIANCE AND OPERATING PERMIT:

Before operation of any such SWWTP, they shall obtain a CERTIFICATE OF COMPLIANCE OPERATIONS PERMIT from the Board of Health stating that the conditions set forth in this regulation and any other conditions of the Board of Health have been met or satisfied, (The definition of “operations permit” is the conditions set forth in this regulation and any other conditions that may be issued by the Board of Health).

1.30 SERVICE AREA AND LIMITATIONS:

The SWWTP shall not serve a volume of sewage flow from any subject project in excess of the aggregate volume that would be generated by each lot, which could have constructed upon it a septic system installed and operated in full compliance with Title V, the State Environmental Code and the Regulations of the Board of Health.

2.00 SUBMITTALS:

2.10 APPLICATIONS, REPORTS, PLANS, DATA, DOCUMENTS:

Six copies of all applications, reports, plans, specifications, data, and supporting documents required by these regulations and by the regulations of any other agency in connection with the approval or operation and maintenance of the subject facility shall be submitted to the Board of Health. In the case of a request for Board of Health action, such materials shall be submitted a minimum of ninety (90) days prior to the date upon which action by the Board of Health is desired. In the case of submittals to other agencies, all materials shall be submitted to the Board of Health at the time of submittal to the agency. The Board of Health Disposal Works Construction Permit will not be issued prior to approval by the Massachusetts Department of Environmental Protection. Other submittals shall be made in accordance with schedules as specifically designated by the Board of Health. Six copies of all reports/information shall be given to the Board of Health

2.15 DESIGNER QUALIFICATIONS:

All plans and specifications for the design and construction of a SWWTP, submitted to the Board of Health, must be prepared by a civil/sanitary engineer properly licensed in the Commonwealth of Massachusetts.

2.20 DISPOSAL WORKS PERMIT FEE AND PROFESSIONAL REVIEW FEE:

Prior to the issuance of a disposal works permit by the Board of Health for installation of a SWWTP or any other sewage disposal system not covered by Title V of the Massachusetts State Environmental Code, an independent registered civil/sanitary engineer will be retained by the Board of Health to conduct a review of the planned sewage disposal system. To offset the cost of this review to the Town, the applicant will be assessed a fee in addition to the Disposal Works Construction Permit fee, commensurate with the complexity of the planned disposal system and the time required to adequately review the plans and specifications, and the expected impacts to groundwater and surface water. (Two percent of the design and construction costs of the plans or \$ 3,000.00, whichever is greater). The applicant will pay half of the fee at the time of application and the remainder prior to the issuance of the permit. Payments will be made in cash. The unused portion shall be refunded after the successful review of the first annual operations report by the Board of Health.

2.30 MAINTENANCE AND REPLACEMENT FUNDING:

1. Prior to commencement of operation of the sewage treatment facility, the permittee shall provide security in the sum of at least 15% of all capital costs of the SWWTP, including but not limited to building, sewage, lift stations and all attendant structures, to serve as a source of funding for immediate replacement or repair. Such security shall be provided by means of an interest-bearing bank escrow account and/or bank loan agreement in form satisfactory to the Board of Health to fund such an account. The permittee and/or its successors shall maintain such security throughout the life of the permit replenishing the amount thereof in full within one year of any disbursement.
2. A separate capital reserve account must be set up by the permittee to accumulate sufficient capital to replace the SWWTP at the end of twenty (20) years. Capital reserve account must reflect inflationary effects on the cost of a replacement SWWTP.
3. The permittee and any successor shall submit to the Town of Sandwich an annual financial report concerning the sewage treatment system, within thirty (30) days of the date on which charges are assessed to users of the system. The report shall include, at a minimum, the following:
 - a. aggregate balance of the security funds maintained in accordance with the requirements of special condition #1;
 - b. statement of all disbursements from the security fund, together with a description of the means by which the security funds will be replenished;
 - c. all expenses for operation, maintenance, replacement or repair of the sewage treatment facility within the past year;
 - d. all revenue generated to meet such expenses;
 - e. initial and current balances in the capital reserve account and any other accounts.

The report shall be prepared in accordance with generally accepted accounting principles consistently applied.

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

2.50 STANDARDS FOR DESIGN, OPERATION AND MAINTENANCE:

These regulations herein do not and are not intended to cover all aspects of engineering design, operation and maintenance of SWWTP's. Rather they outline the specific Board of Health interests and policies that are not adequately reflected by other existing regulations, policies and manuals. Where other requirements of the Board of Health or other Town agencies are more stringent, these shall prevail. Where regulations or specifications or guidelines of other political subdivisions or agencies included herein are more strict, they shall prevail.

The applicant shall specifically adhere to the following regulations and guidelines which address the various aspects for the systems and facilities considered herein and are incorporated as part of these regulations by reference where applicable:

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

Guidelines for the designing of sewage treatment plants with subsurface disposal

Title 5 – The State Environmental Code

Ground Water Quality Standards

Ground Water Discharge Permit Program

NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION

Guidelines for the Design of Wastewater Treatment Works, 1988 Edition –tr-16

**AMERICAN SOCIETY OF CIVIL ENGINEERS AND WATER POLLUTION CONTROL
FEDERATION, Manuals of Practice**

**RECOMMENDED STANDARDS FOR SEWAGE WORKS: GREAT LAKES – UPPER
MISSISSIPPI RIVER; BOARD OF STATE SANITARY ENGINEERS**

(the Ten State Standards)

For situations not covered by these situations and guidelines good engineering practices shall be the standard of review. Good engineering practices shall be those guidelines, regulations and specifications of all Federal, State or Local Engineers and any professional engineering standards. While it is recognized that certain modifications or exceptions may be necessary where justified in unusual situations, any such modifications or exceptions shall only be provided by application for variance to the Board of Health. Any variances to these regulations issued by the Board of Health shall comply with the provisions outlined in the State Environmental Code, Title 5.

3.00 GENERAL PROJECT PLANNING REQUIREMENTS:

Certain basic principles shall be considered early in the planning and design process in order to ensure that the SWWTP development process will meet all requirements.

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

3.10 GENERAL PROJECT PLANNING REQUIREMENTS:

The plans for the proposed system or facility shall take into account all aspects of public health and environmental quality protection. Efforts shall be taken to preserve public and private water supplies and their zones of contributions, watershed or recharge areas to surface water bodies, potential water supplies, private property, wetlands, wildlife habitats, recreational sites, historic sites and natural beauty.

The design shall be prepared so as to have the least possible adverse impact on the public health and the environment.

The project proposal shall include evidence that the wastewater system or facility will result in the least adverse impact on the public health or the environment as compared with other possible wastewater management alternatives for the project.

3.20 GENERAL DISCHARGE AND TREATMENT REQUIREMENTS:

No discharge from a SWWTP shall result in degradation of ground or surface waters in a manner inconsistent with their proposed use. The existing characteristics of the immediate and final receiving waters must be considered to ensure against degradation beyond all applicable federal, state and local water quality standards. There shall be no discharge into any wetland, stagnant waters, lakes or streams. In any event all SWWTP's must be proven state of the art technology including such tertiary treatment as deemed necessary by the Sandwich Board of Health to insure against adverse impacts of SWWTP's discharge on ground water quality.

3.30 HYDROGEOLOGICAL INVESTIGATION:

The applicant shall submit a hydrogeological survey report, prepared by a qualified geotechnical engineer or hydrogeologist, to show the impact of the subsurface discharge of the SWWTP on groundwater. The report shall include a determination of the flow direction, contaminant levels, nutrient loading to public water supplies as well as surface water bodies, extent of wastewater discharge plume, ground or surface waters affected, and the location of public and private water supplies as well as all expected effects on these supplies. This analysis shall be performed for the SWWTP's design plan and also for any other wastewater treatment or disposal strategy for the project to be served. In order to determine the need for any additional analyses of down gradient groundwater or surface water to insure against adverse impacts from the SWWTP's discharge, monitoring, as determined necessary by the Board of Health shall begin not less than one year before the start-up of the facility.

3.40 WETLAND AND FLOOD PLAINS:

No portion of the SWWTP shall be located within 200 feet of wetlands or the "100-year" Flood Plain, as defined by the State and local authorities.

No portion of the subsurface disposal works for a SWWTP shall be located less than 200 feet from a wetland or the "100-year" Flood Plain. No component of the treatment plant, except for underground piping, shall be constructed less than eight (8) feet above the estimated highest groundwater level as calculated by the USGS methodology. Such distances are considered "minimum" and may be increased by the Board of Health if site specific conditions warrant.

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

3.50 GENERAL SITING AND DESIGN REQUIREMENTS:

SWWTP design shall include attenuation of odor or noise problems, to protect both the operator and the public

3.51 DISTANCES:

No portion of the SWWTP shall be located less than the following distances stated to the components listed:

MINIMUM ACCEPTABLE SEPARATION DISTANCES IN FEET

Component	Subsurface Tank, Sewer or Force Main	Leaching Area
Public Well	400	400
Private Well	200	400
Water Supply Line	25	25
Subsurface Drain	25	100
Surface Water	100	200
Wetland	150	200

Greater separation distances may be required based on site specific geohydrology.

3.60 ULTIMATE DISPOSAL OF SLUDGE AND SOLIDS:

Provisions for final or ultimate disposal of sludge and solids shall be in a manner approved by the Board of Health permit. The estimated quantity must be stated. If sludge and solids are to be disposed of off-site, the final destination must be established prior to issuance of any permit. The applicant must demonstrate, to the satisfaction of the Board of Health, that the destination for the sludge and solids is in compliance with all applicable federal, state and local regulations and also that it will reliably be available for such purpose for the length of time that its use is required by the SWWTP. On-site dewatering of sludge is prohibited. Contract for sludge disposal covering full operational life of SWWTP must be submitted to the Board of Health prior to issuance of any permit.

3.70 TREATMENT PLANT RELIABILITY:

The SWWTP shall be planned and designed so as to provide maximum reliability at all times. The facility shall be capable of operating satisfactorily during power failures, reduced power periods, peak loads, flooding, equipment failure and maintenance shutdowns.

The Board of Health shall receive a written certification from the engineer and/or equipment supplier that the SWWTP is capable of meeting all effluent limits.

Following completion of the SWWTP, the manufacturer shall review and certify in writing to the Board of Health that the equipment installed is capable of providing the treatment level required.

Multiple units or dual compartments with unit drains shall be required for all processes, including disinfection facilities so that draining, cleaning, repairing, replacing, or other maintenance can be provided without omitting any treatment processes in zones of contributions, recharge or watershed areas, or other sensitive areas as determined by the Board of Health.

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

3.72 STAND-BY POWER:

The SWWTP must be constructed with a stand-by generator with an automatic transfer switch to minimize down-time during a power outage when the operator may not be able to reach the plant at the time the outage occurs. The generator must be sized to power any remote pump stations tributary to the plant, or a potable pump must be provided.

3.74 ALARMS

All alarm functions shall be wired to a bell or horn and light at a continually monitored manned location. The alarm shall be wired to remain on until the problem is corrected.

3.76 INTERIOR LAYOUT:

Sufficient space must be provided for an on-site laboratory large enough to conduct routine analyses not contracted for with a private laboratory. Plant design shall allow for easy equipment removal if necessary and large items need to be removed for repair/replacement. Sufficient space must be provided around all process units to facilitate access for maintenance purposes. Additional space will be provided for the possibility of expanded wastewater flow and/or the need for treatment upgrading at any future time.

3.78 BY-PASSES AND OVERFLOWS:

No by-passes, either upstream of or at the SWWTP shall be permitted.

3.80 DISINFECTION:

The SWWTP must be designed and constructed to allow for disinfection of the SWWTP effluent by ultraviolet irradiation or ozonation. The use of disinfection equipment shall be determined by the Board of Health. Chlorination of SWWTP effluent is prohibited.

3.85 MOISTURE CONTROL:

The SWWTP must be provided with adequate ventilation and plans for the facility must fully address this issue.

3.90 ODOR CONTROL:

The SWWTP must be designed and constructed to allow for odor control by activated carbon filtration. The use of this odor control equipment shall be determined by the Board of Health.

3.95 CHEMICAL STORAGE:

All chemicals/toxic/hazardous substances, as defined by the Sandwich Board of Health regulations, stored on the premises must be stored in a separate area with the safeguards against leaks and vandalism and shall be reported to the Fire Department in accordance with current regulations.

4.00 SUBSURFACE DISPOSAL FACILITIES:

4.10 GROUNDWATER:

The bottom interface of any subsurface disposal or leaching facility shall be located a minimum of eight (8) feet above the maximum elevation of the groundwater or saturated soil zone as determined by the USGS methodology, where appropriate. However, this vertical separation distance between the bottom of the leaching facility and tip of the maximum groundwater level must be maximized to the extent possible. This elevation shall include consideration of the mounding effect of the groundwater caused by the discharge of the SWWTP effluent. Such analysis shall be calculated using generally accepted analytical or numerical methods. When geologic conditions permit, the “Hantush” formula and procedure may be used. When the assumptions of that procedure cannot be met to derive a reliable results, it shall be required to utilize such method as finite difference equations for groundwater flow and elevation.

4.20 DISTANCE TO IMPERVIOUS LAYER:

The bottom interface of any subsurface disposal or leaching facility shall be located in a minimum of ten (10) feet above the elevation of an impervious soil layer. Impervious soil shall be defined as having a percolation rate of greater than twenty (20) minutes per inch.

4.30 THICKNESS OF PERMEABLE SOIL:

A depth of at least eight (8) feet of naturally occurring permeable soil shall be maintained below the bottom of the leaching area. To be considered permeable, the soil shall have a percolation rate of twenty (20) minutes per inch or less.

4.50 SEWERS:

The lateral sewer system serving the SWWTP shall be of a design and construction in accordance with WPCF MOP #9. Adequate capacity shall be provided for peak flow rates and shall provide for a cleansing velocity of at least two (2) feet per second at 75 percent of the estimated peak discharge. For low service connection areas, peak flow rate shall be calculated by the fixture unit method as described in MOP #9. The minimum pipe size allowed shall be eight (8) inches in diameter.

5.00 GROUNDWATER MONITORS:

5.10 INSTALLATIONS:

The permittee shall install, at a minimum, ground water monitoring wells in accordance with the following:

One up-gradient cluster of three monitoring wells;

Two down-gradient clusters of three monitoring wells each;

One monitoring well for groundwater level only near the center of the leaching works;

Screen depths for the cluster wells shall be set at elevations such that at least two screen depths will yield samples at time of seasonal low groundwater (e.g. September sampling periods.)

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

Such locations shall be approved by the Board of Health and as indicated appropriate from the results of the hydrogeological investigation. Monitor wells shall be installed and in place prior to issuance of the CERTIFICATE OF COMPLIANCE AND ANNUAL OPERATIONS PERMIT. Additional monitoring wells or requirements may be required at the discretion of the Board of Health.

Monitoring shall begin one year before the start-up of the SWWTP to give background information on the groundwater quality. All parameters in Section 6.12 shall be analyzed once during the year and those parameters listed as Daily, Weekly or Monthly in Section 6.12 shall be analyzed quarterly.

5.20 GROUNDWATER ELEVATION:

The permittee shall determine and provide the Board of Health, in continuous graph form, elevations of the water table to the nearest one-hundredth of a foot in all monitor wells on a monthly basis, along with the current separation distance between the bottom of the leaching facility and the water table.

6.00 EFFLUENT LIMITS AND TESTING REQUIREMENTS:

Effluent limitations shall be at least those required by DEP regulations for Class I groundwaters. All groundwaters are considered to be in this classification unless proved to be otherwise following procedures set forth by DEP. However, in no case shall the SWWTP effluent have a nitrogen concentration greater than ten (10) PPM total Kjeldahl nitrogen; nor shall the total annual Kjeldahl nitrogen of the effluent exceed forty (40) pounds per acre served (total area of all lots served by the SWWTP), or 18, 2 kilograms Kjeldahl nitrogen per acre served.

6.10 WASTEWATER:

6.11 TREATMENT PLANT INFLUENT:

The influent to the treatment plant shall be sampled and tested weekly for 5-Day Biological Oxygen Demand (BOD) and Total Suspended Solids.

6.12 TREATMENT PLANT EFFLUENT:

<u>TEST FREQUENCY</u>	<u>PARAMETERS</u>
DAILY	Flow Specific Conductance pH
WEEKLY	5-day Biochemical Oxygen Demand (BOD) Total Suspended Solids (TES) Coliform Bacteria, Fecal Coliform Bacteria
MONTHLY	Total Kjeldahl Nitrogen Ammonia Nitrogen Nitrate Nitrogen Total Dissolved Solids Solids

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

TEST FREQUENCY

PARAMETERS

SEMI-ANNUALLY

Oil and Grease
Volatile Organic Compounds (USEPA-624)

ANNUALLY

Arsenic, Copper, Silver, Barium, Zinc, Lead
Cadmium, Mercury, Chromium, Fluoride,
Selenium, Total Tri-Halomethanes

FIVE YEARS

Pesticides
Radioactivity

All sampling and analyses, except for the daily and weekly frequency tests which will commence at the time of plant start-up shall be performed initially at sixty (60) days after plant start-up and at the stated frequency thereafter.

6.20 GROUNDWATER MONITORING WELLS:

Monitoring well testing in the up gradient and down gradient wells shall be performed semi-annually in the months of April and September for all parameters designated above as semi-annually, monthly, weekly, or daily. Testing for other parameters shall occur during the month of April at the stated frequency.

On an annual basis, the Board of Health, or upon written request from the permittee, may review the sampling frequency and the tested parameters and may modify either or both if it deems it necessary.

7.00 OPERATION:

7.10 OPERATOR:

A Certified Waste Water Treatment Plant Operator having the grade appropriate for the plant shall be retained by the permittee. Such operator shall spend a minimum of three (3) hours per day every day at the plant. When conditions warrant as may be determined by the Board of Health, additional hours shall be required. Such operator shall be designated as the Chief Operator and shall be responsible for the operation of the SWWTP. The Board of Health shall receive a copy of the responsible party's contract with the operator.

7.20 BACK-UP OPERATOR:

A second Certified Waste Water Treatment Plant Operator, having the same grade as the Chief Operator shall be available in the absence of the Chief Operator. The Board of Health shall receive a copy of the responsible party's contract with the back-up operator.

**(REGULATION FOR THE DESIGN, OPERATION AND MAINTENANCE
OR SMALL WASTEWATER TREATMENT FACILITIES – Cont.)**

7.30 OPERATIONAL GUARANTEE:

Prior to the issuance of the CERTIFICATE OF COMPLIANCE AND ANNUAL OPERATIONS PERMIT, the permittee shall provide security, in the form of a performance bond or other adequate monetary security, in an amount specified by the Board of Health to guarantee the operation of the SWWTP. The security shall provide for salaries, operational costs and cost of immediate replacement, if necessary, of any major unit essential to the operation of the plant, or in the event of the failure of the plant to operate, an amount sufficient to cover the costs of hauling one hundred percent (100%) of the waste water to another facility for disposal for a one year period. The permitted and/or its successors shall maintain said security through the life of the facility.

8.00 REPORTING:

A registered civil/sanitary engineer shall be hired by the responsible party to oversee the plant operations and make quarterly inspections, as well as prepare a quarterly and an annual written report. The report shall summarize operating results, plant status, problems experienced and any plan modification necessary. The engineer shall also appear before the Board of Health on an annual basis to discuss the facility's performance and other pertinent issues. Six copies of all reports and laboratory data shall be sent to the Board of Health. In addition, all groundwater monitoring reports required through the DEP permit conditions shall also be sent to the Town and summarized in the engineering report. All data should be in continuous graph form where appropriate.

9.00 ENFORCEMENT:

The Board of Health shall review annually, or as necessary, the operations permit and may suspend, modify, revoke or add additional conditions prior to the issuance of the annual operating permits.

10.00 VIOLATIONS:

Violations of this regulations are subject to penalties as provided for in Massachusetts General Laws, Chapter 111, Section 31, after a Board of Health hearing. Each day shall constitute a separate violation and each violation shall constitute a separate penalty.

11.00 VARIANCES:

While it is recognized that certain modifications or exceptions may be necessary where justified in annual situations, any such modification or exception may only be provided by application for variance to the Board of Health. Any variance to these regulations issued by the Board of Health shall comply with the provisions outlined in the State Environmental Code, Title 5.

12.00 SEVERABILITY:

If any part or portions of these regulations be adjudicated as invalid, the adjudication shall apply only to the material so adjudged, and the remaining Rules and Regulations shall be deemed valid and in full force and effect.

Adopted: November 27, 1989
Effective: December 4, 1989

POLICIES AND CLARIFICATION OF POLICIES

CERIFICATE OF COMPLIANCE POLICY

The Sandwich Board of Health at the regularly scheduled meeting on February 9, 1989 voted to adopt the following policy:

Certificate of Compliance for septic system repairs will not be issued without the submission of an as-built plan of the repaired system.

DISPOSAL WORKS CONSTRUCTION PERMIT POLICY

The Board of Health policy regarding applications for disposal works construction permits states:

No permit shall be issued for the installation of a subsurface disposal works system unless said application is accompanied by a complete set of building plans. Effective August 22, 1988.

NITRATES LOADING POLICY

For the sake of clarity, the Board of Health has decided to use the same basic nitrates loading formulation that has been suggested by the Cape Cod Commission, as drafted by Gabrielle Belfit in the Draft Technical Bulletin 91-001 of 5-1-91, with the following exceptions:

1. The commission uses a recharge rate of 19 in/yr for Sandwich. The Board of Health will use a more conservative number of 17 in/yr.
2. The Commission attempts to take into account actual Town occupancy levels in calculating flows. For a Town such as Sandwich, which has a large fluctuation in occupancy rates depending upon the season, determining meaningful occupancy rates is virtually impossible. Therefore, the Board of Health will use flows as determined strictly by Title V.
3. The Commission recommends 35 ppm NO_3^- as the effluent loading level from a disposal works, the Board will continue to use 40 ppm.

EXPECTED NITRATE LEVELS & DISPOSAL WORKS

There has been confusion concerning the amount of nitrates that can be expected from a disposal works system. A septic tank is anaerobic, therefore the vast majority of the nitrogen present occurs as ammonia, or in an organic form, not in the form of nitrate, NO_3^- . However, once this organic nitrogen reaches the leaching field, it is rapidly oxidized to the inorganic nitrate form. Once this happens, the persistence of NO_3^- is long term, especially for an aquifer system like Cape Cod's, which is predominantly glacial, and somewhat sterile. Thus the total assumed nitrate is based upon the sum of organic and inorganic derived nitrogen.

ALLOWABLE NITRATE LEVELS

The allowable nitrate level will 5 ppm, including single family homes. Clearly, whether the nitrate comes from a business or a home is irrelevant. The 5 ppm calculation assumes that ammonia and organic derived nitrogen is all converted to NO_3^- .

(NITRATES LOADING POLICY-cont.)

CONDITIONS & CALCULATIONS

Nitrate loading calculations reflect the following conditions:

Sewage Flow: 110 gallons/bedroom/day

Effective Nitrate Concentration in Disposal Works Effluent: 40 ppm

Nitrate Loading per Bedroom: 13.5 pounds/year

Lawns:

Area: 5,000 sq. ft.

Fertilizer: 3 pounds/1,000 sq. ft.

Leaching: 25%

Recharge Rate for Natural Areas: 17 inches/year

Recharge:

Impervious Surfaces: 40 inches/year

Road Runoff Concentrations: 1.5 ppm NO₃-

Roof Runoff Concentrations: 0.75 ppm

SAMPLE CALCULATION - RESIDENTIAL

Three Bedroom Home:

Lot Size: 2 Acres (87,120 sq. ft.)

Natural Area: 84,620 sq. ft. Lawn Area: 5,000 sq. ft.

Impervious Surfaces: Roof Area: 2,000 sq. ft.
 Paving Area: 5,000 sq. ft.

Title V Flow: 100 gallons/day

Waste Water

(3 bedrooms) (110 gpd/bedroom) (3.785 L/gal) = 1,249 L/day
(1,249 L/day) (40 mg NO₃-/L) = 49,960 mg NO₃-/day

Impervious Surfaces

Roof: (2,000 sq. ft.) (40 in/yr) (1 ft/12 in.) (28.32 L/ft³)(1 yr/365 days) = 517.3 L/day

(517.3 L/d) (0.75 mg NO₃-/L) = 387.9 mg NO₃-/d

Paving: (500 sq. ft.) (40 in/yr) (1 ft. / 12 in.) (28.32 L/ft³) (1 yr/365 days) = 129.3 L/d
(129.3 L/d) (1.5 mg NO₃-/L) = 194 mg NO₃-/d

(NITRATES LOADING POLICY-cont.)

Lawn:

$$(5,000 \text{ ft}^2) (3 \text{ lbs}/1000 \text{ ft}^2/\text{yr}) (1 \text{ yr}/365 \text{ days}) (454,000 \text{ mg}/\text{lb}) (0.25) = 4,664.4 \text{ mg NO}_3^-/\text{d}$$

Natural:

$$(84,620 \text{ ft}^2) (1.42 \text{ ft}/\text{yr}) (28.32 \text{ L}/\text{ft}^3) (1 \text{ yr}/365 \text{ days}) = 9,323 \text{ L}/\text{day}$$

Summary

$$\frac{49,960 + 387.9 + 194 + 4664.4}{1,249 + 517.3 + 129.3 + 9,323} = \frac{55,206.3 \text{ mg NO}_3^-}{11,219 \text{ L} / \text{day}} = 4.9 \text{ ppm}$$

SAMPLE CALCULATIONS – NON RESIDENTIAL

Lot Size: 5 acres (217,800 ft.²)

Lot Coverage: 50%

Natural Area: 108,900 ft.²

Lawn Area: 5,000 ft.²

Impervious Surfaces: Roof Area: 36,300 ft.²

Paving Area: 72,6000 ft.²

Flow: 75 gallons/day per 1,000 ft.²

Maximum Allowed Flow: 1,2000 gal/day

Buffer Zone: 70 x 70 ft.

Wastewater

$$(1,200)(3.785 \text{ L}/\text{gal}) = 4,542 \text{ L}/\text{day}$$

$$(4,542 \text{ L}/\text{day}) (40 \text{ mg NO}_3^-/\text{L}) = 181,680 \text{ mg NO}_3^-/\text{day}$$

Impervious Surfaces

Roof:

$$(36,3000 \text{ ft}^2)(40 \text{ in}/\text{yr})(1 \text{ ft}/12 \text{ in})(28.32 \text{ L}/\text{ft}^3)(1 \text{ yr}/365 \text{ days}) = 9,388 \text{ L}/\text{d}$$

$$(9,388 \text{ L}/\text{d})(0.75 \text{ mg NO}_3^-/\text{L}) = 7,041 \text{ mg NO}_3^-/\text{day}$$

Paving:

$$(72,600 \text{ ft}^2)(40 \text{ in}/\text{yr})(1 \text{ ft}/12 \text{ in})(28.32 \text{ L}/\text{ft}^3)(1 \text{ yr}/365 \text{ days}) = 18,777 \text{ L}/\text{d}$$

$$(18,777 \text{ L}/\text{d})(1.5 \text{ mg NO}_3^-/\text{L}) = 28,165 \text{ mg NO}_3^-/\text{d}$$

(NITRATES LOADING POLICY-cont.)

Lawn:

$$(5,000 \text{ ft}^2)(3 \text{ lbs}/1000 \text{ ft}^2 \text{ yr})(1 \text{ yr}/365 \text{ days})(454,000 \text{ mg}/\text{lb})(0.25) = 4,664.4 \text{ mg NO}_3\text{-}/\text{d}$$

Natural:

$$(108,900 \text{ ft}^2)(1.42 \text{ ft}/\text{yr})(28.32 \text{ L}/\text{ft}^3)(1 \text{ yr}/365 \text{ days}) = 12,000 \text{ L}/\text{day}$$

Summary:

$$\frac{181,680 + 7,041 + 28,165 + 4,664.4}{4,542 + 9,388 + 18,777 + 12,000} = \frac{221,550 \text{ mg NO}_3\text{-}}{44,707 \text{ L}/\text{day}} = 5.0 \text{ ppm}$$

Formally adopted on July 13, 1992

REQUESTS FOR VARIANCE POLICY

The Board of Health adopted the following policy on August 14, 1995 regarding requests for variances in accordance with provisions of 15.220 and 15.411 of the 1995 State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of Onsite Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage:

Every request for a variance shall be made in writing and shall state the specific variance sought, the Title V Section and reasons therefore.

The plan must be prepared by a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian. A Massachusetts Registered Land Surveyor stamp must accompany the aforementioned professional disciplines. Four (4) copies of the plan are required with original stamps and signatures. Dwellings and/or structures which are serviced by subsurface septic systems requiring variance(s) will require floor plans as related to the septic design flow calculations for the proposed system. Four (4) sets of floor plans must be submitted with the variance request. The Board will also require a list of the abutters certified by the Town of Sandwich Assessor's Office as well as a \$50.00 filing fee. The applicant will be billed for the advertising directly by the newspaper.

The applicant shall notify abutters within 200 feet of the lot where the proposed work is to be done by certified mail ten (10) days prior to the Board of Health hearing. Return Receipts are to be brought to the meeting.

**VARIANCE REQUESTS AND RELATIONSHIP WITH
THE CONSERVATION COMMISSION POLICY**

The Board would like to clarify, at this time, policies that we have been using in the past, effective January 13, 1987.

1. Any request for a Variance whether from our local regulations or from Title V, requires notification of abutters by Certified Mail, return Receipts to be brought to the meeting. The Board's definition of an abutter is: All people who own property within 200 feet of the perimeter of the lot where the proposed work is to be done.
 2. As regards our relationship with the Conservation Commission, the Board of Health has regulations in effect that relate to areas of Conservation concern. We would like to have the opinion of the Conservation Commission on proposed work in sensitive areas; i.e.: coastal dunes, marshes, etc. before we render a decision.
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