STATE OF VERMONT

AGENCY OF NATURAL RESOURCES

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SOLID WASTE MANAGEMENT RULES

Waste Management and Prevention Division

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Solid Waste Management Rules

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§ 6-101 Authority

These Rules are adopted by the Secretary of the Agency of Natural Resources pursuant to the authority of 10 V.S.A. chapter 159, Waste Management. The Secretary has the power to adopt, amend, and repeal Rules pursuant to 3 V.S.A. chapter 25.

§ 6-102 Declaration of Purpose

(a) These Rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont. These Rules amend the Solid Waste Management Rules as adopted on March 15, 2012.

(b) A facility in compliance with the requirements of these Rules is presumed to:

(1) Not results in an exceedance of groundwater enforcement standards at points of compliance, as defined by the Groundwater Protection Rule and Strategy; or

(2) Otherwise adversely affect public trust uses of groundwater in the State.

(c) Notwithstanding the presumption of §6-102(b), the Secretary may require additional demonstration of compliance with the Groundwater Protection Rule and Strategy.

§ 6-103 Severability

The provisions of any section of these Rules shall be severable. If any provision of these Rules is invalid or if any application of these Rules to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

§ 6-104 Fees

(a) Fees related to these Rules are established in 3 V.S.A. §2822(j). Municipalities shall be exempt from the payment of fees in accordance with 3 V.S.A. §2822(i).

(b) Facilities operated by a private entity are required to pay relevant fees.

(c) For activities where the role of the private applicant is to function solely as a contracted service provider and the municipality establishes and maintains the approved financial responsibility instrument, controls facility operations, directly utilizes the services of the facility, maintains an unencumbered right to possession, maintains access to the facility at all times, and controls the financial aspects of the facility (e.g. obtains the user fees and pays any fees or taxes), the municipal exemption of §6-104(a) applies. Under these circumstances, the contractor would not be vested in the financial viability of the facility.

§ 6-105 Incorporation by Reference

When reference is made herein to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on the effective date of these Rules.

§ 6-106 Signatories to Certifications and Reports

(a) Applications and reports requested or required by the Secretary shall be signed by each applicant or by a duly authorized representative of the applicant.

(b) A person is a duly authorized representative for the purposes of subsection (a) of this section only if:

(1) The authorization is made in writing and is signed by the facility applicant;

(2) The authorization states that the applicant has delegated the legal authority for the representative to sign on behalf of the applicant; and

(3) The written authorization is submitted to the Secretary.

(c) If an authorization described in subsection (b) of this section no longer meets the requirements of that subsection, a new authorization satisfying the requirements of subsection (b) of this section shall be submitted to the Secretary prior to or together with any documents signed by the new authorized representative.

(d) Any person signing a document pursuant to subsection (a) of this section shall make the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of the person or persons who operate the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Subchapter 2 – General Definitions and Acronyms

§ 6-201 Definitions

(a) All terms not defined herein shall have the meaning given them in 10 V.S.A. §6602. Terms presented in this subchapter apply generally to these Rules. Additional terms relevant to specific waste management activities are included in subchapters 4 and 11.

"Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.

"Active portion" means the part of a facility or operational unit that has received or is receiving wastes and that has not been closed in accordance with the Solid Waste Management Rules.

"Adjoining Property Owners" means a person who owns land in fee simple, if that land:

(a) shares a property boundary with a tract of land where proposed or actual activity regulated by the Secretary is located; or

(b) is adjacent to a tract of land where such activity is located, and the two properties are separated only by a river, stream or public highway.

"Administrative amendment" means an amendment to a certification or permit that corrects typographical errors, changes the name or mailing address of a permittee, or makes other similar changes to the certification or permit that do not require technical review of the permitted activity or the imposition of new conditions or requirements.

"Administratively complete application" means an application for a certification or permit for which all initially required documentation has been submitted, and any required fee, and the information submitted initially addresses all application requirements but has not yet been subjected to a complete technical review.

"Agency" means the Vermont Agency of Natural Resources.

"Alternative Daily Cover" means materials which substitute for compacted soils and earthen materials to cover waste at landfills on a daily basis, and which use has been approved by the Secretary.

"Airport" means a public-use airport, open to the public without prior permission and without restrictions within the physical capacities of available facilities.

"Approved Uniform Solid Waste" means solid waste which has been determined in writing by the Secretary to be uniform, consistent and does not contain landfill banned materials as defined by State and/or Federal regulation.

"Architectural Waste" or "AW" means discarded drywall, metal, asphalt shingles, clean wood, and plywood, and oriented strand board derived from the construction or demolition of buildings or structures.

"Asbestos" means the fibrous varieties of primarily the amphibole and serpentine mineral groups which include the minerals: chrysotile, riebeckite (crocidolite), cummingtonite, grunerite (amosite), anthophyllite, actinolite and tremolite.

"Asbestos Waste" means a waste that contains any type of asbestos in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous material.

"Bird Hazard" means the likelihood of collision between birds and aircraft that may cause damage to the aircraft or injury to its occupants.

"Biosolids" means sewage sludge derived, in whole or in part, from domestic wastes which have been subjected to a treatment process for the reduction of pathogens and have been demonstrated to meet the applicable requirements of these Rules for contaminant concentrations, vector attraction reduction, and pathogen reduction, such that the material has been approved by the Secretary for application to the land under a site specific solid waste facility certification.

"Cell" means a discrete, confined portion of compacted solid waste within a landfill. A cell is a subpart of an operational unit within a landfill.

"Closure" means the activities and requirements that a facility shall complete, as prescribed by the approved Facility Management Plan or otherwise by the Secretary, when a portion of the facility or the entire facility is no longer receiving, processing or disposing of solid waste. "Clean Wood" means untreated and unpainted wood including dimensional lumber, and other natural woody debris. This term includes trees, tree stumps, brush and limbs (≥ 1 inch in diameter), root mats, and logs.

"Commercial Hauler" means any person who transports regulated quantities of hazardous waste and/or transports solid waste for compensation.

"Composite Liner" means a system consisting of two components; the upper component must consist of a minimum 60-mil Flexible Membrane Liner (FML) and a lower component consisting of at least a two- foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. The FML must be installed in direct and uniform contact with the compacted soil component.

"Composting" means the controlled aerobic biological decomposition of organic matter through active management to produce compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

"Conditionally Exempt Generator" or CEG" means a generator of hazardous waste which is conditionally exempted from certain provisions of the Vermont Hazardous Waste Management Regulations. A generator is conditionally exempt if they meet the requirements as described in subchapter 7 of the Vermont Hazardous Waste Management Regulations.

"Construction and Demolition Waste" or "C&D" means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster drywall, roofing paper and shingles, insulation, glass, , flooring materials, brick, masonry, mortar, incidental stone, soil, metal, furniture and mattresses. This definition includes architectural waste. This definition *does not* include asbestos waste, regulated hazardous waste, hazardous waste generated by households, or hazardous waste from conditionally exempt generators.

"Contact person" means a person designated by a permittee or permittee(s) who has the authority to make and implement decisions regarding operating conditions at a facility.

"Container" means a portable device in which a material or waste is stored, transported, treated, disposed or otherwise handled.

"Corrective Action" means steps taken by a person, as directed by the Secretary, to repair facility structures or operations in order to bring the facility into compliance with design, construction, management and operational regulations and/or to reduce or eliminate risk of harm or actual harm to the public health, public safety or the environment.

"Cover Material" means earthen material, or other material approved by the Secretary, that is used to cover compacted solid wastes in a landfill in order to control fire, disease vectors and odors, to prevent blowing litter, to discourage scavenging by animals, and to assure an aesthetic appearance.

"Custodial Care" means the continued management of end-use obligations of a landfill, particularly protection of the landfill cap and limiting access, following completion of the post-closure period.

"Development soils" means unconsolidated mineral and organic matter overlying bedrock that is contaminated solely by polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead at concentrations which exceed Vermont Soil Screening Values and are not hazardous waste.

"Development soil concentration level" means those levels of polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead expressed in units of mass per mass, contained in the development soils.

"Diffuse Disposal Facility" shall have the same definition as "Land Application Site".

"Discarded" means a material that is:

(a) delivered to a treatment, storage, recycling or disposal facility;

(b) abandoned;

(c) burned or incinerated;

(d) stored or placed in a manner that constitutes the discharge, injection, spilling or leaking of material or any constituent thereof into or on any land or water or into the air;

(e) placed in or near the public right of way for collection; or

(f) conveyed to a commercial hauler for delivery to a treatment, storage, recycling or disposal facility.

It *does not* mean a material that is used in a manner approved by the Secretary and not posing a threat to public health or the environment.

"Discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a waste, or waste constituent, into or on any land or water, or into the air.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.

"Diversion" means the management of solid wastes through methods other than disposal. Diversion includes recycling, composting, reuse, and anaerobic energy production. Diversion does not include use of materials for alternative daily cover at landfills or the incineration of solid waste to produce energy.

"Domestic food source animals" means animals raised for direct human consumption.

"Domestic septage" means either liquid or solid material removed from a septic tank or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial or industrial wastewater, or a mixture of commercial or industrial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or grease removed from a grease trap.

"Domestic Wastes" means wastes originating from bathrooms, kitchens, showers, toilets or other sanitary facilities (public or private) regardless of the degree of treatment.

"Drinking Water Source" means any surface water or groundwater intake used or permitted to be used as a source of drinking water for human consumption.

"Environmental Notice Bulletin" or "bulletin" means the website and e-mail notification system required by 3 V.S.A. §2826.

"Exceptional Quality (EQ) Biosolids" means products derived in whole or in part from domestic wastes which have been subjected to and meet the requirements of the following: a pathogen reduction process established in 40 CFR Part 503.32(a)(3), (4), (7) or (8); one of the vector attraction reduction standards established in 40 CFR Part 503.33; the contaminant concentration limits in §6-1303(a)(1); and if by a composting process, §6-1303(a)(4) of these Rules. EQ biosolids, once released from the generating facility, are no longer considered to be solid wastes in accordance with §6-302(a)(4) of these Rules and may be marketed and distributed to the general public. Residual dairy wastes are considered to be equivalent to EQ biosolids or EQ biosolids products and eligible for marketing and distribution to the general public when they have been prepared and are managed in full accordance with §6-1305.

"Facility" means all contiguous land, structures, other appurtenances and improvements on the land, used for treating, storing or disposing of solid waste. A facility may consist of several treatment, storage or disposal operational units.

"Fact Sheet" means a document that produced by the Secretary that briefly sets forth the principle facts and significant factual, legal, methodological, and policy questions considered in preparing a draft decision.

"Final Closure" means the completion of all closure activities.

"Final Grades" means the maximum authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.

"Final Capping System" means an engineered layer of materials which has been approved by the Secretary to be placed on the surface of a landfill in a location where no additional waste will be deposited. A final capping system shall meet the minimum requirements of these

Rules and achieve the performance criteria of minimizing infiltration and controlling landfill gas emissions as described in § 6-1004, as applicable.

"Floodplain" means the land area adjacent to a surface water body that is below the one hundred (100) year flood elevation.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge a one-hundred-year base flood, without cumulatively increasing the water surface elevation more than one foot at any point.

"Food processing residual" means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants.

"Food residual" means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with 10 V.S.A. § 6605k. Food residual may include pre-consumer and postconsumer food scraps. "Food residual" does not include meat and meat-related products when these materials are composted by a resident on site.

"Friable asbestos" means any asbestos containing material that can be crushed, crumbled, pulverized or turned to powder with the ordinary force of a human hand.

"Geosynthetics" means a generic classification of all synthetic materials used for geotechnical engineering applications, and includes geotextiles, geogrids, geomembranes, geo nets and geocomposites.

"Groundwater" means the water below the land surface but does not include surface waters within the meaning of 10 V.S.A. §1251(13).

"Groundwater Compliance Points" means the following:

(1) any point of present use of groundwater, including use as a public water source or as a source of water for potable water supplies;

(2) the boundary of Class I, Class II, or Class IV groundwater area;

(3) zone two of a public water source protection area;

(4) any point at the boundary of the property where the activity is located: and

(5) any point 150 feet upgradient and any point 300 feet downgradient from a land application area, as measured from the edges of the land application area.

(6) the additional points established by these Rules or the Groundwater Protection Rule and Strategy for specific facility certification and activity types.

"Groundwater Protection Rule and Strategy" or "GWPRS" means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

"Hazardous materials" means (A) all petroleum and toxic, corrosive, or other chemicals and related sludge included in any of the following: (i) any substance defined in section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability (CERCLA) Act of 1980; (ii) petroleum, including crude oil or any fraction thereof; (iii) hazardous wastes as defined by the Vermont Hazardous Waste Management Regulations; or (iv) a chemical or substance that, when released, poses a risk to human health or other living organisms and that is listed by this rule. (B) does not include herbicides and pesticides when applied consistent with good practice conducted in conformity with federal, state, and local laws and regulations and according to manufacturer's instructions.

"HHW/CEG Hazardous Waste Collection Facility" means a facility used for the collection and storage of Household Hazardous Wastes (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG).

"Hazardous Waste" means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which may have an unusually destructive effect on water quality if discharged to ground or surface waters of the State. All special nuclear, source, or by-product material, as defined by the Atomic Energy Act of 1954, is

specifically excluded from this definition.

"High Carbon Bulking Agent" means carbon-based material, the use of which is intended for adding structure and bulk to, and/or for moisture management within, a compost pile.

"Household Hazardous Waste" or HHW means any waste from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas) that would be subject to regulation as hazardous wastes if it were not from households.

"Hydric Soils" means soils that are formed under conditions of saturation, flooding, or ponding for a long enough time during the growing season that anaerobic conditions are developed in the upper portions of the soil profile.

"Implementation Plan" means a municipal or Solid Waste Management Entity's plan which is adopted and found to be consistent with the State Material Management Plan. This plan must include all the elements required for consistency with the State plan and an applicable regional plan and shall be approved by the Secretary.

"Implemented Waste" means all solid waste which originates from a municipality which manages waste in accordance with a solid waste implementation plan approved by the Secretary.

"Interim Cap" means a temporary layered landfill capping system, which may consist of either, or a combination of, soil and geosynthetics barriers designed to control emissions and minimize infiltration and meets the performance standard of §6-1004(i).

"Individual permit" means a permit that authorizes a specific discharge, emission, disposal, facility, or activity that contains terms and conditions that are specific to the discharge, emission, disposal, facility, or activity.

"Intermediate Cover" is a landfill cover system which is used when an opened area of the landfill is not anticipated to receive waste for a period of three (3) months or more.

"Incinerator" means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of a solid waste and is considered a disposal facility.

"Inert Materials" means material that is non-putrescible and that will not exceed Vermont Groundwater Enforcement Standards when analyzed using EPA SW-846 Synthetic Precipitation Leaching Procedure (SPLP).

"Insignificant Waste Management Event Approval" or "IWMEA" means a waste disposal, storage, treatment, collection or processing event of limited duration that the Secretary has determined will not result in a threat to the public health and safety or to the environment and will not create a nuisance.

"Land Application" means the diffuse spreading of non-EQ biosolids and stabilized domestic septage on the land at a controlled application rate for the purpose of providing agricultural nutrients, improving soil structure, or reclaiming a site.

"Land Application Site" or "Land Application Facility", means a parcel of land certified under these Rules for the management of non-EQ biosolids or stabilized domestic septage via application to the land as a nutrient source or soil conditioner (see also "Diffuse Disposal Site").

"Lateral Expansion" means a horizontal expansion of the waste boundaries of an existing solid waste landfill unit.

"Leachate" means liquid that passes through or emerges from a solid waste, such as dissolved, suspended or miscible materials, chemicals or biologic products, or other materials that have been derived from the waste.

"Leaf and Yard Residuals" means source separated, compostable untreated vegetative matter, including grass clippings, leaves, kraft paper bags, and brush, which is free from non-compostable materials. It does not include such materials as pre- and post-consumer food residuals, food processing residuals, or soiled paper.

"Liquid Waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095B (2004, Paint Filter Test), contained in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

"Major Amendment" means an amendment to an individual permit or notice of intent under a general permit that necessitates technical review.

"Mandated Recyclables" means the following source separated materials: aluminum and steel cans; aluminum foil and aluminum pie plates; glass bottles and jars from food and beverages; polyethylene terephthalate (PET) plastic bottles or jugs; high density polyethylene (HDPE) plastic bottles and jugs; corrugated cardboard; white and colored paper; newspaper; magazines; catalogues; paper mail and envelopes; boxboard; and paper bags.

"Mining Activity" means the process or business of extracting metals, minerals, rocks or ores from the earth.

"Mineral Processing Waste" means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity and where chemicals are intentionally added as part of that processing. Mineral processing waste does not include commercial products from mined materials.

" Mining Waste" means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity that is generated from the beneficiation, irrespective of the addition of chemicals, of rock or ore to separate and concentrate valuable minerals from waste material, remove impurities, or prepare the rock for further refinement. Mining waste includes asbestos waste, except when that asbestos waste is disposed at a certified facility in accordance with subchapter 10 of these Rules. Mining waste does not include mining waste solely from cutting, shaping or finishing granite, marble, limestone, slate or other stones for monuments, buildings or other similar uses.

"Minor Amendment" means an amendment to an individual permit or notice of intent under a general permit that requires a change in condition or requirement, does not necessitate technical review, and is not an administrative amendment.

"Mobile HHW/CEG Hazardous Waste Collection Unit" means a vehicle or trailer used to collect Household Hazardous Waste and/or hazardous waste from Conditionally Exempt Generators, at more than one location.

"Mobile Solid Waste Collection Operation" means the operation of a vehicle or trailer, or a container on or attached to such vehicle or trailer used for the collection of solid waste.

"Municipal Solid Waste" or "MSW" means combined household, commercial and industrial waste materials generated in a given area.

"Non-Implemented Waste" means all solid waste which originates from a municipality that does not have a solid waste implementation plan approved by the Secretary.

"Nuisance" means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the results of the storage, transport, processing or disposal of solid wastes. Constitutes the interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.

"Organic Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition.

"Food Residual Drop-Off" means a registered facility that is not located at a certified solid waste facility and is approved only for the collection of food residuals.

"Organic Solid Waste Recovery Facility" or "ORF" means a facility where organic solid wastes are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

"Operating Capacity" means the volume of material that a facility is approved by the Secretary to manage, consistent with the volume of materials for which fees have been paid within the operational year and is less than or equal to the permitted design capacity. This applies only to facilities required to pay application fees.

"Operational Unit" means a discrete area of land or excavation that plans to receive, currently receives, or has received solid waste for permanent disposal.

"Operator" means the person responsible for the overall operation of the facility and whose actions or failure to act may result in non-compliance with these Rules or the facility certification. Operators must have the minimum required training as required by the training plan submitted with the facility application for certification.

"Open Burning" means the burning of solid wastes in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney, or other enclosure.

"Permitted Design Capacity" means the volume of materials that a facility's designed infrastructure is capable of handling. Certifications will be issued with permitted design capacity amounts. This volume may be greater than the actual volumes of material managed at the facility (Operating Capacity).

"Permitted Hazardous Waste Transporter" means a commercial hauler or transporter permitted to transport hazardous waste.

"Person" means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department or subdivision of the state, federal agency, or any other legal or commercial entity.

"Post-Closure" means the regulated time period following landfill closure.

"Processed Construction and Demolition Debris Residual" is construction and demolition debris which has had all hazardous and recyclable materials removed, and which consists of materials with little or no economic value. This material may be disposed of.

"Processed Glass Aggregate" or "PGA" means the mixed glass cullet produced from crushed and screened clean food and beverage glass containers and meets the specification of § 6-302(a)(12).

"Qualified Professional" means a person who possesses the following education, training, and experience: A current professional engineers or professional geologists license, a license or certification to perform environmental site work equivalent if applicable, a baccalaureate or higher degree in a related discipline or five years relevant experience.

"Recyclable Materials" means solid waste materials that can be reclaimed and/or processed to be used in the production of materials or products.

"Recycle" means the process of reclaiming and/or processing solid waste materials to produce new materials or products. This term does not mean incineration of solid waste to produce energy or fuel products.

"Regional Plan" means that plan which is prepared and adopted in accordance with the provisions of 24 V.S.A. §4348.

"Regulated Medical Waste" or "RMW" means that portion of waste generated in health care facilities and requiring special handling and treatment prior to disposal. The following types of solid waste are considered RMW:

(1) The following types of solid waste are considered RMW:

(A) Pathological and microbiological waste containing blood or other potentially infectious materials;
(B) Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state, if compressed;
(C) Sharps;
(D) Animal infectious waste;
(E) Liquid or semi-liquid blood or other potentially infectious materials;
(F) Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; and
(G) Other wastes not included above, as determined by the Secretary.

(2) The following types of solid wastes are not considered RMW:

(A) Waste that has been identified or characterized as hazardous waste based on the compounds listed in the *Vermont Hazardous Waste Management Regulations* (HWMR) Appendix 3, U or P (Acute) list [40 CFR 261.33, *Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof*] and is the sole active

ingredient of the mixed formulation. The formulation may be hazardous if it exhibits any of the characteristics as described in §7-205, *Characteristic of Ignitability,* §7-206, *Characteristic of Corrosivity,* §7-207, *Characteristic of Reactivity,* and §7-208, *Characteristic of Toxicity,* as presented in the Vermont HWMR;

(B) Corpses, remains and anatomical parts that are for ceremonial interment or ceremonial cremation;

(C) Nasal secretions, sputum, tears, sweat, urine, and vomitus unless they contain visible blood;

(D) Teeth; and

(E) Medical waste generated in the home that has not been administered by a visiting licensed healthcare professional.

"Residence" means a permanent structure where a person lives during some or all of a year.

"Residual Waste" or "Residuals" shall mean sewage sludge, biosolids, EQ biosolids, short paper fiber, wood ash, and drinking water treatment sludge.

"Reuse" means the use of a material or product more than once before it is recycled or discarded as solid waste.

"River corridors" means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform and bovver of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition, and for minimization of fluvial hazards, as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures

"Sanitary Landfill" or "Landfill" means a disposal site employing an engineered method of disposal of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

"Sanitary Waste" means any non-hazardous or non-radioactive solid waste materials.

"Saturated Zone" means the zone in which the voids in the rock or soil are filled with water.

"Secretary" means the Secretary the Agency of Natural Resources, or his or her duly authorized representative.

"Septage" means the liquid or solid materials pumped from a septic tank that receives either commercial wastewater or industrial wastewater; or a mixture of commercial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or a mixture of grease and domestic waste removed from a grease trap during cleaning.

"Sewage Sludge" means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility or process treating any amount of domestic waste.

"Slaughterhouse Waste" means the residual liquid, inedible animal tissues and offal derived from the production of meat. Slaughterhouse waste is not a food residual.

"Sludge" means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility or process, water supply treatment plant, air pollution control facility or any other such waste having similar characteristics and effects.

"Solid Waste" means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment; high carbon bulking agents used in composting; or solid or dissolved materials in industrial discharges which are point sources subject to permits under the Water Pollution Control Act, 10 V.S.A., chapter 47. Note: for the purposes of these Rules, solid waste that is also hazardous waste is subject to further regulation under the Vermont Hazardous Waste Management Regulations.

"Solid Waste Management" means the activities that result in the storage, transportation, transfer, or treatment of solid waste or recyclable materials, or in the disposal of solid waste.

"Solid Waste Management Entity" or "SWME" means a municipal entity (solid waste district, solid waste alliance or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

"Stabilized" means the resulting condition of waste once the waste no longer undergoes spontaneous physical, chemical or biological changes.

"Storage" means the actual or intended containment of wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such wastes.

"Technical Review" means the application of scientific, engineering or other professional expertise to the facts to determine whether the activity for which a permit is requested meets the standards for issuing the permit under statute or rule.

"Transfer" means to carry, remove, transport, or shift solid waste from one place, facility, vehicle, trailer, or container to another.

"Transfer Station" means a solid waste management facility where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.

"Transport or Transportation" means the movement of wastes by air, rail, road, highway or water.

"Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.

"Uniform Solid Waste" means solid waste which has been determined, in writing, by the Secretary to be consistently uniform (e.g. foundry sands) and does not contain yard waste, marketable recyclable materials or hazardous waste as defined by State and/or Federal regulation.

"Untreated Wood" means:

1) wood produced by splitting or chipping a whole tree, including wood, bark, tree tops, limbs and logging residue;

2) any timber, board or sawn dimensional lumber which has not been treated, coated or preserved. This *does not* include any manufactured building material, such as, pressure treated wood, plywood, particle board or waferboard;

3) sawdust produced solely by the primary processing of the acceptable materials listed (1 & 2) in this definition;

4) fuel pellets produced from the acceptable materials described in this definition.

"Used Oil" means any petroleum product that has been refined from crude oil (in whole or in part), or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point of greater than 100 degrees (Fahrenheit). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived from crude or synthetic oils that are used as fuels (e.g. gasoline, jet fuel and diesel fuel), cleaning agents or solvents (e.g. naptha or mineral spirits).

"Vectors" means organisms or media (e.g., air, water, soil) that serve to transmit disease organisms.

"Vermont Hazardous Waste Management Regulations" or "VHWMR" means the Vermont Hazardous Waste Management Regulations, as amended.

"Waste" means a material that is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded or that has served its originally intended use and is normally discarded or that is a manufacturing or mining by-product and is normally discarded.

"Waste Management Boundary" means the outer perimeter of the area within which solid waste is stored, treated or disposed.

"Water Table" means the upper surface of the zone of saturation.

"Waters" means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border portion of the State.

"White Goods" means discarded refrigerators, washing machines, clothes dryers, ranges, water heaters, dishwashers, freezers and microwave ovens and other similar domestic and commercial large appliances.

"Working Face" means that portion of a landfill where solid wastes are discharged and are spread and compacted prior to the placement of cover material.

"100-year flood" means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period

§ 6-202 Acronyms

ADC – Alternative Daily Cover

AUD – Acceptable Use Determination

AW – Architectural Waste

C&D – Construction and Demolition Waste

CEG – Conditionally Exempt Generator

CFR – Code of Federal Regulations

EPA – U.S. Environmental Protection Agency

EQ – Exceptional Quality

FML – Flexible Membrane Liner

FMP – Facility Management Plan

GWES – Groundwater Enforcement Standards

GWPRS – Groundwater Protection Rule and Strategy

HDPE – High-density Polyethylene

HHW – Household Hazardous Waste

IWMEA – Insignificant Waste Management Event Approval

LCRS – Leachate Collection and Removal Systems

LGCCS – Landfill Gas Collection and Control System

MSW – Municipal Solid Waste

MRF – Materials Recovery Facility

NPDES – National Pollutant Discharge Elimination System

ORF – Organic Solid Waste Recovery Facility

PAH – Polycyclic Aromatic Hydrocarbons

PCB – Polychlorinated Biphenyl

PET - Polyethylene Terephthalate

PGA – Processed Glass Aggregate

RAPs – Required Agricultural Practices Rule

RMW – Regulated Medical Waste

SDS – Safety Data Sheet

SWIP – Solid Waste Implementation Plan

SWME – Solid Waste Management Entity

SPLP – Synthetic Precipitation Leaching Procedure

TCLP – Toxicity Characteristic Leaching Procedure

VAR – Vector Attraction Reduction

VSA – Vermont Statutes Annotated

Subchapter 3 – Applicability, Exemptions, and Prohibitions

§ 6-301 General Applicability

(a) Subject to § 6-302 and § 6-303 of these Rules, these Rules shall apply to any persons that stores, transports, treats, disposes, recycles or otherwise owns, operates, or manages any solid waste facility. Such solid waste management facilities include, storage facilities, (including transfer stations, transportation, incineration, recycling, composting or other processing or treatment facilities) disposal facilities; and land application activities.

(b) These Rules also apply to persons involved with solid waste planning activities pursuant to 24 V.S.A §2202a(c) (see Subchapter 4 – Waste Management Plans).

(c) Extended Producer Responsibility (EPR) requirements for end-of-life management of certain materials that are of particular environmental concern. These requirements, including application collection and management requirements, are defined within statute (title 10 of Vermont Statutes Annotated). Solid waste collected under these EPR programs are not subject to these Rules, provided they are managed in accordance with applicable statutory requirements.

§ 6-302 Exemptions

(a) The following are exempt from regulation under these Rules:

(1) The disposal of brick and concrete, trees, stumps, yard waste, and wood chips that is free from paint, staining, is not odorous or otherwise suspected of contamination , when the origin and disposal of such waste occurs on property under the same ownership or control.

(2) Small volumes of less than one cubic yard of solid waste that:

(A) are stabilized, treated, or composted;

(B) are distributed in association with some other primary product (e.g. nursery stock, top soil)

(C) do not contain pathogenic or chemical contaminants above applicable standards (as specified in §6-1306); and

(D) meet the requirements of §6-1307.

(3) Recycling facilities which accept, aggregate, store and/or process less than fifty (50) tons of recyclable materials per year.

(4) The product of solid waste that has been treated or processed in a certified waste management facility provided that the applicant demonstrates to the satisfaction of the Secretary that after treatment or processing; the product poses no threat to the environment, public health and public safety, and does not create a nuisance.

(5) Storage and compaction operations or activities managed by a solid waste generator or a consortium of generators, provided that:

(A) the solid waste generator or consortium of generators is a single facility, or a single consolidation point for associated or satellite facilities;

(B) the storage or compaction operations or activities will not result in the unauthorized disposal of solid waste;

(C) operations or activities poses no threat to the environment, public health and public safety, and does not create a nuisance; and

(D) operations or activities do not occur at sludge and septage storage facilities.

(6) Mobile solid waste collection operations - the operation of a vehicle, trailer, or container on or attached to such vehicle or trailer, used for the collection of solid waste, provided that:

(A) the vehicle or trailer is authorized by a current Vermont waste transporter permit, and a current registration and inspection required in the state of

registration;

(B) the vehicles, trailers, or containers used to collect solid wastes are in adequate condition to prevent any potential or actual release or discharge of solid wastes and related liquids; and

(C) solid wastes collected by the operation are delivered to a certified waste management facility by the end of the next business day following the date of collection, or within 48 hours of collection, whichever is later.

(7) The transfer of solid waste by a commercial hauler from a vehicle or trailer used for the collection or storage of solid waste to a receiving vehicle or trailer provided:

(A) The transfer activity meets the requirements of § 6-302(a)(7); and

(B) The receiving vehicle or trailer has a capacity not greater than fifteen (15) tons for solid waste or 10,000 gallons for liquid sludge or septage.

(8) Sludge management facilities located inside the fence of municipal wastewater treatment facilities provided the facility does not utilize a process to further reduce pathogens in order to produce EQ biosolids for distribution and marketing to the general public.

(9) Septage, portable toilet, grease trap wastes and holding tank wastes when disposed of at a municipal wastewater treatment facility or other non-land application facility, as approved by the Secretary. This exemption does not r relieve operators of wastewater treatment facilities from complying with the reporting and recordkeeping requirements set forth in § 6-1308.

(10) Glycerol that is delivered to an anaerobic digester as a feedstock for digester operations, provided that:

(A) the anaerobic digester is located on a farm; and acceptance of glycerol is allowable under the farm's nutrient management plan.

(B) The anaerobic digester is off farm and glycerol is managed according to the Facility Management Plan.

(11) Collection of used oil and used oil filters provided that the collection is in compliance with all applicable used oil provisions of the Vermont Hazardous Waste Management Regulations.

(12) Processed Glass Aggregate (PGA) that:

(A) Contains no hazardous waste and no more than 5% contamination by weight from china dishes, ceramics, or plate glass; or 1% contamination by weight from plastics, papers or other objectionable materials. PGA must be crushed and screened such that 95% of the material passes a 25.0 mm screen and not more than 3% of the material that passes through the 4.75 mm sieve passes the 75 µm sieve.; and

(B) is used in the following applications:

(i) Roadway, trail, parking lot or sidewalk application, including:

(I) base course: layer(s) of specified material supporting a surface course;

(II) subbase: layer(s) of specified material place on a subgrade to support a base or surface course, or

(III) embankments: a portion of a fill section situated between the existing ground and subgrade;

(ii) Utility Trench Bedding;

(iii) Backfill material for underground utilities (sewer and water pipes, electrical conduit and fiber optic line);

(iv) Drainage applications, including:

(I) Free draining back-fill behind retaining walls; or

(II) Foundations drains, drainage blankets, French drains; or

(v) Filter media for wastewater treatment systems.

(13) The following materials, when used as high-carbon bulking agents in composting:

(A) Clean wood chips and shavings;

(B) Bark wood chips;

(C) Straw;

(D) Shelled corn cobs;

(E) Corn stalks;

(F) Shrub trimmings;

(G) Clean dry leaves, excluding any leaves vacuumed or accumulated from roadways;

(H) Coarse sawdust;

(I) Nut shells;

(J) Pine needles – brown;

(K) Non-legume hay – dry;

(L) Heavily-bedded horse manure (carbon to nitrogen ratio of 22-50:1);

(14) Vermicomposting facilities, provided that all vermicomposting activities occur within a fully enclosed structure that is equipped with an impermeable floor.

(15) Collection, storage, and treatment of regulated medical waste (RMW) by a RMW generator provided that the conditions in (A) through (C) of this subdivision are met. This exemption does not relieve a generator of RMW from compliance with the requirements of § 6-304(h).

(A) The consolidation point shall only accept the same type or types of RMW that is produced at that location;

(B) The on-site amount of RMW accepted by the generator from satellite facilities shall not exceed the storage capacity of the site; and

(C) The annual amount of RMW accepted by the generator from satellite facilities does not exceed the amount of RMW produced by the generator for that calendar year.

(16) Cemeteries as defined in 18 V.S.A. § 5302.

(17) Institutions with an established food residual diversion program choosing to offer food residual consolidation to their employees are exempt from the transfer station certification and food residual drop off registration requirements of these rules.

§ 6-303 Waiver of Technical Standards

The Secretary may waive technical and siting requirements of these Rules provided the following conditions are met:

(A) The President of the United States intends to perform a response action, as defined in 42 U.S.C. § 9601(25), or the Secretary intends to perform a removal or remedial action, pursuant to 10 V.S.A. Chapter 159, in response to a release or threatened release of hazardous substances or materials; and

(B) The Secretary makes prior written findings that:

(1) The proposed response action will not adversely affect public health, safety or the environment; and

(2) The technical and siting requirements will be complied with to the extent practical in light of the overall objectives of the response; or

(C) The Secretary has granted a variance pursuant to section § 6-605 of these Rules. Only those provisions specified in a written determination issued under § 6-605 shall be waived.

§ 6-304 Prohibitions

The following activities are prohibited under these Rules:

(a) Open burning of solid waste except as may be allowed in accordance with the Vermont Air Pollution Control Regulations, as amended, and/or as may be approved by the Secretary pursuant to § 6-505(b) (Insignificant Waste Management Event Approvals) of these Rules.

(b) Combustion of solid waste in an incinerator unless the incinerator meets all requirements of the Air Pollution Control Regulations, as amended, and these Rules.

(c) Construction, substantial alteration, operation or change of ownership of any solid waste management facility without first obtaining certification or modification of a certification from the Secretary in accordance with these Rules.

(d) Treatment, storage or disposal of solid waste outside of a certified facility except for the exemptions set forth in § 6-302 of these Rules.

(e) Disposal of commercial septage, a mixture of commercial and domestic septage, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, and waste from Type III marine sanitation devices by application to the land is specifically prohibited.

(f) Disposal of hazardous waste in solid waste landfill facilities, as may be permitted under the Vermont Hazardous Waste Management Regulations, as amended.

(g) Knowing disposal of wastes listed in 10 V.S.A. § 6621a which are designated by law to be prohibited from disposal in a landfill facility.

(h) Disposal of regulated medical waste (RMW) which has not been adequately treated, rendered inaccessible, and obtained a Certificate of Treatment by a regulated medical waste treatment facility or regulated medical waste generator with on-site treatment.

(i) Any other waste treatment, storage, disposal, or other management activity conducted in violation of the provisions of 10 V.S.A. chapter 159, these Rules, or the conditions of an existing permit or other written authorization issued by the Secretary.

Subchapter 4 – Waste Management Plans

§ 6-401 Planning Specific Definitions

"Materials Management Plan" means the solid waste management plan required to be adopted by the Secretary pursuant to 10 V.S.A. § 6604.

"Solid Waste Management Entity" or "SWME" means a municipal entity (solid waste district, solid waste alliance, solid waste group or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

§ 6-402 Solid Waste Implementation Plans; General Requirements

(a) Municipalities shall participate as member towns to a solid waste management district or alliance or act as independent towns in performance of their solid waste management responsibilities. Collectively, these municipalities are referred to as Solid Waste Management Entities (SWME). Each SWME shall have a Solid Waste Implementation Plan (SWIP) that has been approved by the Secretary. A municipality that does not comply with this section shall not be eligible for State funds to plan and construct solid waste facilities and shall not use facilities certified by the State of Vermont.

(b) A SWME shall submit for the Secretary's review and approval a solid waste implementation plan that conforms to the performance standards in the materials management plan (MMP) adopted by the Secretary pursuant to 10 V.S.A. § 6604 and to any applicable regional plan adopted pursuant to title 24, chapter 117 of the Vermont Statutes Annotated. The proposed SWIP submittal shall:

(1) Address how the performance standards of the MMP and 24 V.S.A. § 2202a will be completed during the current SWIP term;

(2) describe siting criteria that will apply to solid waste facilities in the SWME region. As required by 10 V.S.A. § 6605(c), these siting criteria shall not be less stringent than the criteria of these Rules;

(3) specify the facilities that are included within the SWIP proposal;

(4) describe how proposed facilities will be reviewed for inclusion within the SWIP;

(5) describe the process that will be used to ensure public participation in the development and implementation of the SWIP, including at least two public

meetings of the draft SWIP;

(6) include copies of any solid waste related ordinances with the SWIP; and

(7) demonstrate conformance with any applicable regional plan. Such a demonstration can be in the form of a letter from the applicable regional planning commission, copies of pertinent sections of the regional plan, or other documentation that demonstrates conformance.

(c) Solid waste implementation plans shall be submitted and shall be reviewed by the Secretary in accordance with § 6-403 of this subchapter.

§ 6-403 Review of Solid Waste Implementation Plans

(a) Plans or amendments thereto shall be reviewed pursuant to this section in the following instances:

(1) upon any modification by the SWME responsible for preparing the plan;

(2) upon the Secretary's determination that changes made to the materials management plan or these Rules necessitate review of a solid waste implementation plan to determine compliance with the changes or requirements of these Rules.

(b) Review; Standards. Plans and plan revisions required to be submitted pursuant to this section shall be reviewed by the Secretary for conformance with the submittal requirements of § 6-403.

(c) Determination; pre-approval. Upon a finding that a solid waste implementation plan or any amendment complies with the performance standards of the MMP established under subsection § 6-402(b) of this section, the Secretary shall issue a written pre-approval of the plan or amendment to the SWME. If a plan or amendment does not comply with one or more of the performance standards, the Secretary shall issue written notification to the SWME indicating that the plan or amendment is not approved and identifying the deficiencies of the plan or amendment. Pre-approval shall not be issued until all deficiencies are fully addressed.

(d) Public notice and comment. Prior to issuance of a final determination by the Secretary, the SWME shall provide public notice and a public hearing on the plan or plan amendment. If the plan or plan amendment addresses nonregulated hazardous waste (HHW), the SWME shall hold two public hearings on the plan or amendment as required by 24 V.S.A. § 2202a(c)(4)(B). The SWME shall submit written verification of compliance with this subsection to the Secretary, including the dates of the public meeting(s) held on the plan or amendment and a summary of each meeting.

(e) Final approval.

(1) The SWME shall submit the solid waste implementation plan or amendment for final review and approval. The final submission shall identify changes made to the plan or the amendment, including any changes made in response to the Secretary's determination under subsection (c) of this section.

(2) The Secretary shall approve the solid waste implementation plan, including any amendments or changes thereto, upon making a determination that:

(A) The plan adequately addresses and conforms to the performance standards in subsection (c) of this section;

(B) The plan and has been publicly noticed; and

(C) the public notice requirements of 24 V.S.A. § 2202a and this subchapter have been satisfied.

(3) When issuing a final approval of a plan or plan amendment, the Secretary may impose any conditions, requirements, or restrictions that may be necessary to ensure the plan's compliance with subdivision (e)(2) of this subsection.

Subchapter 5 – General Application Submittal Requirements

§6-501 Applicability

Any facility or activity that is required to obtain approval by the Secretary shall do so in accordance with the requirements of these Rules. Applications for certification, registration, or other approval shall be submitted and shall be reviewed by the Secretary in accordance with the provisions of this subchapter and subchapter 6 of these Rules.

Table A. Application Process by Relevant Notice Types

Notice Type	Upon Application Submittal	Administratively Complete Application	Draft Decision	Comment and Meeting Request Period	Public Meeting	Post-Meeting Comment Period	Final Decision
Type 2 - *Individual Permits and Certifications*	Applicant notices adjoining property owners by US mail	Notice posted to Electronic Notice Bulletin	Notice and documents posted to Electronic Notice Bulletin	≥30 days after draft decision posted. Meeting request must be made within 14 days of draft decision.	Must be announced for ≥14 days prior to meeting date	Lasts ≥7 days after public meeting	Notice posted to Electronic Notice Bulletin with final decision and response to any comments
Type 4 – *Notices of Approval, Minor Amendments*	No notice required of adjoining property owners	Notice posted to Electronic Notice Bulletin	Notice and documents posted to Electronic Notice Bulletin	≥14 days after draft decision posted.	N/A	N/A	Notice posted to Electronic Notice Bulletin with final decision and response to any comments
Type 5 – *Emergency Permits and Registrations*	N/A	N/A	N/A	N/A	N/A	N/A	Notice posted to Electronic Notice Bulletin with final decision

Further details may be found in 10 V.S.A. Chapter 170

§6-502 General Permitting Provisions

(a) Signatory requirements.

(1) The following individuals shall be applicants or co-applicants to a certification, registration, or other request for approval under these Rules (if different parties) and shall be bound by the terms of the certification:

(A) The facility operator; and

(B) The owner of the land on which the facility is located, except that where the proposed facility is for the management of sludge or septage and in lieu of the land-owner signature, the operator of the proposed facility may provide a lease for a term consistent with the term of the certification and which does not conflict with the requirements of these Rules; and

(C) The facility owner.

(2) Applications and all reports requested or required by the Secretary shall be signed in accordance with the following:

(A) If the applicant is a corporation, the application shall be signed by a principal executive officer of at least the level of vice-president, or a duly authorized representative who is responsible for the operation of the facility.

(B) If the applicant is a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor.

(C) If the applicant is a municipality, state, or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.

(D) If the applicant is an individual, the application shall be signed by the applicant or by a duly authorized representative of the applicant.

(3) Duly authorized representatives shall be established as signatories to certifications and reports as established by § 6-106.

(b) Documentation retention.

(1) All applicants shall maintain all records of data and any supplemental information used to complete applications for all certification and other approvals allowed for by these Rules for a period of at least ten years from the date on which the application is signed by the applicant. Such records shall be submitted to the Secretary upon request.

(2) Applicants shall maintain a copy of any current facility management plan (if applicable) and a copy of the current certification or other approval at the facility. These documents shall be accessible by all facility personnel during hours of operations.

§6-503 Certification Types

(a) Full Certifications/Type 2. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-

504 and § 6-601 of these Rules:

(1) Solid waste storage facilities, transfer or processing facilities and recycling facilities;

(2) Large composting facilities authorized under § 6-1104(c) of these Rules;

(3) Interim certifications for solid waste management facilities authorized under 10 V.S.A. §6605b;

(4) Treatment, storage or disposal facilities for any waste derived solely or in part from domestic wastes, unless authorized under a Sludge Management Plan as established in §6-1302(a);

(5) Land application sites for non-EQ biosolids, residual dairy wastes, or domestic septage;

(6) Landfills;

(7) Off-farm anaerobic digesters authorized under Subchapter 12; and

(8) Any other individual permit issued pursuant to the Secretary's authority under 10 V.S.A. Chapter 159 and these Rules that is not specifically listed under § 6-503(b)-(c).

(b) Minor Certifications/Type 4. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-505 and § 6-602 of these Rules:

(1) Categorical solid waste certification under 10 V.S.A. chapter 159 and § 6-902(a) and § 6-1002(a) of these Rules; and

(2) Medium scale composting certification under 10 V.S.A. Chapter 159 and § 6-1104(b) of these Rules.

(3) Insignificant Waste Management Event Approvals under § 6-505(b)

(4) Categorical solid waste certification

(c) Registrations and Emergency Approvals/Type 5. Applications for the following activity types shall be governed by the procedures in § 6-506 and § 6-603 of these Rules:

(1) Small composting facility registration under § 6-1104(a);

(2) Food residual drop-off facility registration under § 6-1202(a);

(3) HHW/CEG collection event approvals under § 6-1403(b); and

(4) Issuance of emergency sludge and septage disposal approvals under 10 V.S.A. 6605.

(d) Additional Process.

(1) In an individual case, the Secretary may determine to apply the procedures of a Full Certification/Type 2 to the issuance of a minor certification, registration, or emergency approval otherwise subject to the procedures as prescribed in subdivision (b) or (c) of this section.

(2) In an individual case, the Secretary may require measures in addition to those directed by this subchapter in order to provide notice to other persons potentially affected by the issuance of the certification, registration, or approval.

§6-504 Full Certification Application; Interim Certification Submissions

(a) Applicability. Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter, or operate a solid waste facility type described in § 6-503(a), shall submit a complete application that complies with the requirements of this section, as applicable. If a solid waste management facility includes more than one operational unit (i.e. multiple sites used for the land application of septage or sludge), the application shall provide all required information for all units.

Note: these are the minimum application requirements necessary for all full certification applications. Refer to the relevant subchapter(s) elsewhere in these Rules that addresses the solid waste management activity(ies) for which certification is desired for any additional application requirements that may apply.

(b) Application preparation. Applications submitted under this section shall be completed under the direction of a qualified professional, licensed in the State of Vermont. The qualified professional shall certify that to the best of their information, knowledge and belief that the application is in compliance with standards contained or referenced in these Rules.

(1) An applicant may request that the Secretary waive this requirement prior to submission of an application. If a waiver of this requirement is granted by the Secretary, the applicant is required to certify that the application is in compliance with standards contained or referenced in these Rules.

(c) Application for full certification. An application for a full certification shall include the following:

(1) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-501.

(2) Identification of the type of solid waste management facility, including all operational units;

(3) The physical location of the facility, including the 911 address. The physical location shall be marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.

(4) The applicable application fee as specified in 3 V.S.A. chapter 51, subchapter 2 §2822(j).

(5) Evidence of ownership of facility or property: This shall include a copy of a fee simple title to the property or a lease agreement consistent with § 6-502(a)(1)(B). This evidence of ownership requirement does not apply to land application facilities.

(6) Evidence of compliance with the disclosure requirements of the waste management personnel background review if required by 10 V.S.A. §6605f.

(7) Documentation demonstrating compliance with the siting, design and operations requirements of Subchapter 7 and any additional siting, design and operations requirements specific to the type of facility as provided in Subchapters 9 to 12.

(8) A facility management plan (FMP), which includes a demonstration that the siting, design and operational information for the facility is sufficient to demonstrate compliance with the standards and requirements of these Rules. The FMP shall address all operational units and wastes to be managed at the facility along with providing the basis for the operating capacity and permitted design capacity planned for the facility. At a minimum, the FMP shall address the components of a FMP identified in § 6-704(b).

(9) Evidence that the facility, is included in a solid waste implementation plan as required by 10 V.S.A. § 6605(c). This requirement shall not apply to land application sites.

(10) Information sufficient, as defined by the Secretary pursuant to 10 V.S.A. Chapter 48, to show that the property on which the facility is located is classified as a Class III or Class IV groundwater area.

(11) A description of the proposed operation(s), any planned development of the facility, and any relevant engineering plans.

(12) A listing of the types and amounts of materials that will be managed at the facility during the certification period.

(13) For fee considerations, private applicants shall list amounts for the permitted design capacity of the facility and may list an operating capacity. Municipal facilities shall only provide permitted design capacity estimates.

(14) An operator training plan that provides either classroom or on-the-job training for all facility personnel involved in the handling of waste. This instruction shall educate each individual on the procedures necessary to perform their duties safely and in a way that ensures the facility's compliance with all applicable statutes, Rules, facility management plans and conditions of certification.

(15) A closure plan that satisfies the applicable criteria of § 6-907; § 6-1007, § 6-1111, § 6-1208 or § 6-1309 of these Rules, as required for the facility type.

(16) A post-closure plan that satisfies the criteria of § 6-1008 of these Rules.

(17) Evidence of compliance with the financial responsibility and capability requirements of Subchapter 8 of these Rules, or a plan for achieving compliance with these requirements which will result in compliance prior to the issuance of the draft certification.

(18) A signed certification providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in accordance with subsection (g) of this section.

(19) Any other information that the Secretary may require, as deemed necessary to protect human health, safety, and the environment.

(d) Application for Interim Certification.

(1) A person who does not qualify for a solid waste management certification under 10 V.S.A. § 6605 and this section may apply for an interim certification under this subsection.

(2) A complete application for an interim certification shall include:

(A) Applicants for an interim certification shall submit the information as required by § 6-504 (a-c) above;

(B) Evidence of the necessity of facility operation and public benefits derived from operation;

(C) An assessment of other currently available methods to manage the wastes stored, treated or disposed at the facility;

(D) A schedule of the activities that will result in proper closure or full certification of the facility prior to the expiration of the interim certification;

(E) Monitoring plans for the groundwater, surface water and air quality of the facility; including summary of any existing data;

(F) Evidence that the construction, alteration and continued operation of the facility or the activity is consistent with regional solid waste plans, if any, and the solid waste management plan; An affidavit providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in accordance with subsection (g) of this section below; and

(G) Any other information the Secretary may require.

(e) Upon (prior or concurrently with) submission of an application to the Secretary, the applicant shall provide written notice of the application to all adjoining property owners. The notice shall be made through U.S. mail using a form developed by the Secretary, and shall provide the following information:

(1) A description and location of the proposed activities;

(2) A description of the process for review of the application and a statement that includes information about how the property owners can continue to receive notices and information, and the opportunities for public participation and comment, on the application;

(3) Contact information (name, mailing address and phone number) for a person at the Agency processing the permit.

§6-505 Minor Application Submissions

(a) Categorical Certification Applications.

(1) Any person wishing to construct, substantially alter, or operate any categorical solid waste facility shall submit a complete application that complies with the requirements of this section.

Note: The application requirements included in this section are the minimum application requirements necessary for all categorical certification applications. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired to determine if there are any additional requirements specific to the management activity.

(2) An application for a categorical certification, shall include the following:

(A) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-502.

(B) A description of the proposed activity and operations;

(C) The physical location of the facility, including the 911 address. The physical location shall be marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.

(i) A site plan map of the facility at a scale of 1:100 or greater that contains:
Location of barriers to prevent unauthorized entry;

(ii) Access roads;

(D) Location of waste management transfer, storage, treatment and processing areas, and facility boundaries and property boundaries.

(E) Names, mailing addresses and telephone numbers of the owner of the land and the operator of the facility;

(F) The facility's proposed hours; of operation;

(G) An estimate of the type and quantity of materials to be received;

(H) A letter from solid waste management entity where the facility is located that indicates the facility is acceptable under the solid waste implementation plan,

(I) If disposal is proposed within the source protection area of a public water supply, the location of the disposal area and the delineated source protection area shall be identified on a site map;

(J) Information addressing compliance with the relevant siting restrictions of Subchapter 7 and any additional siting limitations required by the Secretary as may be necessary to protect public health and safety or the environment; and

(K) Other requirements, as determined by the Secretary and including financial responsibility, if deemed necessary to protect human health, safety, and the environment.

(b) Insignificant Waste Management Event Approvals (IWMEA)

(1) An IWMEA allows for the occurrence of a one-time waste disposal, storage, treatment or processing event that:

(A) has been demonstrated to the satisfaction of the Secretary to be of limited duration, generally six months or less, and will not result in a threat to the public health and safety or to the environment, and will not create a nuisance or.

(B) consists of a one-time, limited duration disposal of, the disposal event shall meet the categorical disposal facility siting requirements of § 6-1003:

(i) stumps, root masses, decomposing wood or brush;

(ii) bituminous concrete;

(iii) brick, concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;

(iv) street sweepings;

(v) clogged septic stone;

(vi) burning of structures for the purpose of training firefighters;

(vii) fires to thwart a hazard which cannot properly be managed by any other means, or fires that are necessary for the protection of public health;

(viii) pilot scale experimental facilities for the management of sanitary wastes; and

(ix) other solid wastes that will not result in a threat to the public health and safety or to the environment and will not create a nuisance.

(2) In order to obtain approval for an IWMEA, applicants shall submit a complete application on a form provided by the Secretary.

Note: Certified solid waste facilities that have provisions for holding collection events included within the issued certification do not need to obtain a separate IWMEA approval if the event is held in compliance with that certification.

(3) Insignificant waste management events operated by a private entity shall submit application fees in accordance with 3 V.S.A 2822(i) and 2822(j)(6)(D).

§6-506 Registrations and Emergency Approval Submissions

A person seeking approval for activities listed in § 6-503(c) shall submit a completed application on a form provided by the Secretary, that includes the following information:

(a) For a small composting facility, the information required by in § 6-1105(a)

(b) For a food residual drop-off facility, the information required by § 6-1206(a)

(c) For a HHW/CEG collection event, the information as required by § 6-1403(b)

§6-507 Application for Variance from Solid Waste Rules

(a) Any person who owns or is in control of any facility, building, structure, process, or equipment may apply to the Secretary for a variance from these Rules in accordance with this section. A variance or renewal shall not be a right of the applicant or holder thereof but shall be in the discretion of the Secretary. In no case shall a request for a variance from these Rules be considered a contested case under 3 V.S.A. § 809.

(b) Variances from the requirements for the collection of leaf and yard residuals (10 V.S.A. § 6605(j)(2)) and/or food residuals (10 V.S.A. § 6605(j)(3)) shall be made by facilities as provided for by 10 V.S.A. §6613(b).

(c) With the exception of variances sought under 10 V.S.A. §6613(b), an application for a variance from these Rules shall contain, at a minimum:

(1) The specific rule provision(s) for which the variance is sought, a written demonstration of need for the variance, and the specific authority under 10 V.S.A §6613(d) for which the variance is sought;

(2) Information demonstrating that the variance, including any alternate standard and/or process to be employed by the applicant in lieu of the provision(s) from which the variance is requested, will not endanger or tend to endanger human health or safety;

(3) Information demonstrating serious hardship from compliance with the rule without equal or greater benefit to the public (e.g., cost benefit analyses, profit and loss statements, balance sheets, federal income tax returns, and other documentation as may be necessary);

(4) The proposed duration of the requested variance, and, except for a permanent variance from the siting requirements of Rules adopted pursuant to chapter 159 of title 10, a schedule for obtaining compliance with the rule from which the variance is sought;

(5) Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act; and

(6) An affidavit providing the names of adjoining property owners and a statement that notice of application has been provided by the applicant in accordance with subdivision (d) of this section.

(7) Other requirements, as determined by the Secretary and if deemed necessary to protect human health, safety, and the environment.

(d) The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:

(1) a brief description of the rule from which the variance is being sought;

(2) the location of the proposed activity;

(3) a description of the process for review of the application and opportunities for public participation and comment on the application; and

(4) contact information (name, mailing address and phone number) for a representative of the Secretary.

Subchapter 6 – Application Review and Certification Issuance

§ 6-601 Full Certification (Type 2) Review Process

(a) Following the submission of an application for full certification the Secretary shall review of the application pursuant to this section.

(b) Administrative review; notice of application.

(1) The application shall provide notice through U.S. Mail to adjoining property owners on a form developed by the Secretary The notice shall be provided at the same time that the application is submitted to the Secretary, and the applicant shall provide a signed certification to the Secretary that all adjoining property owners have been notified in accordance with this requirement.

(2) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.

(3) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. This notification shall be completed within 15 days of receipt of the application and shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.

(c) Technical review; public comment period; public informational meeting.

(1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.

(2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.

(3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 30 days.

(4) Upon request by any person, or upon the Secretary's own motion, the Secretary shall hold a public informational meeting within 14 days of the notice to the ENB.

(5) If a public informational meeting is requested, the Secretary shall provide 14 days' notice of the location, date, and time of the public informational meeting. The notice shall be provided to all persons who received notice of the draft decision through the ENB. When a public informational meeting is held, the public comment period shall not end until at least seven days following the public informational meeting.

(d) Final decisions; content; notice.

(1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.

(2) Secretary's final decision on an application shall include the following:

(A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.

(B) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision. If the Secretary determines that an application does not meet the applicable standards for issuing the permit, the Secretary shall also identify each deficiency in the application that resulted in the Secretary's decision.

(C) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.

(D) Notice on how the decision may be appealed and where to file an appeal.

(3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

§6-602 Minor Certification (Type 4) Review Process

(a) Following the submission of an application for a minor certification, the Secretary shall review the application pursuant to this section.

(b) Administrative review; notice of application.

(1) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.

(2) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. The notification shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.

(c) Technical review; public comment period.

(1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.

(2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.

(3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 14 days.

(d) Final decisions; content; notice.

(1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.

(2) Secretary's final decision on an application shall include the following:

(A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.

(B) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.

(C) Notice on how the decision may be appealed and where to file an appeal.

(3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the

discretion of the Agency, to protect public health, public safety, or the environment.

(e) Additional notice. At any time during the review of an application, the Secretary may require that a permit application being reviewed under the procedures of this section may be reviewed under the Full Certification (Type 2) procedures of § 6-601. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

§6-603 Registration and Emergency Approvals (Type 4)

(a) Following the submission of a request for registration or application for emergency approval, the Secretary shall review the application pursuant to this section.

(b) Administrative review. The Secretary shall review the request for registration or application for emergency approval for administrative completeness. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.

(c) Final decisions; content; notice.

(1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.

(2) Secretary's final decision on an application shall include the following:

(A) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision.

(B) All documents and information on which the Secretary relied in issuing the decision.

(C) Notice on how the decision may be appealed and where to file an appeal.

(d) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

(e) Additional notice. At any time during the review of an application, the Secretary may require that a permit being reviewed under the procedures of this section may be reviewed under Full Certification (Type 2) procedures of § 6-601 or Minor Certification (Type 4) procedures of § 6-602. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

§ 6-604 Amendments; Renewals

(a) Amendments; process.

(1) If the Secretary determines that an amendment to a certification or other approval is required, only the conditions subject to amendment shall be modified. Until applications for amendment are granted or denied in whole or in part, the terms and conditions of the original certification or other approval shall remain in force.

(2) Amendments shall be processed as follows:

(A) A major amendment shall be subject to the same procedures applicable to the original permit decision under these Rules.

(B) A minor permit shall be subject to procedures applicable to the Minor Certification Process (Type 4) in § 6-602 of this subchapter.

(C) An administrative amendment shall not be subject to the procedures of this subchapter.

(b) Renewal. A person may renew a certification under the same application and procedural requirements that are applicable to the original decision under this subchapter.

§ 6-605 Variance Review Process

(a) Variance applications shall be reviewed pursuant to the full certification review process as provided in § 6-601 except as provided in this section below.

(b) Prior to the determination that an application for a variance is administratively complete, and at the discretion of the Secretary, in accord with 10 V.S.A. § 6613, the processing of a variance application may be delayed when an applicant for a variance or renewal, is not in compliance with an administrative order or an assurance of discontinuance with respect to a violation that is directly related to the activity which is the subject of the application.

(c) A variance or renewal shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. The Secretary shall only grant a variance from these Rules upon finding that the requirements of 10 V.S.A. §6613(a) and (b) and the notice and consideration requirements of § 6613(c) have been met.

(d) Variances shall be issued with conditions and for a time period consistent with the reasons for the variance and consistent with the provisions of 10 V.S.A. §6613(d), as applicable.

(e) The Secretary's determinations on variance applications (including renewals) shall contain the following:

(1) An opinion detailing the factual findings that are the basis of the approval, denial or renewal;

(2) the conclusions of the Secretary on whether the variance meets the requirements of 10 V.S.A. § 6613 and these Rules, as applicable;

(3) any conditions necessary for the approval or renewal of the variance;

(4) a summary of responses to comments from the public on the variance application;

(5) instructions on how to appeal the Secretary's determination; and

(6) any other information the Secretary deems necessary.

(f) Any variance granted may be renewed on terms and conditions and for periods, which would be appropriate on initial granting of a variance. An application for renewal shall be made at least 60 days prior to the expiration of the variance. If complaint is made to the Secretary on account of the variance, no renewal thereof shall be granted, unless following public notice and an opportunity for a public meeting on the complaint, the Secretary finds that renewal is justified.

§ 6-606 Suspension and Revocation of Certifications and Registrations

(a) Authority. The Secretary may suspend or revoke, in whole or in part, a certification, or registration issued under this subchapter for suspension or revocation.

(b) Basis for suspension or revocation. The following shall be bases for suspension or revocation of a certification, or registration:

(1) Violation of a condition imposed in the certification, or registration as issued;

(2) Violation or failure to comply with the provisions of these Rules or any authorizing statutes;

(3) False or misleading information submitted in support of an application or request for approval; or

(4) A determination by the Secretary that the suspension or revocation of the certification, or registration is necessary to prevent:

(A) actual substantial harm to the public health, public safety, or the environment, or

(B) an imminent and substantial threat of harm to the public health, public safety, or the environment.

(c) Notice of suspension or revocation. The Secretary shall provide notice of the suspension or revocation to the holder of the certification, or registration and post the notice to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. Except as provided in subsection(e) of this section, such notice shall be provided at least 14 days prior to the date when the suspension or revocation takes effect. The notice shall include:

(1) The legal authority for the proposed action;

(2) A brief statement of the facts upon which the proposed action is based;

(3) The effective date of suspension or revocation of the certification, plan, or registration; and

(4) Notification of the permittee's right to, within 30 days of receipt of the written notification, request a hearing to present information in response to the notice for suspension or revocation.

(d) Finding of harm; threat of harm. If the Secretary determines that immediate suspension or revocation of a certification, or registration is necessary to prevent actual substantial harm or an imminent and substantial threat of harm to the public health, public safety, or the environment under §6-606(c)(5), the suspension or revocation shall become effective upon the receipt of the Secretary's notice under (d) of this section. The suspension or revocation shall be effective until any requested hearing has been completed and a final decision issued by the Secretary.

(e) Hearing; request. Upon request for a hearing made within 30 days of receipt of the Secretary's notice of suspension or revocation, the Secretary shall hold a hearing on the decision for suspension or revocation of the certification, plan, or registration. The failure to request a hearing within 30 days of receipt of the Secretary's notice shall constitute a waiver of the right to a hearing on the petition.

(f) Party status. The Secretary shall determine the right of any other persons requesting party status to participate in the proceedings. In determining party status, the Secretary shall consider whether a person or his or her property is directly affected by the facility or activity(ies) authorized in the certification, or registration. The Agency shall automatically be a party to the proceeding.

(g) Burden; admissibility of evidence. The hearing in a contested case shall be conducted by a hearing officer appointed by the Secretary. The burden of establishing that the certification, or registration should be suspended or revoked shall be upon the Secretary. The admissibility of evidence in proceedings under this section shall be determined under the criteria set forth in 3 V.S.A. §810.

(h) Recording. Upon request of the party, a hearing held under this section shall be transcribed by a qualified stenographer or recorded on an electronic sound device. If a transcription by a stenographer is requested, the request shall be made in writing at least 10 days prior to the scheduled hearing. Costs shall be borne by the requesting party. The requesting party shall provide one copy of the transcript to the Secretary without costs; other parties wishing to obtain a copy of the transcript shall reimburse the requesting party on a prorated basis.

(i) Examination of evidence; decision and order. The examination of evidence, decision and order shall be governed by the provisions of 3 V.S.A. § 811 and § 812. The final decision shall be made by the Secretary within 30 days after the close of the hearing. The decision shall constitute the final decision of the Secretary. Copies of the decision shall be sent to the holder of the certification, plan, or registration, and other parties to the proceeding.

Subchapter 7 – General Siting, Design and Operating Standards

§ 6-701 Applicability

The requirements of this subchapter apply to all solid waste management facilities with the exception of those facilities that have been issued a categorical certification pursuant to § 6-503(b).

Note: The requirements of this subchapter are the minimum requirements necessary for siting, design, and operations of all facilities subject to this subchapter. Refer to the relevant subchapter which addresses the solid waste management facility for any additional requirements specific to that type of facility.

§ 6-702 Prohibited Areas

(a) Facilities are prohibited from being sited in the following designated areas:

(1) Class I and Class II Groundwater Areas.

(2) Class I and Class II wetlands and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.

(3) Class III wetlands as and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.

(4) Class III wetlands, as defined by the Vermont Wetlands Rules, unless allowed by a Water Quality Certification that has been issued pursuant to 40 CFR Part 401, or has been waived by the Agency;

(5) A National Wildlife Refuge as designated by the United States Fish and Wildlife Service.

(6) A wildlife management area as designated by the Agency.

(7) A threatened or endangered species habitat area as designated by the Agency.

(8) Floodways, Special Flood Hazard Areas. This criterion does not apply to storage, transfer or recycling facilities, certified prior to the date of these Rules where there is no expansion of the facility beyond the previously certified waste management boundary.

(9) River corridors, except for land application sites as provided in §6-1304. This criterion does not apply to previously certified storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.

(10) A watershed for a Class A Waters, as designated by the Agency; and

(11) Within 500-feet of an Outstanding Resource Water. This criterion does not apply to previously certified storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.

§ 6-703 Siting Standards

(a) Facilities shall be located such that an emission or discharge from the facility will not unduly harm the public health and safety and will have the least possible reasonable impact on the environment by demonstrating the requirements of subsection (b) of this section.

(b) In an application for a facility subject to this subchapter, an applicant shall satisfactorily demonstrate each of the following:

(1) The isolation distances from the high seasonal water table, bedrock and surface waters are sufficient to ensure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and Rules;

(2) The isolation distance to public and private drinking water sources is sufficient to ensure that an emission or discharge from the facility will not adversely affect drinking water;

(3) The isolation distances to property lines or any residence, school, day-care facility, hospital or nursing home, are sufficient to ensure that the facility will not:

(A) Result in objectionable odors off site;

(B) Result in an unreasonable visual impact off site;

(C) Unreasonably increase the level of noise detectable off site; or

(D) Otherwise adversely affect public health.

(4) The minimum isolation distances for the facility or activity listed in Table B are met, or other isolation distances as required by the Secretary pursuant to subsection (c) of this section Any facility which is not listed in Table B, shall

have an isolation distance to property lines of at least 50 feet.

(5) That the facility is not located in areas that have development limitations, such as highly erodible soils, steep slopes, or do not have the physical capability to support the facility;

(6) That the facility is accessible from a state or federal highway or a Class III or better town highway;

(c) The Secretary may require that a facility meet isolation distances that are greater than those distances identified in Table B if such increase in distances is necessary for the facility to demonstrate compliance with § 6-703(b)(1)-(3) of this section.

(d) The Secretary may request any additional information necessary to determine a proposed facility ’s compliance with the standards contained in this section.

Table B : Required minimum isolation distances.

CATEGORY	Minimum Distances By Facility Type				
	Land Application[1] Injection	Land Application[1] Other	Landfills [2]	Storage, Transfer, Processing, and Recycling Facilities	Categorical Disposal Facilities
Minimum vertical separation from high seasonal water table[3]	3'	3'	6'	n/a	6’
Minimum vertical separation to bedrock	4’	4’	10'	n/a	10’
Minimum distance to waters from the waste management boundary	50'	100'	300'	100' [4]	100’
Minimum distance from waste management boundary to drinking water source not owned by the applicant.	300'	300'	1000'	100' [4]	200’
Minimum distance to property line from waste management boundary	25'	50'	300'[8]	50'[6]	50’
Minimum distance from a waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes.	100'	100'	1000'[5]	100' [7]	300’

[1] Applies to land application, of non-EQ biosolids, and stabilized domestic septage.

[2] Minimum criteria for a landfill facility are based on underlying soils with a maximum permeability of 1×10^{-4} cm/sec. Landfill sites with more permeable soils will be evaluated on a case by case basis, but are generally not acceptable.

[3] For land application, vertical separation for this category shall be measured from the ground surface, or bottom of the zone of incorporation if applicable, to the saturated zone existing at the time of disposal. For disposal facilities, vertical separation for this category shall be measured from the bottom of the landfill liner system to the seasonal high groundwater table.

[4] This criterion applies to facilities constructed after the effective date of these Rules, and to facilities constructed prior to the effective date of these Rules which have been expanded or modified and such expansion or modification will resulted in a reduction in the isolation distance to a drinking water source.

[5] This criterion applies only to certifications issued after October 15, 2004 for new landfill units or lateral expansions or modifications of existing landfill units.

[6] This criterion applies only to facilities certified after July 1, 1998.

[7] This criterion applies only to facilities certified after October 1, 2004 and to expansions or modifications of existing facilities certified after October 1, 2004.

[8] This criterion applies only to facility certifications issued after October 15, 2004 for new landfill units or lateral expansions of previously certified landfill units. The minimum distance to the property line shall be 50 feet for landfill units certified prior to October 15, 2004. This criterion does not apply to any facility located on or adjacent to property sought by a solid waste district through an eminent domain proceeding, pursuant to 24 V.S.A. § 2299a et seq., which was initiated prior to June 24, 2002, provided that the district that demonstrated the necessity in the eminent domain proceeding acquired the property. The minimum distance for such municipal facilities shall be 100 feet.

§ 6-704 Site Characterization and Facility Design

(a) General. The basis of design and operational plans for all facility components shall be addressed in a facility management plan (FMP). The plan shall be submitted to the Secretary for review and shall contain sufficient information for the Secretary to determine whether the facility conforms to the provisions of this section.

(b) At a minimum, the FMP shall include:

(1) The number of employees that will be utilized to properly operate the facility;

(2) A description of the types of vehicles which will use the facility;

(3) A description or diagram of vehicle flow at permitted design capacity;

(4) The type, number and handling capacity of the equipment used;

(5) Storage capacity at the facility, including the waste transfer schedule;

(6) The facility's hours of operation;

(7) A site plan map of the facility at a scale of 1:100 or greater that contains:

(A) Location of barriers to prevent unauthorized entry;

(B) Access roads;

(C) Location of waste management transfer, storage, treatment and processing areas, including the tipping floor area, if a tipping floor is part of the facility design ; and

(D) Facility boundaries and property boundaries.

(8) A contingency action plan which:

(A) describes the organized, coordinated and feasible course of action that will be followed in cases of emergency or other occurrences which could cause potential endangerment of human health and safety or environmental hazards. These occurrences include, but are not limited to: fires, failure of facility design features (e.g. compactors, leachate collection systems), emergency situations or inability to remove waste as scheduled. The plan shall identify the procedures that will be followed to minimize potential hazards during both planned and unplanned events and provide for continued effective waste management; and

(B) All facilities designed with tipping floors shall have a written contingency plan for operations while the tipping floor is being repaired or replaced or otherwise becomes inoperable in whole or in part. The contingency plan shall consider all aspects of the facility which may be affected by the temporary closure of the tipping floor so that the

facility continues to operate within these Rules.

(c) Any other information relevant to proper operation of the facility.

(d) The FMP documentation shall be prepared under the direction of a qualified professional, t, unless the Secretary specifically approves a waiver of this requirement.

(e) The qualified professional shall make appropriate use of available expertise for evaluating geology and hydrogeology, surface grade, soils science, potential for air pollution impacts, and other areas of specialized knowledge which may be required to design the facility.

(f) The facility design shall provide for reliable means to control vectors, emissions or discharges including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.

§ 6-705 Operational Standards

(a) Applicability. Facilities which qualify for categorical disposal, categorical recycling or compost certification, are exempt from the provisions of this subsection.

Note: Operational requirements for categorical disposal, categorical recycling or compost are contained within the provisions of subchapters relevant to those activities.

(b) Operational standards; general. Each owner and operator shall ensure that activities conducted at a facility comply with the following standards, as applicable to the facility type.

(1) Qualified personnel shall be retained to operate solid waste management facilities.

(2) Activities at the facility shall adhere to all conditions of the facility certification and these Rules.

(3) At least one (1) contact person shall be identified in the certification application, and be able to be contacted at all times.

(4) All sampling shall be performed by properly trained and qualified personnel. Qualified personnel must have a minimum three (3) months training and six (6) months experience in sampling or analysis.

(5) Each facility shall develop and implement a plan to prevent and/or control spills, nuisance dust, vectors, wind-blown debris, and odors.

(6) The owner and operator shall take all practicable steps to prevent the inclusion of hazardous wastes, into the waste stream being managed by the facility.

(7) Clearly visible and easily read signs shall be posted at the facility that provide notice of the prohibition on the disposal of banned materials as identified in 10 V.S.A. § 6621a and providing

(d) Pursuant to 32 V.S.A. 5954(b), the owner and/or operator shall file a copy of the quarterly tax return if required under 32 V.S.A. Chapter 151, subchapter 13 (solid waste franchise tax) with the Secretary (attention Solid Waste Program) by April 30, July 30, October 30 and January 30 of each year.

§ 6-707 Recordkeeping

(a) The records identified in (a)(1) through (a)(3) of this section shall be maintained by the owner and/or the operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location at the facility or the primary location of business for the facility and shall be made for review upon request by the Secretary.

(1) All information that demonstrates compliance with these Rules, 10 V.S.A. chapter 159, and conditions of the current permit;

(2) Copies of any reports, records, data or other information required to be submitted to the Secretary as a requirement of certification.

(3) Any other records required by the Secretary to be maintained in accordance with this section.

(b) All records shall be kept from the date on which the application for initial certification is signed through the date of closure of the facility, with the following exceptions:

(2) For landfills, such records shall be maintained through the post-closure period and shall cease upon written notification by the Secretary of the completion of post-closure care; and

(3) For sludge or septage storage and treatment facilities located at wastewater treatment facilities record keeping shall persist for ten (10) years

§ 6-708 Corrective Action

(a) If the operation of a facility results in a discharge that poses a threat to public health, public safety, or the environment, the Secretary may require the facility owner and/or operator to perform certain activities including, but not limited to:

(1) Monitoring of the surface water, groundwater, soils and/or air in addition to any monitoring required by these Rules and the facility's certification;

(2) Other investigations of the site necessary to determine the nature and extent of the discharge and any contamination resulting from the discharge;

(3) Removal and remedial actions necessary to prevent further contamination, to address the existing contamination and to meet applicable environmental quality and public health standards;

(4) Activities required to address discharges to groundwater causing an exceedance of a Preventative Action Level at a groundwater compliance point, as required by §12-606 (Preventative Actions) of the Vermont Groundwater Protection Rule and Strategy; and

(5) Any other action required to address the discharge and any resulting contamination that is authorized by law or these Rules.

(b) Where the Secretary determines that any of the corrective actions in subsection (a) is required, the following shall occur:

(1) The Secretary shall notify the facility Permittee in writing that corrective action is required. The notification shall describe the need for corrective action and shall describe the corrective actions that are required.

(2) Within a timeframe established by the Secretary the owner and/or operator shall:

(A) Submit a corrective action plan that includes:

(i) A description of the actions necessary to prevent present and future damage to public health and safety and the environment;

(ii) An estimate of the quantities of labor, materials and testing necessary to perform each corrective action;

(iii) A timeframe for commencement and conclusion of each corrective action;

(iv) A plan for public notification of the proposed corrective actions;

(v) A plan for periodic reporting to the Secretary on the effectiveness of any ongoing corrective actions; and

(vi) Any other information as required by the Secretary pertaining to the required corrective actions.

(B) Submit a cost estimate prepared by a third-party contractor for the implementation of the corrective action plan in accordance with § 6-807;

(C) Provide evidence of financial responsibility for the total cost of the required corrective actions in accordance with the provisions § 6-802 and Appendix A.

(3) Any additional activities required to address discharges to groundwater causing an exceedance of a Groundwater Enforcement Standard at a groundwater compliance point, as required by §12-607 of the Vermont Groundwater Protection Rule and Strategy.

(c) A corrective action plan, cost estimate and financial responsibility instruments shall be included as conditions through an amendment to the existing facility certification or other operating authority. The corrective action plan may be amended, subject to the approval of the Secretary, at any time during the ongoing action to reflect changes in the method or schedule of remediation. The Permittee shall be required to submit a revised cost estimate and evidence of financial responsibility in accordance with any amendment of the corrective action plan.

(d) Upon completion of the corrective action plan, the Permittee shall provide written certification to the Secretary that the corrective actions are completed. Upon satisfaction of the Secretary that the corrective actions have been completed, the Secretary shall notify the certification holder within sixty (60) days of the Permittee's certification that the Permittee is no longer required to maintain financial responsibility as required by this section.

(e) Where the Secretary determines that the cessation of operations is required to alleviate the hazard posed by a facility, certification suspension or revocation proceedings under § 6-606 shall be initiated. The Secretary may also pursue such other and/or additional remedies authorized under Vermont law.

Subchapter 8 – Financial Responsibility, Capability, and Estimates

§ 6-801 Purpose; Applicability

(a) Purpose. This subchapter establishes requirements and procedures for owners and operators of solid waste management facilities to demonstrate evidence of financial responsibility for closure and, as appropriate, post-closure care of the facility. Financial responsibility shall be provided in accordance with this section so that upon abandonment, cessation or interruption of the operation of a facility, all appropriate measures can be taken, by a third party if necessary, to prevent present and future damage to public health and safety and to the environment.

(b) Applicability.

(1) Compost facilities and categorical facilities are excluded from the requirements of §6-802 and §6-803.

(2) The requirements of § 6-802, for financial responsibility, shall apply to all existing and new private solid waste management facilities and to municipally-owned solid waste landfills that close subsequent to the effective date of these Rules.

(1) The requirements of § 6-803, for financial capability, shall apply to municipal solid waste facilities that are not landfills. These facilities may be owned and operated by the State of Vermont or by municipal entities created under 24 V.S.A., including facilities operated by Union Municipal Districts formed under 24 V.S.A. Chapter 121, other public entities, and municipal solid waste landfills which closed prior to the effective date of these Rules.

(2) This subchapter shall not apply to facilities certified by registration or emergency approval under § 6-503(c) unless the Secretary determines that compliance with this subchapter is necessary to protect public health, safety or the environment.

§6- 802 Financial Responsibility

(a) Financial instrument; forms. Evidence of financial responsibility for private facilities and municipally-owned solid waste landfills operating after the effective date of these Rules shall be in one or a combination of the following forms:

(1) A trust fund maintained by the applicant for the benefit of the Agency with a surety bond guaranteeing full payment into the fund;

(2) A surety bond guaranteeing performance of closure or post-closure care;

(3) An irrevocable standby letter of credit; or

(4) Other financial responsibility instruments that the Secretary may deem appropriate.

(b) Each financial instrument shall be submitted on a form prepared for this purpose by the Secretary and shall meet the standards and requirements specified in Appendix A.

(c) Except as provided in this subchapter, the certification holder shall maintain financial responsibility equal to or greater than the amounts required by this section at all times. The approved financial responsibility instrument shall be effective prior to the date that an owner or operator of a facility receives a certification. Financial responsibility instruments shall be in the amount of the total of the cost estimates for closure and post-closure care, as applicable, and as calculated using the procedures set forth in § 6-804 and § 6-805. The certification holder shall, within 90 days of any of the following changes, increase the total amount of the financial instrument or combination of instruments to equal the required total cost estimates:

(1) An increase in the required cost estimates for closure or post-closure care;

(2) A decrease in the value of a trust fund used for financial responsibility;

(3) A determination by the Secretary that the certification holder no longer meets the gross revenue or financial test; or

(4) Notification by the certification holder that he or she intends to substitute alternative financial responsibility.

(d) The Secretary shall be a party to each financial instrument and shall have the right to obtain, without the consent of the owner or operator, exclusive direction and control over the transfer, use, and disbursement of the secured funds or performance benefits to perform approved closure and post-closure maintenance or secure reimbursement for costs incurred for so performing upon its determination that an owner or operator has failed in whole or in part to carry out closure or post-closure requirements in accordance with § 6-1008 or § 6-1009.

(e) A certification holder may satisfy the requirements of this section by establishing more than one or a combination of financial responsibility instrument per facility. For purposes of this subsection, only trust funds, surety bonds, and letters of credit, may be used. The combination of instruments shall provide financial responsibility for an amount equal to or greater than the closure or post-closure care cost

estimates.

(f) The Secretary may draw on any or all of the instruments to provide for closure or post-closure care at the facility.

(g) A certification holder may satisfy the requirements of this section by using a single financial responsibility instrument for more than one facility.

(1) Evidence for financial responsibility submitted to the Secretary shall the name and address of, and the amount of funds assured by the instrument for, each facility. The total amount of the financial instrument shall be no less than the sum of funds that would be required if a separate instrument had been established and maintained for each facility.

(2) In directing funds available through the instrument for closure or post-closure care for any of the facilities covered by the instrument, the Secretary may direct only the amount of funds designated for that facility, unless the applicant agrees to the use of additional funds available under the instrument.

(h) A certification holder may satisfy the requirements of this section for both closure and post-closure care for one or more facilities by using one of the instruments specified in this section. The amount of funds available through the instrument shall be no less than the sum of funds that would be required if a separate instrument has been established and maintained for closure and post-closure care.

(i) Upon satisfactory demonstration by the certification holder to the Secretary that the requirements of a closure or post-closure care plan have been satisfied, the Secretary shall notify the certification holder in writing, within 60 days, that he or she is no longer required to maintain financial responsibility for closure or post-closure care.

§ 6-803 Financial Capability

(a) Financial Capability; forms.

(1) The auditor of the entity responsible for operating the facility or an independent certified public accountant shall annually submit a report to the Secretary on the financial condition of the entity. For municipal entities, this shall be the auditor's annual report required by 24 V.S.A. §§ 1681 through 1683. For other public entities, the annual report shall contain at least the information required of municipalities in 24 V.S.A. §§ 1681 through 1683, unless otherwise required by the Secretary. Documentation for a Union Municipal District need not include an annual report for each member town but shall include the district's annual report as required by 24 V.S.A. § 4868.

(2) The following documents shall be submitted to the Secretary biennially:

(A) A letter from the entity's chief financial officer outlining current and anticipated income and expenses for the entity's waste management facilities and certifying that the entity will be financially capable to meet the cost estimates made for closure and post-closure care required in these Rules. The letter shall be in a form prescribed by the Secretary and shall include, at a minimum, the total debt for the facility, closure and post-closure estimates, other anticipated expenses, income from user charges, transferred funds, and any other income.

(B) The opinion of the entity's auditor or an independent certified public accountant as to the entity's financial capability to meet closure and post-closure costs.

(3) The documents required by this section shall be submitted with the application for certification.

§ 6-804 Closure Cost Estimate

(a) All facilities required to prepare a closure plan pursuant to these Rules shall maintain a current written estimate of the total cost of closing the facility in accordance with the facility closure plan.

(b) The closure cost estimate shall be developed based on each activity that would be required for a third-party contractor to perform closure in accordance with the closure plan at the point in the life of the facility when closure would be most expensive. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.

(c) The following minimum factors shall be considered in estimating the closure cost:

(1) the size and topography of the facility;

(2) the daily and weekly tonnage to be received at the facility;

(3) the availability of cover and fill material needed for facility grading;

(4) expected amounts of leachate production and requirements for treatment and disposal;

(5) plans and methods of disposal at the facility;

(6) the location of the facility and the character of the surrounding area;

(7) requirements for surface drainage;

(8) leachate and gas collection and treatment systems, as required;

(9) environmental quality monitoring systems, as required;

(10) structures and other improvements to be dismantled and removed;

(11) facility storage capacity for the types of wastes being received;

(12) off-site disposal requirements;

(13) an appropriate forecasted average rate of inflation over the active life of the facility; and

(14) vector control requirements.

(d) The certification holder may revise the closure cost estimate at any time during the active life of the facility if:

(1) a certified partial closure has been completed; or

(2) a change in the closure plan decreases the closure cost estimate.

(e) The certification holder shall certify that a closure cost estimate is consistent with the facility closure plan and the requirements of this Rules or must file an application for a certification modification reflecting new plans.

(f) The certification holder shall revise the closure cost estimate whenever a change in the closure plan increases the closure cost estimate, or as otherwise required in § 6-806 of this section.

§ 6-805 Post-Closure Cost Estimate

(a) Facilities that are required to prepare a post-closure plan pursuant to these Rules shall have a current written estimate of the cost of post-closure monitoring and maintenance of the facility in accordance with the post-closure plan.

(b) The post-closure cost estimate shall be based on the work required for a third-party contractor to implement the post-closure plan. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.

(c) The factors to be considered in estimating post-closure monitoring and maintenance cost shall include at least:

(1) the size and topography of the facility;

(2) the type and quantity of waste received;

(3) the disposal method and plan;

(4) the potential for significant leachate production and the possibility of contaminating groundwater or surface waters;

(5) environmental quality monitoring systems;

(6) soil conditions;

(7) an appropriate forecasted average rate of inflation over the active life of the facility and the post-closure care period;

(8) the location of the site and the character of the surrounding area; and

(9) leachate and gas collection and treatment systems.

(d) For the purposes of post-closure cost estimates, the post-closure period for landfills shall be at least 30-years from the date that installation of the final capping system is completed or the date of the last most recent estimate submitted. Post-closure care activities shall be performed until the Secretary determines that the performance standards for custodial care, as outlined in § 6-1009, are achieved, and may extend beyond the 30-year post-closure period.

(e) The financial assurance mechanism provided for the post-closure care shall not decrease below the amount of the 30-year cost estimate at any point during the post-closure period.

(f) Where post-closure monitoring data and other available information suggests that the required performance standards for custodial care will be achieved as provided for in § 6-1009, the certification holder may submit a request for a modification to the post-closure plan. Upon approval by the Secretary for a modification to the post-closure plan, the certification holder shall adjust associated cost estimates to reflect the change in necessary post-closure care activities.

(g) If the Secretary determines that post-closure monitoring data or other available information demonstrate that the performance standards for custodial care will not or unlikely to be achieved, the Secretary may require the owner or operator to perform any of the following:

(1) investigate the cause of the post-closure performance deficiencies and submit findings to the Secretary;

(2) pursuant to § 6-806 of this section, submit an amendment of the post-closure cost estimate that reflects any necessary adjustment in remedial post-closure work required to remedy the deficiencies; and

(3) perform any additional investigation or submit any additional information as required by the Secretary.

(h) The certification holder shall certify that a post-closure cost estimate is consistent with the facility post-closure plan and the requirements of this Rules or file an application for a certification modification reflecting new plans.

(i) The certification holder shall revise a post-closure cost estimate as required in § 6-806 of this section.

§6-806 Revision to Closure and Post-Closure Cost Estimates

(a) Closure cost estimates and post-closure cost estimates shall be revised pursuant to the requirements of this section.

(b) Annual adjustment for inflation, current rates, and prices. On an annual basis, the certification holder shall adjust a closure cost estimate and post-closure cost estimate to reflect changes to the estimate caused by inflation, changes in current rates and/or prices. The certification holder shall submit to the Secretary a revised cost estimate itemizing the changes, updated rates and prices, or submit a written report demonstrating that no changes are required based on current rates of inflation.

(c) Changes to closure or post-closure plans. The certification holder shall adjust a closure cost estimate or post-closure estimate cost upon any changes to the facility closure plan or upon any changes to the facility post-closure plan, as applicable. The revised estimate shall be submitted to the Secretary with the revised closure/post-closure plan and amendment request, as necessary.

§ 6-807 Assurances for Corrective Actions

(a) An owner or operator required by the Secretary to undertake corrective action pursuant to § 6-708 of these Rules shall have a detailed written estimate of the cost of hiring a third party to perform the all necessary corrective actions. A third-party contractor shall be a party who is neither a parent nor a subsidiary of the owner or operator of the facility.

(b) A corrective action cost estimate shall include the total costs of all corrective actions as approved by the Secretary in the corrective action plan for the corrective action period as designated by the Secretary.

The cost estimate shall be submitted to the Secretary on a timeframe designated by the Secretary and shall approved by the Secretary.

(c) Upon any of the following events, Permittee shall, within 90 days of such event, increase the total amount of financial responsibility so as to equal the cost estimates:

(1) An increase in the required cost estimates;

(2) A determination by the Secretary that the Permittee no longer meets the gross revenue or financial test, if applicable; or

(3) Notification by the Permittee that they intend to substitute alternative financial responsibility for self-insurance.

(c) A corrective action plan shall be annually adjusted for inflation and revised based on changes in current rates and prices in accordance with the processes outlined in § 6-807 of this section and shall be revised to reflect any changes to the corrective action plan that are approved by the Secretary.

Subchapter 9 – Storage, Transfer, Recycling and Treatment Facilities

§ 6-901 Applicability

(a) All solid waste recycling, processing, treatment, storage and transfer facilities are subject to the requirements of this Subchapter and the requirements of Subchapters 3, 5, 6, 7 and 8. This subchapter shall not apply to facilities which manage sludge or septage, facilities used in conjunction with land application, .

§ 6-902 Storage, Transfer, Recycling and Processing Facilities Types

Facilities subject to this subchapter and other subchapters referenced in § 6-901 are designated as follows and shall obtain a certification prior to operation:

(a) Recycling Facilities: Facilities that only manage solid waste materials that can be diverted from disposal.

(b) Transfer Stations: Facilities where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.

(c) Construction and Demolition Debris Processing Facilities: Facilities which sort and process solid waste from construction or demolition projects for diversion from disposal and may also manage architectural waste materials. These facilities shall obtain a certification prior to operation.

(d) Architectural Waste Recycling Facilities: Facilities that qualify as Construction and Demolition Processing Facilities that also recycle all six architectural wastes. These facilities shall apply for a new certification or an amendment to an existing certification prior to operation.

(e) Organic Solid Waste Recovery Facilities or "ORF": Facilities where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

§ 6-903 Storage, Transfer, Recycling and Processing Facilities Siting

Facilities subject to this subchapter shall comply with the siting standards and prohibitions of § 6-702 and § 6-703 of these Rules.

§ 6-904 Storage, Transfer, Recycling and Processing Facilities Design Standards

(a) General performance standards: Facilities shall be designed to ensure the effective collection, storage and/or processing of waste or recyclable materials.

(1) Facilities shall be designed and operated to prevent, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes or recyclable materials.

(b) Design Standards.

(1) General design standards. To meet the performance standards of § 6-904(a) of this section, facilities subject to this subchapter shall comply with the general design requirements of § 6-704 of these Rules and the additional standards outlined in this section.

(c) All facilities subject to this subchapter shall address in facility designs the following aspects of the site, and the applicable requirements of Subchapter,

(1) soils and surficial geology;

(2) topography; and

(3) surface water.

(d) All facilities shall be designed to provide for all weather access, with access controlled and limited to hours of operation identified in the FMP.

(e) Facilities with tipping floors where municipal solid waste is temporarily deposited pending transport shall be designed so that the tipping floor is within a building or covered by a roof to prevent exposure of waste to weather.

(f) All tipping floors shall incorporate a collection system designed to collect leachate that may be associated with incoming waste materials. Leachate collection tanks utilized in collection systems shall designed to be:

(1) double-walled with an interstitial space;

(2) sized appropriately for the facility and volume of waste managed;

(3) of material compatible with the expected composition of the leachate; and

(4) tested or inspected biennially for leak detection.

(g) Facilities shall be designed to have storage capacity for all recyclable materials and any process residue.

(h) Organic Solid Waste Recovery Facilities shall be designed to:

(1) treat food residuals in a manner that prevents impacts to public health and safety, the environment and creation of nuisance conditions (e.g. odors, vector attraction).

(2) have adequate storage capacity for all food residuals, unprocessed and processed; and

(3) have capability for adequate through-put of processing food residuals such that they maintain optimal material quality for the receiving facility.

§ 6-905 Storage, Transfer, Recycling and Processing Facilities Operating Standards

(a) All facilities subject to this subchapter shall comply with the general operational requirements of § 6-705 of these Rules, the additional general operating standards in subsection (b) of this section, and the additional operating standards of (c) – (m) of this section as applicable to the type of facility.

(b) General operations; additional standards.

(1) A qualified operator, as identified in the FMP, shall be on site during all hours of waste acceptance. A contact person for the facility shall be identified and shall be able to be contacted at all times.

(2) Personal protection equipment appropriate to the materials being handled shall be available at all times for material handling and spill control.

(3) All leachate collected by transfer stations with tipping floors shall be disposed of in a treatment facility.

(4) Hours of operation shall be as specified in a FMP and facility certification.

(c) All solid waste received by a facility shall be actively managed.

(1) The operator shall take all practicable steps to prevent hazardous wastes and landfill banned wastes, identified in 10 V.S.A. § 6621a from being included in the waste stream for disposal.

(2) Waste shall not be stored for a period of time which results in a condition adversely impacting the environment or public health and safety.

(3) All solid waste leaving a facility shall be transferred to an appropriate managing facility that is permitted for solid waste management as required by these Rules.

(4) Organic solid waste shall be stored as briefly as possible at an organic solid waste recovery facility and in a manner that maintains optimal material quality for the receiving facility.

(d) Solid Waste; additional standards.

(1) Except as specifically provided in this section, all solid waste shall be stored in containers, except during active management. The facility and storage containers shall be managed to prevent a r discharge of contaminants from the containers.

(2) All materials removed from containers for management during routine operations shall be managed under a roof and in a defined operational area to prevent a discharge of contaminants.

(3) All solid waste shall be transported to a treatment or disposal facility on a schedule adjusted as necessary to minimize odors from the waste.

(4) Solid waste deposited on a tipping floor shall be removed from the tipping floor as soon as is practical, but in no event later than the end of the operating day as defined in the FMP . The FMP and contingency plan shall identify any unique circumstances when solid waste might remain on the tipping floor beyond the end of the operating day and the practices that will be implemented at the facility so that the facility complies with the provisions of § 6-904(a) during this circumstance.

(e) Recyclable Materials; additional standards.

(1) Materials to be recycled, contaminated recyclable materials, and process residue which may be dispersed by wind shall be stored inside buildings, under roofed structures, in enclosed trailers, or in other closed containers which are covered except when the facility is operating.

(2) In accordance with §10 V.S.A 6605(J)(1), the Permittee(s) shall offer collection for mandated recyclables.

(3) The Permittee(s) shall not knowingly dispose of recyclable materials previously source separated by the hauler or the commercial or residential customer.

(f) Lead-Acid Batteries; additional standards.

(1) All lead-acid batteries shall be stored under cover on an impervious surface.

(2) The facility shall maintain a supply of absorbent materials and acid neutralizers sufficient to clean up a spill of at least one gallon of battery acid solution.

(3) All batteries shall be transported off-site in accordance with all applicable federal and state hazardous materials transport requirements.

(g) HHW/CEG Hazardous Waste at Permanent Collection Facilities; additional standards.

(1) All HHW/CEG wastes shall be handled by personnel appropriately trained in accordance with the requirements of this subsection and all applicable federal and state regulations:

(A) Training program.

(i) Facility personnel shall successfully complete a program of classroom or on the job instruction that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of these regulations. The program shall be taught by a person trained in hazardous waste management procedures and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(ii) The training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including, where applicable:

(I) Waste handling procedures;

(II) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;

(III) Key parameters for automatic waste feed cutoff systems;

(IV) Communications or alarm systems;

(V) Response to fires or explosions;

(VI) Response to groundwater contamination incidents; and

(VII) Shutdown of operations.

(B) All wastes collected shall be properly stored at the end of each operating day in accordance with the FMP.

(C) Facilities shall comply with the generator short-term storage requirements of the Vermont Hazardous Waste Management Regulations.

(h) Tires; additional standards. No more than 1,500 tires may be stored uncovered and on the ground at the facility site at any time. Tires shall be removed from the facility on at least an annual basis, unless the facility processes tires on-site, in which case, the maximum amount and the storage design shall be dictated by the FMP.

(i) Construction and Demolition Waste (C&D); additional standards.

(1) The maximum storage time and the maximum on-site volume for C&D collected at a facility that processes the material on-site shall be dictated by the approved FMP.

(2) C&D collected at a facility that does not treat or process the material on-site shall be stored in containers or in an enclosed or covered area as dictated by the FMP.

(j) Architectural Waste; additional standards.

(1) Architectural waste recycling facilities shall be designed and operated to achieve the greatest amount and highest quality of marketable materials.

(2) The combustion of architectural waste is prohibited, except for natural wood used as a feedstock for a facility that burns biomass-only for the purpose of generating heat or electricity.

(k) Leaf and Yard Waste; additional standards. In accordance with § 10 V.S.A §6605(j)(2), facilities offering collection of municipal solid waste shall offer collection for leaf and yard waste. These materials may be stored on the ground and are exempt from the containerization requirement of § 6-905(d)(1).

(l) Food Residuals; additional standards.

(1) In accordance with § 10 V.S.A 6605(j)(3), the facilities offering collection of municipal solid waste shall offer collection for food residuals at the facility.

(2) All food residuals and organic solid wastes shall be transported to a certified or registered treatment facility on a schedule adjusted to control odors and vectors from the waste.

(3) The Permittee(s) shall store all food residuals in a manner that prevents leaking of associated liquid, minimizes nuisance odors, prevents vectors, prevents contamination and preserves the integrity of the material for the receiving facility. Specific management methods shall be identified in the FMP.

(m) Other Materials; additional standards.

(1) Untreated wood, concrete, bricks, mortar or asphalt, and appliances and are exempt from the containerization requirement of § 6-905(d)(1) and may be stored uncovered at the facility. These materials shall be removed from the ground, and either taken off-site or stored under cover in accordance with a schedule included in the approved FMP. In no event shall this schedule exceed two years from the date of receipt of the materials. The maximum on-site volume shall not exceed 2,000 cubic yards at any time unless otherwise approved as part of the FMP.

(2) Refrigerants from appliances shall be drained and collected by a licensed refrigerant removal professional prior to any further treatment of the appliances. Refrigerant-containing appliances shall be stored and handled in a manner that prevents the release of refrigerant.

§ 6-906 Storage, Transfer, Recycling and Processing Facilities Applications

(a) Facilities subject to this subchapter shall comply with the siting standards and prohibitions of Subchapter 5 of these Rules and the additional requirements in this section.

(b) An applicant seeking certification as an Architectural Waste Recycling Facility in accordance with 10 V.S.A. § 6605(m) and these Rules shall specify in the facility FMP how each of the architectural wastes to be managed by the facility will be collected, stored, separated, and processed for market.

(c) ORFs and on-farm anaerobic digesters which process food residuals shall describe the proposed reuse or disposal of the liquid and solid waste residual streams within the facility FMP.

(d) ORFs that process food residuals for use as a feedstock at an offsite anaerobic digester or compost facility shall demonstrate in the FMP that the produced feedstock will be transported to a certified facility with sufficient capacity to accept anticipated volumes and/or materials types. An on farm ORF that processes food residuals for use within the farm digester shall establish and submit as part of the FMP a schedule and plan for introduction of the produced feedstock into the digester.

§ 6-907 Storage, Transfer, Recycling and Processing Facilities Closure

(a) All facilities subject to this subchapter shall be closed in a manner that:

(1) Minimizes the need for further maintenance related to the waste facility; and

(2) Controls, minimizes, or eliminates post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater, surface waters or the atmosphere. Such actions shall be completed to the extent necessary to prevent threats to public health and safety and the environment as determined by the Secretary.

(b) An approved closure plan shall be developed by the facility and an approved closure plan shall become a condition of the facility certification issued by the Secretary.

(c) An updated closure plan shall be submitted for approval to the Secretary whenever changes in the operating plan or facility design affect the closure plan. An approved closure plan may be adjusted , subject to the approval of the Secretary, at any time during the active life of the facility, except that an closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.

(d) Notice of Closure. A certification holder shall send to the Secretary a notice of intention to close or notice of closure at the point of closure plan implementation.

(e) Notice of Closure Completion. A certification holder shall send to the Secretary a notice of closure within 30 days after the date that the final volume of waste is received at the facility.

(f) Partial Closure. Any partial closure shall be performed in accordance with an appropriate section of the approved closure plan and shall be subject to all of the requirements of this section.

(g) Certification of Closure. As part of the final closure of a facility, the Permittee shall submit the following to the Secretary:

(1) Certification by the owner or operator of the facility and that the facility has been closed in accordance with the specifications of the approved closure plan. The Secretary reserves the right to require this closure certification to be submitted by a professional engineer licensed in the State of Vermont and will notify the facility of this requirement at the submittal of the notice of closure; and

(2) a request for discontinuance of any existing financial assurance mechanism required by § 6-802.

Subchapter 10 – Disposal Facilities

§ 6-1001 Applicability

(a) Unless specifically exempted by these Rules, the disposal of solid waste into or on any land of the State shall be subject to the certification requirements of these Rules.

(b) Any mining or mineral processing waste exempted from the Vermont Hazardous Waste Management Rules pursuant to § 7-203(e) of those Rules shall be subject to the certification requirements of these Rules. Soil, rock, and other materials from mining activities that are not a mining waste or a mineral processing waste are not subject to the certification requirements of these Rules.

§ 6-1002 Disposal Facility Types

(a) Categorical Disposal Facilities The disposal of one or more of the following categories of solid wastes, which does not qualify for a limited duration Insignificant Waste Management Event (IWMEA) under § 6-505(b) is a categorical disposal facility:

(1) Stumps, root masses, decomposing wood or brush;

(2) Bituminous concrete;

(3) Concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;

(4) Street sweepings;

(5) Car wash grit and municipal separated stormwater catch basin grit; that does not leach volatile organic compounds in excess of applicable groundwater enforcement standards;

(6) Mining waste not in excess of 15,000 cubic yards per year; and

(7) Development soils.

(b) Landfill Facilities. No person shall construct, operate, expand, commence closure or perform post-closure care and custodial care of a landfill facility without obtaining prior approval by the Secretary pursuant to 10 V.S.A §6605(a)(1). This requirement applies to and includes municipal solid waste landfills, mono-fill landfills, construction and demolition debris landfills, mining waste landfills

(>15,000 cubic yards per year) and mineral processing waste landfills.

§ 6-1003 Additional Disposal Facility Siting Prohibitions

In addition to the general siting standards and prohibitions of Subchapter 7 of these Rules, the additional following prohibitions apply to all disposal facilities:

(a) Applicants for a categorical disposal facility shall demonstrate that subdivisions (a)(1) and (a)(2) of this subsection are satisfied

(1) Categorical disposal facility prohibitions.

(A) Fifty (50) feet of a public highway, or property line(s) of adjoining property owners;

(B) the source isolation zone of a public water supply, or within 200 feet of the source of a public drinking water source, whichever is greater.

(C) 200 feet of the source of a private drinking water source.

(D) One-hundred (100) feet of Class B Waters, and

(2) Disposal shall not occur within 300 feet of a public highway or within 300 feet of the property line(s) of adjoining property owners unless the applicant can demonstrate to the sufficiency of the Secretary that a reduced distance (less than 300 feet) will not result in any of the following:

(A) objectionable odors to be present off-site of the facility,

(B) unreasonable visual impact observed off site of the facility,

(C) unreasonable increase in level of noise detected off site of the facility, and

(D) a nuisance or condition that otherwise adversely affects public health and safety and the environment

(3) Applicants for a landfill facility shall demonstrate that subdivisions (A-E) of this subsection are satisfied. Landfills shall:

(A) not be sited in the Green Mountain National Forest, except for a one half-mile corridor drawn from the center line of the right of way of each Federal and secondary highway or

as approved by the United States Forest Service;

(B) not be sited within the floodway, mapped fluvial erosion hazard zones, or within the 100-year flood plain;

(C) not be sited within the Source Protection Area of a public water system using a groundwater source;

(D) not be sited within zone 1 or zone 2 of a Source Protection Area for a public water system using a surface water source; and

(E) be sited such that any emissions or discharges from the facility will be detected through monitoring and remediated prior to such emission or discharge impacting any off-site property.

§ 6-1004 Additional Disposal Facility Design Standards

In addition to the general site characterization and facility design requirements of Subchapter 7, the following design standards apply to all disposal facilities:

(a) Facilities shall be designed to provide a reliable means to control vectors, emissions or discharges, including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.

(b) Facilities shall be designed to protect surface water, groundwater and the air, by detecting, through monitoring where appropriate, the emission or discharge of contaminants.

(c) New landfills or new operational units at an existing facility, shall have liner and leachate collection systems and appropriate provisions for leachate treatment. The Secretary may waive the liner, gas collection requirements, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate or landfill gas that is harmful to public health and safety or the environment or capable of the creation of nuisance conditions. Landfills accepting municipal solid waste shall not be granted a liner waiver.

(d) Expansion of an existing facility that has documented groundwater contamination may be approved. It must be demonstrated that the design and operation of the proposed expansion activities will not worsen the existing contamination and that remediation, containment and/or monitoring of the existing contamination will concurrently occur with the expansion operations. The design for expansion at a

facility with existing contamination must provide:

(1) sufficient environmental monitoring to assess the impacts of the expansion prior to a point or points of compliance and provide for the capability of remediation within property boundaries if necessary;

(2) any additional monitoring systems necessary to monitor the proposed expansion area independently of preexisting operational units (monitoring systems beneath the liner of the expansion area, expanded monitoring well networks, tracer systems etc.);

(3) demonstration through modelling, or other means, that existing contamination will not be worsened by the expansion.

(e) Lined landfill liner systems. Lined landfills shall be designed to comply with the following standards.

(1) The landfill shall have a Landfill Liner Base System that consists of the following components:

(A) Subgrade. This component shall be designed to provide structural integrity and support to the facility; and

(B) Bedding layer. This component shall be designed to screen earthen material sufficient to provide puncture protection to the secondary liner.

(C) The landfill liner base system shall be designed to be consistent with the following standards:

(i) Be of low-permeability materials and adequate for supporting the loads and stresses imposed by the weight of the landfill and all facility components during all phases of construction, operation, closure and post-closure;

(ii) Shall be graded and prepared for landfill construction such that the subgrade below the liner provides a uniform and consistent bedding layer capable of preventing puncture of the landfill liner; and

(iii) Shall be graded such that there is a minimum 2% slope toward the leachate collection sump.

(2) The landfill shall have a Landfill Liner System that consists of the following components:

(A) Secondary Liner. This component shall be designed to collect and detect leachate leakage through the primary liner.

(B) Leak Detection Drainage Layer. This component shall be designed to reduce hydraulic head on the secondary liner and facilitate migration of leachate to the secondary leachate collection system.

(C) Primary Liner. This component shall be designed to prevent leachate migration into the Leak Detection Drainage Layer or outside of the designed lined landfill area.

(D) Leachate Collection Drainage Layer. This component shall be designed to reduce hydraulic head on the primary liner and facilitate migration of leachate to the leachate collection system.

(E) Liner Protection Layer. This component shall be designed to screen material sufficient and provide puncture protection to the primary liner and leachate collection system.

(F) The landfill liner system shall be designed to be consistent with the following standards:

(i) All liner systems shall be of double liner construction.

(ii) The secondary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties.

(iii) The primary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties. .

(iv) All liner materials shall be chemically non-reactive with anticipated disposed waste and leachate characteristics.

(v) The leak detection drainage layer and leachate collection drainage layer shall:

(I) achieve a minimum hydraulic conductivity of 1×10^{-2} cm/sec;

(II) consist of a granular material with fines removed or a combination of granular material and geosynthetics within basal areas;

(III) consist of a granular material with fines removed or a combination of granular materials and geosynthetics along extended side slopes. If granular material placement impossible, geosynthetics may be used provided it can be demonstrated that they provide equivalent functionality; and;

(IV) be covered by a filtration layer or geosynthetic that aids in the prevention of clogging.

(vi) The liner system shall not be penetrated by any appurtenances, with an exception of penetrations located at the top of the slope and outside a defined limit of waste, as needed and as approved to facilitate the operation and maintenance of the secondary leachate collection and removal system.

(vii) For landfills disposing of waste other than MSW, the Secretary may approve an alternative liner system design that deviates from the standards required by § 6-1004(e) of this subsection upon a finding that the liner system proposed design is adequate to protect human health and the environment.

(f) The landfill shall have an Operating System that consists of the following components:

(1) Daily Cover. This component shall be designed to provides odor control, inhibit fires, prevent vectors and wind-blown debris and promote anaerobic waste decomposition.

(2) Intermediate Cover. This component shall be designed to provide limited duration control of landfill odors and infiltration of precipitation into the waste mass.

(3) Interim Cap. This component shall be designed to provide extended duration control of landfill odors, infiltration of precipitation into the waste mass, enhancing gas collection and control, accommodating waste settlement, and reducing erosion and leachate production.

(g) The landfill shall have a Final Capping System that consists of the following components:

(1) Hydraulic Barrier Layer. This component shall be designed to prevent infiltration of liquids into the waste mass.

(2) Final Capping Drainage Layer. This component shall be designed to facilitate migration of liquids to perimeter drains and stormwater management systems, and to prevent saturation of final capping layers.

(3) Final Capping Protection Layer. This component shall be designed to provide frost and physical protection of the final capping drainage layer.

(4) Vegetative Support Layer. This component shall be designed to support herbaceous vegetative growth for erosion stabilization.

(5) The Secretary may approve alternative design components that can be determined to achieve equivalent or improved performance standards.

(h) Leachate Collection and Removal Systems (LCRS). Landfills shall be equipped with leak detection and leachate collection and removal systems that are designed to be consistent with the requirements of this section.

(1) Performance standards. The LCRS shall be designed to meet the following performance standards:

(A) Collect and remove all leachate and gas condensate generated by the landfill.

(B) Enable detection of leachate migration through the primary landfill liner system.

(C) Prevent migration of leachate off of the landfill site.

(D) Restrict leachate depth to 30 cm or less over the liner system, except within the leachate sump area, under typical operating conditions.

(E) The LCRS shall restore leachate depth to less than 30 cm within five days following a 25-year/24-hour or greater storm event, or other approved contingency storage events.

(F) Provide capability of accurately and independently measuring and recording leachate generation within the primary and secondary collection systems.

(G) Be designed to be hydrologically separate from the stormwater management system and designed such that the secondary leachate collection system is separate from the primary leachate collection system.

(2) Piping. The LCRS shall utilize piping that:

(A) is composed of material compatible with anticipated leachate composition;

(B) is perforated sufficiently for anticipated leachate quantities; and

(C) Allows for effective flow monitoring with access for routine maintenance.

(3) Sump. The LCRS shall include a sump that:

(A) Provides a supplemental hydraulic liner system protection in the sump areas where leachate will be stored;

(B) Utilizes a sump fill that shall be porous and made of transmissible materials such that it will not biologically or physically clog over time;

(C) Provides for adequate access to change pumps and for general cleaning and maintenance; and

(D) operates to prevent 30 cm of leachate from collecting on the primary liner in the base area under normal operations.

(4) Leachate and gas condensate storage infrastructure shall provide capacity for storing a volume of leachate sufficient to allow for the restoration of 30 cm of hydraulic head on the liner within five days of the 25-year-24-hour storm event or greater.

(5) Leachate containment; leak detection. All LCRS components constructed outside of the lined portion of the waste management area shall provide double containment and be equipped with effective leak detection.

(6) Leachate collection tanks shall be:

(A) double-walled with interstitial space;

(B) constructed of material compatible with the expected composition of the leachate; and tested biennially for leaks.

(i) Operating system. Landfills shall have an operating system that is designed to be consistent with the following standards:

(1) The facility shall maintain daily cover that shall consist of at least a six (6) inches of earthen material. Alternative daily cover may be proposed in accordance with § 6-1004(e).

(2) The facility shall maintain intermediate cover shall consist of a minimum 1-foot thickness of compacted earthen material, which may include the 6-inch daily cover, and shall be stabilized by vegetated cover.

(3) The facility may utilize an interim cap. Interim caps shall consist of a flexible membrane liner or a minimum two-foot thick layer of earthen material with a permeability of less than 1×10^{-5} cm/sec overlain by six (6) inches of earthen material capable of sustaining vegetation.

(4) The design and sequencing of waste lift development shall ensure proper drainage on the landfill site and prevent ponding of water on the facility surface. This requirement applies both during the working life of the facility and after the final capping system has been installed and vegetation established.

(5) Landfill design and fill plans shall be designed such that final grades are achieved as soon as possible and that the open area for active filling is minimized to the extent practicable. Designs shall include the sequencing and extent of planned intermediate cover and interim cap that will be utilized prior to final capping of the landfill units.

(6) Landfill designs shall include a sequential capping plan for closing operational units of the disposal facility during its life. Operational units shall be designed for a life not to exceed ten (10) years unless otherwise approved by the Secretary.

(j) The Landfill Gas Collection and Control System (LGCCS). Landfills shall have a system to ensure that combustible landfill gases created by decomposition of wastes are captured. This system shall be designed to be consistent with the following standards:

(1) The LGCCS system shall achieve the following performance standards:

(A) The LGCCS system shall be designed to effectively manage all landfill gas collected.

(B) all appurtenances shall be designed, operated and maintained to effectively collect and control landfill gases and to prevent emissions and related odors or nuisance conditions, or other hazards to public health and safety.

(C) Gas extraction wells. Landfills shall incorporate the following gas extraction well standards into the facility design:

(D) Vertical landfill gas extraction wells shall be located with overlapping radii of influence; and

(E) Vertical landfill gas extraction wells shall be designed, constructed, operated and maintained:

(i) with a wellhead that provides a means of controlling gas flow, a means of measuring liquid level, and a means of sampling temperature and gas quality;

(ii) to passively drain leachate and condensate to the leachate system; to resist physical and biological clogging;

(iii) to minimize oxygen induction into the landfill gas collection and control system while under vacuum; and

(iv) to terminate at least ten (10) feet above the primary liner system. Gas collection system piping.

(F) The landfill shall be equipped with a gas collection system piping shall is designed to:

(i) withstand the expected temperature of the landfill gas, the negative pressures of the vacuum system and to be durable throughout the life of the landfill;

(ii) passively drain condensate into the leachate collection system; and

(iii) incorporate a looped header piping system to provide a second means for extracting gas from each well. Headers shall be designed with flow control valves to isolate portions of the gas collection and control system when repairs are necessary.

(iv) The landfill design shall include a vacuum system, header and lateral piping sizing and layout that is designed to be capable of providing a minimum of ten (10) inches of water column of vacuum at each gas extraction well.

(v) Extraction wells shall be subject to negative pressure adjusted to maximize the extraction without inducing oxygen migration or otherwise compromising landfill gas quality.

(G) The landfill gas treatment and destruction design shall incorporate, as applicable, the following:

(i) A totalizing meter capable of measuring the amount of gas collected by the landfill gas collection and control system. A means for sampling the temperature and quality of the aggregated landfill gas shall also be provided.

(ii) If a combustion engine is used as the primary method of destroying landfill gas, a backup flare shall be provided to manage gas when the engine is not in operation. The backup flare shall be directly connected to the landfill gas collection and control system and shall be sized to destroy the peak gas flow occurring during the life of the landfill. Backup flares shall be constructed with automatic ignition capabilities.

(iii) If the nature of the landfill gas poses a hazard to the condition and/or operational efficiency of the combustion equipment, gas pre-treatment shall be provided to protect and preserve the condition and operational efficiency of the equipment.

(k) Final Cap System; Lined Landfills. Lined landfills shall have a final capping system that is designed to be consistent with the following standards:

(i) The system shall be integrated with the facility LGCCS.

(ii) The hydraulic barrier layer shall provide a graded, stable base of earthen materials capable of protecting the overlying FML from the underlying waste mass. Intermediate cover may function as this base material if it is demonstrated to the sufficiency of the Secretary to meet this standard.

(iii) The LLDPE flexible membrane liner shall be of a minimum nominal thickness of 40-mil.

(iv)The final capping drainage layer shall effectively transmit infiltrated water off of the FML and into a toe slope drainage system. Stability calculations shall demonstrate that the design materials are capable of maintaining final cap stability for a precipitation event equivalent to a 100-year, 24-hour storm event.

(v) The final capping protection layer shall be constructed of materials demonstrated to provide physical protection of the drainage layer (considering frost, burrowing, dessication etc.) and capable of preventing clogging of the drainage layer. The system shall incorporate a vegetative support layer that consists of earthen material capable of sustaining native plant growth.

(2) The Secretary may approve an alternative final cover design and/or materials that does not comply with the standards in this section when the alternative design and/or materials are demonstrated to the sufficiency of the Secretary to achieve a minimum of equivalent performance to the requirements of this section.

(3) All components of the final capping system shall be designed to function over the full closure, post-closure, and custodial care life of the landfill.

(l) Final Cap System; Unlined Landfills. Unlined landfills shall have a final capping system that is designed to be consistent with the following standards:

(1) The system shall be constructed with:

(A) a minimum two-foot thick layer of earthen material with a permeability of less than 1 x 10^{-5} cm/sec and less than the permeability of the facility base soils, and

(B) a minimum six-inch thick earthen material layer capable of sustaining native plant growth, or some other earthen material, as approved by the Secretary, that has been demonstrated to achieve a minimum of equivalent performance.

(2) Notwithstanding the requirements of (l)(1) of this section, to further minimize the threat to public health, safety or the environment, the Secretary may require that a final capping system for an unlined landfill comply with the standards as required by in § 6-1004 for lined landfills.

(m) Other Provisions Applicable to All Landfills. All landfills, lined and unlined, shall be designed to comply with the standards of this section.

(1) The final capping system design for all landfill facilities shall provide for a minimum slope of five (5) percent after complete settlement and a maximum slope of 33 percent at closure.

(2) All landfill designs shall provide for the appropriate control of surface water run-on and run-off, as determined by the Secretary. At a minimum, designs shall include a management system to divert run-on, control run-off discharge, control erosion, sedimentation, siltation and flooding and minimize the generation of leachate.

(3) All new municipal solid waste landfill facilities and lateral expansions located in seismic impact zones must be designed to withstand the maximum horizontal acceleration in lithified earth material for the site. A seismic impact zone is an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material will exceed 0.10g in 250 years. Note: A seismic impact zone can be identified from the latest USGS seismic hazard map or a site specific seismic hazard study.

(4) Notwithstanding any other provision of these Rules, facilities used for the disposal of ash from waste incinerators shall have liner and leachate collection systems and appropriate provisions for leachate treatment. Waste incinerator ash shall not be disposed with other waste within the lined cell.

(5) A groundwater monitoring system shall be designed and installed with a sufficient distribution and number of monitoring wells at depths capable of yielding groundwater samples from aquifers potentially impacted by the landfill. Up-gradient and/or other monitoring wells shall also be established, as determined by the Secretary, for the determination of local background groundwater quality.

§ 6-1005 Additional Disposal Facility Operating Standards

In addition to the general operational requirements of Subchapter 7, the following requirement apply to disposal facilities:

(a) All Categorical disposal facilities. Categorical disposal certifications shall operate in accordance with the following operating and reporting conditions:

(1) Solid waste shall be covered and the disposal area shall be graded to promote runoff when closing the facility. A minimum cover shall consist of at least one-foot thickness earthen or other material capable of sustaining grassy vegetation. The Secretary reserves the authority to require additional cover requirements.

(2) Vehicle access. Vehicle access to the disposal facility shall be controlled at all times by a fence or barrier or a lockable gate. An attendant shall be present during hours of operation to assure that only the waste allowed by the categorical disposal certification is disposed of at the facility, to perform record keeping and to observe disposal;

(3) Siting limitations. Applicable siting limitations are to be maintained throughout the period of disposal and closure.

(4) Reporting.

(A) The facility operator shall make reports to the Secretary on forms developed by the Secretary. These reports shall be filed electronically rt with the Secretary on a quarterly basis or as specified in the facility certification;

(B) Operators or owners shall report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.

(5) Additional requirements. The Secretary may require any additional operational requirements in the certification, including financial responsibility or capability requirements set forth in Subchapter 8 of these Rules, if it is determined necessary to protect public health, safety, or the environment.

(b) Development soils categorical disposal facilities. Development soils categorical disposal facilities shall operate in accordance with the following additional operating and reporting conditions:

(1) Facilities shall, on a quarterly basis or as specified in the facility certification, provide copies of the originating site work as required by § 6-1006(a)(3)(A) prior to disposal at the site.

(2) Waste shall be covered and graded to promote runoff at least once a year in accordance with the standards of this subsection.

(A) At a minimum, cover shall be capable of sustaining vegetation and suitable for the avoidance of nuisance dust conditions.

(B) At closure, a minimum slope of five (5) percent and a maximum slope of 33 ⅓ percent shall be achieved.

(C) Upon closure of the facility, the Permittee shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.

(D) The Secretary reserves the right to require cover requirements in addition to this subsection.

(c) Landfill facilities. The additional operational requirements for a landfill facility are as follows:

(1) Before the facility may commence operations within a newly constructed cell, a professional engineer, licensed in the State of Vermont, shall certify that the cell was built in accordance with the requirements of the certification, approved plans, approved change orders, and furnish a complete set of as-built drawings to the Secretary.

(2) A qualified operator familiar with the approved FMP, facility certification, and the requirements of these Rules shall be on site during all hours of landfilling operations.

(3) Properly maintained and calibrated scales shall be used to measure the weight of solid waste received and disposed at the facility.

(4) Adequate horizontal and vertical benchmarks shall be established prior to depositing any waste, and maintained throughout the life of the facility.

(5) Non-implemented waste shall not be accepted for disposal.

(6) Approved uniform solid waste and approved processed construction and demolition waste may be accepted, and only in accordance with the standards set forth in the Secretary's written approval of such waste.

(7) The first lift of waste placed shall consist of select waste, with no large or rigid objects, that might cause damage to the liner system or stability. Placement of this first lift of waste shall be completed in a manner that prevents damage to the liner system from operating equipment and the select waste materials.

(8) Lift development shall be carried out in accordance with the engineering plans, to ensure proper drainage and to prevent ponding.

(9) The permittee shall make provisions for standby equipment to be operational within 24 hours of breakdown of primary equipment.

(10) All cover and capping materials, and earthen or other approved alternative cover materials, when stored on-site, shall be managed to prevent the production of fugitive dust or the creation of nuisance or other impairment to public health, safety or the environment.

(11) With the exception of construction and demolition waste landfills, daily cover material shall be in place at the end of each operating day, or at more frequent intervals , as needed to control disease vectors, fires and odors, prevent blowing litter, and discourage scavenging by animals, without presenting a threat to human health and the environment. This shall require compliance with the following:

(A) Grading of cover materials sufficient to prevent ponding.

(B) In all areas, except the working face, which have not received waste material in any given operating day, the owner or operator shall take all steps necessary to ensure that the cover material remains functional and stable until such time as intermediate cover, interim cap or the final capping system is installed.

(12) Construction and demolition waste landfills shall maintain cover pursuant requirements contained within facility's approved facility management plan.

(13) Intermediate cover shall be placed as soon as possible on any area that is not anticipated to receive waste for a period of 3 months or more. Intermediate cover shall be replaced by an interim or final capping system if additional waste is not placed in the area within one year of intermediate cover installation. Extensions beyond the one-year deadline may be granted by the Secretary on a case-by-case basis.

(14) Interim capping shall be performed in accordance with approved plans. To minimize infiltration and enhance gas collection, the operator may place interim cap in areas that are not anticipated to receive waste for a significant period of time. Interim caps shall:

(A) be maintained and inspected to ensure performance and functionality, provide proper drainage, enable gas collection, prevent ponding; and

(B) be removed and replaced by the final capping system when it is determined that additional waste will not be placed in the area.

(15) Within 30 days, the operator shall notify the Agency in writing when the facility has reached final grades, capacity limits, or ceases accepting waste. The final capping system shall be in place within 90 days of attaining final grades, final capacity, or of the last date of receipt of waste for disposal, whichever is applicable. Vegetative cover, or other approved final capping system, shall be established and functional within four (4) months of final cap installation. The Secretary may approve an extension to these deadlines if warranted by weather conditions.

(16) Disposal of regulated hazardous waste is prohibited. Industrial and commercial solid waste, sludge, septage or other materials that may combine to form hazardous substances shall be deposited only as specified in the certification.

(17) The groundwater compliance point shall be no more than 150 meters from the waste management unit boundary and be located on property owned by the landfill owners.

(18) All components of the designed landfill system, including the leachate collection and removal system, and the landfill gas collection and control system, shall be maintained to achieve the performance standards of § 6-1004. If any component is individually incapable of achieving, or which prevents the entire system from achieving, the required performance standards, the Agency shall be notified, and it shall be replaced to comply with and achieve the performance standard. A certification amendment may be necessary if design changes are proposed in order to achieve the needed performance standard.

(d) Landfill facilities. The additional material specific operational requirements are as follows:

(1) Sludge Disposal at a Municipal Solid Waste Landfills.

(A) Sludges shall only be disposed at municipal solid waste landfills

(B) Prior to the disposal of sludge, written approval from the Secretary is required.

(C) Sludges shall be at least 18 percent solids content to be accepted at the facility.

(D) Sludges that cannot pass the following tests are prohibited from disposal:

(E) Paint filter test (indicating that the materials do not contain free liquids); and

(F) Sludges shall not exhibit the hazardous waste characteristic of toxicity as determined using the Toxicity Characterization Leaching Procedure (TCLP); and

(G) Sludges shall be mixed at the working face to minimize odors, vectors, and bacteria and managed according to the approved FMP.

(2) Asbestos Disposal.

(A) Asbestos-containing waste (ACW) shall only be disposed of in a facility certified to receive asbestos-containing waste, and within a demarcated asbestos disposal area. Facilities accepting ACW shall:

(i) Ensure that the incoming ACW is packaged in accordance with the Vermont Department of Health Regulations for Asbestos Controls, the Agency's Policy on the Management of Asbestos-Containing Waste and Vermiculite Insulation in Vermont, and that the ACW is transported separately from other wastes;

(ii) Take appropriate measures to ensure the protection of all persons present during the disposal of any ACW, and all persons who perform duties within the disposal facility. This shall include ensuring that transporters and facility personnel wear NIOSH-approved air purifying respirators whenever outside of a structure or a vehicle while ACW disposal operations are occurring.

(iii) Maintain records on the generator, source and type of ACW, volume disposed, and dates of disposal;

(iv) Ensure that a water truck or other water source, and sufficient cover material is readily available at the time of ACW disposal operations;

(v) Perform disposal in such a way as to ensure no airborne emissions;

(vi) Cover ACW immediately after placement with at least six inches of material, ensuring no breakage of contained ACW;

(vii) Provide training of employees in the asbestos waste disposal procedures; and

(viii) Use a three-dimensional grid system to identify where the ACW is disposed.

(3) Liquid Waste Disposal at Landfills.

(A) Containers holding liquid waste shall not be placed in a landfill unless:

(i) The container is similar in size to that normally found in household waste;

(ii) The container is designed to hold liquids for use other than storage; or

(iii)The waste is household waste.

(B) Bulk or non-containerized liquid waste shall not be placed in a landfill unless the liquid waste is a household waste, other than septage.

(C) Absorbent material may be added, or dewatering of waste may be performed, prior to placement in a landfill so that waste is not considered a liquid waste.

(D) Written approval from the Secretary is required prior to the disposal of liquid wastes including septage and/or sludge, in any landfill facility.

(4) Regulated Medical Waste. Landfills shall only dispose of regulated medical waste that has been documented as having been treated and shall:

(A) dispose of the waste in an isolated area within the working face except if incinerated and as provided in § 6-1004;

(B) take appropriate measures to ensure the protection of all persons present during the disposal of any treated RMW and who perform duties within the disposal facility; and

(C) cover the area immediately after placement with at least six inches of appropriate cover material, ensuring no breakage of contained RMW while exposed to an open-air environment.

(5) Alternative Landfill Daily Cover Materials.

(A) Alternative materials for landfill daily cover material may only be utilized following approval by the Secretary, on a case-by-case basis. Written approval of the Secretary of the material shall be obtained by the facility provided prior to use.

(B) To receive approval under this section, the owner or operator shall submit a request in accordance with subdivision (e)(3), and shall demonstrate to the sufficiency of the Secretary that the performance of the proposed ADC will control disease vectors, control fires, reduce odors, prevent blowing litter, discourage scavenging, assure aesthetic appearance and control moisture and erosion.

(C) The request for approval shall include the following:

(i) The material type and name;

(ii) A safety data sheet (SDS) for the material, if available;

(iii) A detailed operations plan which demonstrates that the performance of the material will meet the performance criteria for alternative daily cover;

(iv) Specifications of the material, procedures for placement, thickness and weather conditions during which the material can or cannot be used;

(v) A contingency plan for the use of earthen daily cover in the event that the ADC material cannot be used, is not available or is not performing adequately; and

(vi) Any available documentation of the material's use at other landfills which addresses the materials performance and regulatory status.

(vii) A field demonstration may be requested by the Secretary prior to approval.

(6) Response to Action Leakage Rate Exceedance. If flow within the secondary leachate collection system exceeds the monthly average action leakage rate of 20 gallons-per-acre-per-day, the landfill shall:

(A) Notify the Secretary in writing within 24 hours of discovery of the exceedance;

(B) Take immediate actions to reduce or eliminate any leaks or other causes of the exceedance;

(C) Sample and analyze the primary and secondary detection liquid as provided for within the approved certification application, with results submitted to the Secretary within 5 days.

(D) Investigate and determine the location, size and cause of any leak(s) or other causes of the exceedance;

(E) Submit a preliminary assessment regarding the cause of the exceedance to the Secretary for approval within 14 days of the discovery of the exceedance, including a management plan for elimination of any leak; and

(F) Implement the approved management plan and/or any other requirements determined by the Secretary to be necessary for the protection of public health and safety and the environment.

(7) Landfill Gas Management.

(A) The landfill gas management system shall be designed and operated in order to effectively control landfill decomposition gas emissions and any related odors.

(B) Surface Emissions Monitoring (SEM) shall occur as provided for under an approved SEM plan and shall be performed for the detection of fugitive emissions.

(C) Emissions shall be managed to prevent off-site migration of landfill gases and explosive concentrations of landfill gases within structures on the landfill property. Monitoring shall be performed as required by the facility certification to document such management.

(D) If methane levels exceed 25% of the lower explosive limit (LEL) within structures or if the LEL is exceeded at the facility or at the property boundary, the owner and/or operator shall:

(i) Immediately take all steps necessary to ensure protection of human health and safety;

(ii) Within 24 hours of identification of the exceedance, notify the Secretary and all affected property owners;

(iii) Within 30 days of identification, submit a remedial action plan for the gas releases to the Secretary for approval; and

(iv) Implement the approved plan in accordance with a compliance schedule established within the approved plan.

(e) Mining waste/mineral processing waste facilities. The permittee of a mining waste or mineral processing waste landfill shall notify the Secretary prior to the implementation of any change to the mining or manufacturing process or any change to the management of the mining waste that would chemically or physically alter the character of the mining waste.

§ 6-1006 Disposal Facility Applications; Additional Application Requirements

(a) Categorical disposal facilities. In addition to the general application requirements of § 6-505, an application for a categorical disposal facility shall include the following:

(1) Except for development soil categorical disposal facilities, categorical disposal facilities shall submit the application requirements established in § 6-505.

(2) Privately operated categorical disposal facilities shall pay fees in accordance with 3 V.S.A. 2822(i) and 2822(j)(6)(D).

(3) The following shall be required for development soil categorical disposal facilities:

(A) The preparation of a site characterization report that includes information necessary to determine all paths of emission or discharge to the environment and shall be sufficient to model potential contaminant transport.

(B) The site characterization must address, unless deemed non-applicable by the Secretary:

(i) Soils and surficial geology.

(ii) Bedrock geology.

(iii) Integrated groundwater geology and geochemistry, including flow direct, presence of multiple aquifer, preferential pathways and parameters for hydraulic conductivity and transmissivity.

(iv) Topography.

(v) Surface water.

(C) Demonstration of the following:

(i) That the isolation distances from the high seasonal water table, bedrock, and waters are sufficient to ensure that an emission or discharge from the facility will not occur or result in an exceedance of applicable environmental quality and public health standards and Rules;

(ii) That the isolation distance to public and private drinking water sources is sufficient to ensure that an emission or discharge from the facility will not adversely affect drinking water;

(iii) That the isolation distances to property lines or any residence, school, day care facility, hospital or nursing home are sufficient to ensure that the facility will not:

(I) result in nuisance dust off site of the facility;

(II) result in an unreasonable visual impact off site;

(III) unreasonably increase the level of noise detectable off site; or

(IV) otherwise adversely affect public health.

(iv) that the facility is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

(D) Any additional information that the Secretary deems necessary to evaluate potential impacts to the public health, and the air, groundwater, and surface water quality. This includes the origin site work required by §35-512 of the Investigation and Remediation of Contaminated Properties Rule.

(b) Landfill facilities. In addition to the general application requirements of § 6-504, an application for a new landfill facility shall include the following:

(1) A hydrogeological study, which shall include all data, maps, cross-sections, schematics and calculations necessary to accurately determine the physical and chemical characteristics of the overburden and bedrock groundwater characteristics, any modelling to demonstrate worse-case scenario impacts to the groundwater and surface water systems and develop a groundwater monitoring plan which will demonstrate ongoing compliance with the Vermont Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.

(2) A Landfill Siting Report, which shall demonstrate compliance with the minimum siting requirements of these Rules.

(3) A Landfill Design Plan, which shall but not limited to, design and construction specifications of the groundwater protection system, the environmental monitoring systems, the cover and final capping and other appurtenances associated with the facility.

(4) Landfill Slope Stability Calculations.

(5) A Seismic Impact Analysis, or a demonstration that seismic impact analysis is not necessary if the landfill is sited outside of a seismic impact zone.

(6) An Odor Control and Surface Emissions Monitoring (SEM) Plan.

(7) A landfill operation and maintenance plan, which shall include the sequence and direction of cell, lift and phase development, capacity and life expectancy for each phase and the sequence of placement of interim and final cover.

(8) A Waste Control plan, which shall include a description of how waste will be received and monitored, identification and management of wastes requiring special handling (friable asbestos, sludges etc.), and the program for detecting and preventing disposal of unauthorized wastes (random load inspections etc.).

(9) A Construction Quality Assurance and Quality Control plan which shall include a description of the observations and tests that will be used before, during and upon completion of construction to ensure that construction materials will meet the design and operation criteria.

(10) A Landfill Closure Plan, which shall identify all the steps necessary to close the landfill at any point during its active life and the associated closure cost estimate necessary for establishing a financial responsibility instrument.

(11) A Landfill Post-Closure Plan, which shall identify the monitoring and inspections that will occur following closure in order to maintain compliance with § 6-1008 of these Rules and the associated post-closure cost estimate necessary for establishing a financial responsibility instrument.

(12) A FAA Notification. In a case where a landfill facility is proposed to be located within a 5-mile radius of an airport runway, serving piston-driven or turbojet aircraft, the applicant shall also provide evidence that the Federal Aviation Administration (FAA) and the affected airport have

been notified. Landfill facilities located within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft, shall not pose a bird hazard to aircraft and shall include a Bird Hazard Management Plan with their application.

(c) Mining waste; mineral processing waste landfills. In addition to the general application requirements of § 6-504, an application for a mineral waste and mineral processing waste landfill shall include the following:

(1) Waste Characterization report for all mining waste and mineral processing waste that is disposed of within the landfill. This report shall provide the following information:

(A) A description of the mining and industrial process or processes that are taking place at the facility, including a process flow diagram.

(B) A detailed description of all materials processed which generate mining waste or mineral processing waste including identification of:

(i) Reagents, chemicals or additives that are used in the mining and industrial process and the point that they are added in that process, including the amount used per year and an estimate of the amount in the waste using a mass balance analysis. A copy of the material safety data sheets for each reagent, chemical or additive used in the industrial process shall be included; and

(ii) Natural contaminants (including heavy metals, metal salts, fluorine, radioisotopes, asbestos, arsenic) present in the material that is processed.

(2) The annual amount of mining wastes or mineral processing wastes proposed to be treated, stored, or disposed.

(3) The results of analytical tests of extract from representative samples of the mining waste or mineral processing waste to determine the concentration of metals, organic compounds, volatile compounds, semi-volatile compounds or other contaminants. The analytical results shall be presented in a format approved by the Secretary.

(4) A statement that the applicant has examined alternatives to reduce the amount of reagents, chemicals, or additives in the mining waste or mineral processing waste. The statement shall include potential reuse and recycling options explored by the applicant for the waste. The statement shall also include a brief description of the alternatives considered and the conclusions

reached.

(5) Any additional information that the applicant or the Secretary believes would assist the Secretary in accurately characterizing the mining waste or mineral processing waste.

(d) Except for facilities that qualify for a categorical certification under § 6-1002(a), the Secretary cannot certify a disposal facility unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, , as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

§ 6-1007 Disposal Facility Closure

(a) A closure plan shall be required for all facilities subject to closure requirements and that are operating on the effective date of these Rules and to new facilities required to obtain certification under these Rules.

(b) All facilities subject to closure shall be closed in a manner that:

(1) Minimizes the need for further maintenance related to the waste facility; and

(2) Controls minimizes or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater or surface waters or the atmosphere.

(c) The closure plan submitted at the point of application and approved by the Secretary will become a condition of the facility certification.

(d) An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.

(e) An amended closure plan shall be submitted for approval to the Secretary whenever:

(1) Changes in the operating plan or facility design affect the closure plan; or

(2) There is a change in the expected year of closure; or

(3) There is a change in the closure cost estimate or financial instrument.

(f) When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment shall be requested at the same time. If the Secretary determines that a certification modification is not needed to authorize the change in operating plans or facility design, a request for a closure plan amendment shall be submitted within 60 days after the change in plans or design occurs.

(g) Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.

(h) Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.

(i) Notification of facility use. Upon final closure of the facility, the owner shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search, as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.

(j) Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:

(1) Certification by the certification holder of the facility and by a professional engineer licensed in the State of Vermont that the facility has been closed in accordance with the specifications of the approved closure plan;

(2) Verification that the owner of the property on which the facility is located has recorded a notation on the deed as required by subsection (i) of this section; and

(3) a request for discontinuance of any existing financial assurance mechanism required by § 6-802.

§ 6-1008 Disposal Facility Post-Closure

(a) Except for categorical disposal facilities, a post-closure plan is required for facilities that are operating on the effective date of these Rules or are otherwise required to obtain certification under these Rules. A post-closure plan shall be required where waste or waste constituents remain at or in the facility after

closure.

(b) The facility post-closure plan approved by the Secretary shall be a condition of the facility certification.

(c) Upon written approval of the certification of closure from the Secretary, the Permittee shall implement the post-closure plan. A facility's post-closure care period shall continue until the owner or operator can demonstrate that the threat to public health and safety and the environment has been eliminated and the performance criteria of custodial care, § 6-1009, are achieved.

(d) The post-closure plan shall identify the activities that will be carried out during the post-closure period to minimize the possibility of an emission or discharge and to demonstrate the achievement of the custodial care performance criteria. The plan shall include:

(1) A description of the appropriate air, surface water, groundwater monitoring activities, to include:

(A) A plan for monitoring and maintenance of the landfill cover system, erosion control measures, drainage systems, groundwater monitoring networks, leachate collection systems, and gas control systems, as applicable. This shall include an annual evaluation of the landfill performed by a registered engineer or approved qualified professional in the month of May. This inspection shall assess whether the facility systems are sufficient to prevent impacts to human health or the environment.

(B) A groundwater monitoring plan developed to demonstrate compliance with the Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.

(C) A plan for detection monitoring at potentially impacted sensitive receptors (e.g., surface waters, residential wells), as applicable.

(D) A plan for explosive gas management and explosive gas monitoring, as applicable.

(2) A description and schedule of any planned maintenance activities;

(3) The name, address and phone number of the person or office to contact about the facility during the post-closure period; and

(4) A post-closure cost estimate pursuant to § 6-805 and provisions for financial assurance pursuant to § 6-802 or § 6-803 as appropriate.

(e) During the post-closure period, the owner or operator must maintain the integrity and effectiveness of the following:

(1) The landfill cover system, access controls, erosion controls, drainage systems, groundwater monitoring networks, leachate collection systems, if applicable, and gas control systems, if applicable This shall include making any repairs as necessary to correct for sparse vegetative cover, settlement, erosion, burrowing, deficiencies in the run-on and run-off systems and mowing the vegetative cover at least once a year; and

(2) Environmental and facility monitoring points.

(f) A post-closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility or during the post-closure period.

(g) An amended post-closure plan shall be submitted for approval to the Secretary whenever:

(1) Changes in the operating plan, facility design or closure plan, or events that occur during the active life of the facility or during the post-closure period, affect the post-closure plan;

(2) There is a change in the expected year of closure;

(3) There is a change to the post closure cost estimate and/or the post closure financial assurance document;

(4) There is a change in the post-closure monitoring activities described within § 6-1008(d); or

(5) There is a change in the anticipated end use of the property. Proposed construction, operation or maintenance of any development upon a closed solid waste landfill shall demonstrate that there will be no compromise to the integrity of the landfill capping system, any landfill gas collection and removal system, leachate collection and removal system, surface water control system, environmental monitoring system, and access controls, or otherwise increase the environmental or public health and safety risk from the facility.

(h) When a certification modification is requested to authorize a change in the operating plans or facility design, a post-closure plan amendment shall be requested at the same time. In all other cases, the request for a post-closure plan amendment shall be made within 60 days after the change in operating plans or facility design or the event that affect the post-closure plan occur.

(i) As required by the approved post-closure plan and described in § 6-1008(d), the owner or operator shall submit the following to the Secretary:

(1) Copies of the inspection reports shall be submitted within 30 days of completion of the inspection;

(2) Copies of all water quality reports shall be submitted within 60 days following the sampling event at the facility; and

(3) Notification within 7 days of any damage, malfunction or sub-standard performance at the facility.

(j) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification will have the existing certification replaced by the provisions of this subchapter and post-closure care management will be regulated under these Rules and the post-closure plan, post-closure cost estimates and financial assurance instruments that are approved at the point of certification expiration.

§ 6-1009 Disposal Facility Custodial Care

(a) Upon the completion of Post-closure Care as approved in a facility post-closure care certification, the owner/operator shall submit a written request for post-closure care completion, along with accompanying documentation to the Secretary that demonstrates that the facility is stable and poses no threat to human health or the environment without further maintenance or monitoring beyond the associated provisions of custodial care outlined in § 6-1009.

(b) The post-closure care completion request shall be prepared under the direction of a professional engineer, licensed in the State of Vermont, and, a minimum, address the following performance criteria standards:

(1) Groundwater Quality.

(A) Concentrations of all contaminants attributed to the facility shall be stable, decreasing, or non-detectable over the most recent five-year period;

(B) Contaminants do not reach or exceed Groundwater Enforcement Standards (GWES) as established in the Groundwater Protection Rule and Strategy at the point of compliance. In the absence of a GWES, any US EPA Maximum Contaminant Level (MCL) or Vermont Health Advisory (VHA) would apply. Statistical significance of detections may

be used to demonstrate compliance as approved by the Secretary.

(2) Landfill Gas Emissions.

(A) Methane concentrations, if monitored, in monitoring wells shall be stable, decreasing or non-detectable over the most recent five-year period;

(B) Methane emissions shall not have the potential of reaching or exceeding 25% of the Lower Explosive Limit (LEL) at the property boundary or in facility buildings or result in objectionable off-site odors.

(C) Any established gas venting system, including passive venting, is fully operational or is decommissioned when determined to be no longer necessary.

(3) Leachate Management. If required to be collected, leachate quality and quantity shall be demonstrated to be stable, decreasing or non-detectable over the most recent five-year period with no GWES, MCL or VHA exceedances for a minimum of two consecutive semi-annual monitoring events.

(4) Final Cover Integrity.

(A) Waste decomposition and settlement rates shall be shown to be negligible and that future settlement will not affect integrity of the final cover system;

(B) Vegetative cover shall be uniformly well-established, stable and resistant to erosion.

(5) Surface Water Diversion System.

(A) The surface water diversion system shall be shown to continue to prevent surface water flow on the capped landfill in accordance with the design requirements that imposed and approved during closure.

(B) Surface water discharge from the facility does not and will not violate Vermont Water Quality Standards, or any requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES).

(6) Institutional Controls. Evidence shall be provided to demonstrate that institutional controls (e.g. land record notices, deed restrictions, access controls) are in place. A land record notice or other

control approved by the Secretary to the Secretary at the time of the custodial care request.

(7) Corrective Actions. Documentation shall be provided to demonstrate that any mandated corrective actions (e.g. waste removal, structural improvements, groundwater remediation) have been successfully performed.

(8) End Use Plans. Documentation shall be provided that the facility owner has identified the end use activities to occur at the facility and that these activities will not pose a threat to human health or the environment.

(9) Adjoining Property Owner Notification. Written notification shall be provided to all adjoining property owners at the post of application for post-closure care cessation. Evidence of this notification should be provided along with the written request.

(c) If the Secretary determines that the findings of § 6-1009(b) cannot be made, the Secretary shall deny a request for post-closure care completion and notify the owner/operator of the basis for denial. The Secretary may require the continuation of post-closure care and/or implementation of corrective action, and may consider modification of specific post-closure care activities.

(d) If the Secretary approves the findings of § 6-1009(b), the Secretary shall provide the owner/operator with written approval of post-closure care completion and commencement of custodial care. Upon custodial care approval, the facility owner/operator shall properly close and abandon all groundwater monitoring wells in accordance with §12.3.5 of Appendix A of the Vermont Water Supply Rule, as may be amended, and discontinue any existing active gas control systems.

(e) The approval for cessation of post-closure care and initiation of custodial care shall not relieve the owner/operator from taking necessary corrective actions to protect human health and the environment. This includes

(1) Any necessary corrective actions as may be required by the Secretary under 10 V.S.A. § 6615;

(2) Necessary continued maintenance (mowing, erosion repairs, etc.) performed on a schedule necessary to maintain performance of the landfill cap;

(3) Institutional controls to maintain access control and prevent risk; and

(4) The custodial care approval shall not release the owner/operator from potential liability to third parties resulting from releases which occur(red) during the operating life, closure period, post-

closure period or custodial care period.

(f) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification which contained the approval to transition from post-closure care management to custodial care management will be approved for custodial care upon expiration of the certification.

Subchapter 11 – Compost Facilities

§ 6-1101 Applicability

(a) This Subchapter applies to persons engaged in composting where the materials being composted do not contain any amount of sewage sludge, domestic septage, or septage. Composting activities where the materials being composted do contain any amount of sewage sludge, domestic septage, or septage shall be subject to the provisions of Subchapter 13 of these Rules.

(b) The siting requirements of § 6-1106 and the liquid management standards of § 6-1107 shall not apply to facilities permitted prior to March 15, 2012, except if an expansion in the compost management area or an increase in processing capacity is proposed.

§ 6-1102 Organic Solid Waste Management Specific Definitions

As used in this Subchapter and Subchapter 12 the following additional definitions apply:

(a) “Actively aerated” means forcibly inducing the flow of air through a compost pile or windrow utilizing mechanical means, such as electrically powered blowers and is accomplished by a pile design which incorporates perforated piping or other mechanisms to direct air flow through the pile.

(b) “Aerated piles” means inducing natural flow of air through a free standing compost pile or windrow through proper compost pile design.

(c) “Anaerobic digestion” means the controlled anaerobic decomposition of food residuals, manure, animal feed waste and other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.

(d) “Clean high carbon bulking agent” means the materials exempt as clean high carbon bulking agents by § 6-302(a)(13).

(e) "Compost" means a stable humus-like material produced by the controlled aerobic biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

(f) "Compostable" means a product, package or material that will safely decompose, in a composting system, into a humus-like material, that can be safely used as a beneficial soil amendment.

(g) "Composting" means the accelerated biological decomposition of organic matter under managed aerobic conditions resulting in compost.

(h) “Compost facility operator” means a person who operates a composting facility regulated under this subchapter.

(i) “Compost management area” means an area used for the unloading and storage of feedstocks, and active and curing compost. Compost management area does not include the area used for the management of runoff or leachate and does not include areas where finished compost is stored.

(j) “Compost tea” means a product produced by mixing finished compost with water and incubating the mixture to make a product used for soil enrichment. Compost tea producers may actively aerate the mixture or add additives to increase the microbial population during its production.

(k) "Contaminant" means material which lends physical or chemical impurity to compost, including glass, metal, plastics, and ceramics.

(l) "Curing" means the final stage of composting in which stabilization of the compost continues after much of the readily metabolized material has decomposed. Curing occurs after material has met the treatment process for compost required by this subchapter.

(m) “Digestate” means the remaining solid and liquid derived from the finished stage of in-vessel anaerobic digestion.

(n) "Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined and determined by Vermont Required Agricultural Practices Rule (RAPs).

(o) “Food processing residual” means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants. Typically, and historically, regulated by the Indirect Discharge Program.

(p) “Food residual” means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with 10 V.S.A. § 6605k Food residual may include preconsumer and postconsumer food scraps. “Food residual” does not include meat and meat-related products when these materials are composted by a resident on site.

(q) “Leachate” means liquid containing dissolved, suspended, or miscible materials that passes through or emerges from raw feedstocks and the active compost area. "Leachate" does not include liquid containing dissolved, suspended, or miscible materials that pass through or emerges from the area where compost is curing, or storage of finished product.

(r) "Leaf and yard residual" means compostable untreated vegetative matter, including but not limited to grass clippings, leaves, Kraft paper bags and brush, which are free from contaminants. It does not

include such materials as pre- and post-consumer food residuals, food processing residuals or soiled paper.

(s) "Organic Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose. Examples of organic solid wastes include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human feces) is not included in this definition.

(t) "Passively aerated" means inducing the flow of air through a free standing compost pile or windrow.

(u) "Processed food residuals" are food residuals which have been slurried into a condition which is suitable to being directly pumped into a holding tank.

(v) "Specified risk material" means tissues of ruminants that could contain Bovine Spongiform Encephalopathy causing prions as defined by the United States Department of Agriculture. These tissues include the tonsils, skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged 30 months or older and the tonsils and distal ileum of the small intestine of all cattle.

(w) "Vermicomposting" means a method of composting utilizing red worms or similar worms to breakdown organic material into a nutrient rich soil amendment.

(x) "Untreated wood residual" means untreated wood as defined in § 6-201.

§ 6-1103 Organic Solid Waste Management Specific Exemptions

(a) The following activities are exempt from the requirements of this subchapter:

(1) A person(s) importing for composting 100 cubic yards or less per year of total organic solid wastes, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

(2) Facilities that manage 3,000 cubic yards or less per year of solely leaf, yard, plant and untreated wood residuals provided that not more than 20 percent of the residuals are grass clippings.

(3) Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment:

(A) any amount of animal manure;

(B) any amount of absorbent bedding; and

(C) any amount of clean high carbon bulking agent.

(4) Facilities located on a farm that compost vegetative farm waste from a farm.

(5) The composting of 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm.

(6) Facilities located on a farm that compost animal mortalities or slaughter house waste from the farm's livestock.

(7) The disposal of animal mortalities when disposed on a farm when the mortalities are from the farm.

(8) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:

(A) One-hundred-fifty (150) feet from the property line or surface waters,

(B) three (3) feet above the seasonal high water table and bedrock,

(C) two hundred feet from public or private drinking water sources ;

(D) is covered with a minimum of 24 inches of soil; and

(E) is not located in a floodway.

(9) Household pet burial on the owner's property.

(10) The treatment or disposal of animal, bird, and fish species resulting from an emergency declaration to control the spread of disease, provided that the disposal activities occur in consultation with the Secretary. This exemption shall be contingent on the following:

(A) In the case of domestic animals, the declaration is issued by the Secretary of Agriculture, Food & Markets, in accordance with the authorities provided under 6 V.S.A.§§ 1159 and 1464.

(B) In the case of wild animal, bird, and fish species, such declaration shall be issued by the Commissioner of the Department of Fish and Wildlife in accordance with the authorities provided under 10 V.S.A. § 4136.

(11) Pet cemeteries. For purposes of this subdivision a pet cemetery means any plot of ground used, or intended to be used, for the permanent burial or disposition of the remains of a pet in a grave, a mausoleum, a columbarium, a vault, or other receptacle.

(12) Organic Solid Wastes that meet the Vermont Agency of Agriculture, Food & Markets' Commercial Feed Law when those materials are used as animal feed on a farm.

§ 6-1104 Compost Facility Types

(a) Small Composting Facility. A facility is designated as a Small Composting Facility under these Rules if the facility:

(1) composts 5,000 cubic yards per year or less of total organic materials of which not more than 2,000 cubic yards per year are food residuals or food processing residuals;

(2) manages 10,000 cubic yards or less per year of solely leaf, yard, and/or untreated wood residuals; and

(3) has a compost management area of four acres or less in size.

(4) Composting facilities that compost animal mortalities, slaughterhouse waste, or offal are not eligible for registration as a small compost facility under this section and shall apply for a permit as a medium compost facility under § 6-1109(a).

(5) Facilities registered and in compliance with this Subchapter, the facility registration, and its facility management plan shall be considered operating consistent with accepted composting practices and subject to the permit limitations of 10 V.S.A. 6605j.

(b) Medium Scale Composting Facility – A facility is a medium scale composting facility under these Rules if the facility:

(1) has a compost management area of less than 10 acres in size; or

(2) composts the following materials:

(C) more than 10,000 cubic yards per year of leaf and yard waste; or

(D) 40,000 or less cubic yards per year of total organic materials consisting of any of the following feedstocks:

(i) not more than 5,000 cubic yards per year are food residuals or food processing residuals.

(ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal per month.

(3) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

(c) Large Composting Facility – A facility is a large composting facility under these Rules if the facility:

(1) Has a compost management area greater than 10 acres in size; or

(2) Composts more than 40,000 cubic yards per year of total organic materials or exceeds 5,000 cubic yards per year of food residuals or food processing residuals; or

(3) if it does not qualify for a de minimis exemption, a small composting facility registration or a medium composting facility certification.

§ 6-1105 Small Composting Facilities – Accepted Composting Practices

(a) Registration. No person shall operate a small composting facility without registering that facility with the Secretary on a form provided by the Secretary and providing the following:

(1) The name and contact information for the facility registrant.

(2) The name and location of the facility registered under this section.

(3) A certification by the facility registrant that the facility has been sited, designed, constructed, and will be operated in accordance with these Rules.

(4) A statement by the facility owner that a copy of the registration and facility management plan was sent to the municipality and to the solid waste management entity where the facility is located.

(5) A letter from the local solid waste planning entity that the facility is acceptable under its plan.

(b) Small Compost Facility Siting. Compost management areas and any area(s) used to treat leachate and run-off from composting activities shall not be sited or operated within any of the following:

(1) 300 feet from the nearest public or private water supplies not owned by the applicant;

(2) 3 feet from seasonal high water table and bedrock;

(3) 100 feet from surface water;

(4) 100 feet from all property lines and edge of public roads; and

(5) 300 feet from all residences not owned by the applicant and from all public buildings;

(6) The 100 year flood plain as shown on the National Flood Insurance Maps;

(7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;

(8) A class III wetland unless authorized by the Secretary;

(9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;

(10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.

(11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

(c) Small Composting Facility Design.

(1) Liquids Management. Composting facilities shall be designed in a manner that prevents discharges off site and to surface waters. At a minimum, the facility shall meet the following

design standards:

(A) Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the vegetative treatment area using berms, swales, and other similar controls.

(B) The compost management area shall be constructed with an average slope between two and five percent and shall be maintained to prevent ponding.

(C) All compost curing run off and leachate shall be managed on property owned or leased by the registrant.

(D) Leachate from the compost management area shall be managed through the use of a vegetative treatment area designed and maintained in the following manner:

(i) The vegetative treatment area shall be, at a minimum, equal to the area of the compost management area.

(ii) The vegetative treatment area shall be equal in length to the contributing length of the compost management area in the downslope direction.

(iii) The vegetative treatment area shall be located on an area with a slope of less than or equal to five percent and shall be managed to prevent the ponding or pooling of liquids in the area.

(iv) The vegetative treatment area shall be maintained and operated to slow the movement of liquids and promote the uptake of liquids and nutrients into the vegetation .

(v) Any berms, swales or ditches used to convey water from the compost management area to the vegetative treatment area shall use finished compost, bark, woodchips, stone, and fabric in the construction as is necessary to filter suspended solids and excess nutrients from leachate.

(d) Small Composting Facility Operating Standards

(1) Prohibitions. A Small Composting Facility registered to operate under this section shall not conduct any of the following prohibited activities:

(A) The discharge of any waste or wastewater from the operation of the facility into surface waters or wetlands.

(B) The construction of any basin, trench, pond, or depression with the purpose of discharging run-off or leachate to groundwater.

(C) The operation or management of the facility in a manner that causes objectionable off-site odors, noise, vectors or other nuisance conditions.

(D) The composting of animal mortalities, slaughterhouse waste, or offal.

(E) The creation of a threat to public health and safety or the environment.

(2) Feedstocks and compost recipe. Small composting facilities shall be managed to properly compost materials and destroy pathogens. The facility shall meet the following operational standards:

(A) The compost feedstocks shall be limited to those listed on the procedure entitled "*Approved feedstocks for small facilities registered to operate under acceptable composting practices*" dated [March 21, 2012 as may be amended.

(B) The clean high carbon bulking agents shall be limited to those listed as exempt high carbon bulking agents in § 6-302(a)(13).

(C) All recipes shall be designed to ensure that the initial compost mix results in:

(i) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1

(ii) A bulk density of less than 1,200 pounds per cubic yard

(iii)A pH in the range of six to eight S.U.

(D) Compost piles shall be optimized for the composting methods and equipment used and shall be sized to maximize operational maneuverability and to minimize compaction and odor potential. .

(E) Food residuals and food processing residual specific management:

(i) Food residuals and food processing residuals shall be incorporated into the compost mix the same day the residuals arrive at the facility; or

(ii) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of the residuals arrival at the facility.

(F) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and all non-compostable material removed either manually or mechanically. All non-compostable materials shall be disposed of at a certified solid waste facility.

(G) Treatment of food and food processing residuals. All facilities composting food or food processing residuals shall meet one of the following treatment methods:

(i) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 15 days. Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.

(ii) If using an actively or passively aerated static pile or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.

(H) Compost stability. All finished compost shall meet the following prior to marketing or distribution for sale:

(i) Temperature decline to near ambient conditions (less than 100° F) provided that the decline is not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.

(ii) At a minimum, at least two of the following analyses shall be required annually if the Agency suspects, either through site inspections or complaint investigations, that compost is being distributed off-site before it matures:

(I) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

(II) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry

solids per hour.

(III) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a maturity index score equal or greater than six.

(IV) Carbon dioxide evolution. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

(V) Ammonia/Nitrate ratio of less than 3.

(VI) Plant tests conducted in a manner approved by the Agency.

(I) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

Parameter	Maximum Total Concentration
Fecal Coliform	1,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)

(J) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters must be completed annually.

Parameter	Maximum Total Concentration (mg/kg dry weight)
Arsenic	15
Cadmium	21
Chromium	1,200
Copper	1,500
Lead	300
Mercury	10
Nickel	420
Zinc	2,800

(K) Screening of finished compost. The finished compost shall be screened to remove any remaining physical contaminants. All non-compostable materials shall be disposed of at a certified solid waste facility.

(L) The Secretary may require additional testing of finished compost, groundwater, leachate and run-off as necessary to protect human health and the environment.

(3) Recordkeeping and Reporting requirements. The compost facility shall keep records for the following activities at the facility office in a dry and secure location available for review for five years. At a minimum, records on the following shall be retained:

(A) Temperature records for active compost piles sufficient to demonstrate compliance with the treatment requirements:

(i) If composting food residuals, the temperature of the compost windrows shall be monitored during the treatment process in accordance with an approved facility management plan. The temperature should be monitored at one foot and three-foot depths at least every 15 linear feet of windrow while achieving the treatment standards established in § 6-1105(d)(2)(G).

(ii) If composting food residuals in an aerated static pile, passive aerated pile or in-vessel method temperatures records shall be kept for the 3 day treatment period.

(B) weekly amounts, recorded in either tons or cubic yards, and types, of incoming compost feedstock;

(C) annual amount of compost produced in cubic yards;

(D) annual amount of physical contaminants disposed of and;

(E) copies of all analytical results for maturity, bacteriological and metals testing as required by § 6-1105(d)(2)(H) above

(4) Leaf and yard residual composting operational requirements. Facilities that compost solely leaf and yard residuals shall also meet the following requirements:

(A) Pile Construction. Incoming leaf and yard residuals, and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than 12 feet high by 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.

(B) Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one-part grass to three parts leaf or wood residuals by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon feedstocks available to meet this ratio.

(C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.

(D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.

(E) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.

(5) Facility operator training. The facility operator shall complete an approved operator training course within six (6) months of filing the registration with the Secretary.

(e) If the Secretary determines that the proposed facility size, processes, activities, or the nature of the composting activities require additional review and oversight not provided by this section, the Secretary may require that the applicant apply for a certification pursuant to § 6-1104(B).

§ 6-1106 Medium and Large Compost Facility Siting

(a) Applicability. All Medium and Large compost facilities, shall be subject to the specific siting requirements of this section (i.e., the general siting requirements provided in Subchapter 7 of these Rules, do not apply).

(b) Compost management areas and any area(s) used to treat or store leachate and run-off from composting activities shall not be sited or operated within any of the following unless otherwise approved by the Secretary:

(1) 300 feet from the nearest public or private water supplies not owned by the applicant;

(2) 3 feet from seasonal high water table and bedrock;

(3) 100 feet from surface water;

(4) 100 feet from all property lines and edge of public roads; and

(5) 300 feet from all residences not owned by the applicant and from all public buildings;

(6) The 100 year flood plain as shown on the National Flood Insurance Maps;

(7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;

(8) A class III wetland unless authorized by the Secretary;

(9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;

(10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.

(11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

(12) 1,000 feet of a residential housing unit located within an area that has a residential housing density of 3 units per acre or greater.

§ 6-1107 Medium and Large Compost Facility Design Standards

(a) Medium and Large Compost Facilities

(1) Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the area used for the management of run-off and leachate using berms, swales, and other similar controls as approved by the Secretary.

(2) The compost facility shall not have an unpermitted discharge of leachate or runoff to a surface water.

(3) Storage and management of untreated material. All raw feedstocks and composting piles that have not met the treatment standard defined in § 6-1108(b)(4), excluding leaf and yard residuals and high carbon bulking agents, shall be stored and managed in an area that meets the following design standards:

(A) Has an average slope of between two and five percent and is maintained so that ponding in the compost management area will not occur; and:

(B) Is on an impervious pad; or

(C) Has been granted approval by the Secretary for use of improved native soils ; or

(D) Is a compacted gravel pad meeting a hydraulic conductivity of $1x10^{-5}$ cm/sec or alternative standard as approved by the Secretary.

(4) Leachate storage.

(A) All facilities subject to the standards of this subsection shall collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following design standards:

(i) be lined with a natural or synthetic liner that has a maximum permeability of 1 x 10^{-7} cm/sec, in a design approved by the Secretary; or

(ii) be constructed in accordance with Natural Resource Conservation Service code 378 standards and approved by the Secretary; or

(iii) be a waste storage facility constructed consistent with the Agency of Agriculture, Food, and Markets standards; or

(iv) an alternative structure as proposed which meets the equivalent hydraulic conductivity design standards above as approved by the Secretary.

(B) Leachate storage structures shall be designed to prevent overflow at all times and to prevent public access.

(5) Treatment of leachate. Acceptable leachate treatment options include the following:

(A) Collection and treatment at a permitted wastewater treatment facility;

(B) Collection and application to active composting piles in a manner approved by the Secretary;

(C) Treatment on site in a manner approved by the Secretary;

(6) Acceptable treatment for run-off collected from compost curing areas include:

(A) Collection and treatment at a permitted wastewater treatment facility;

(B) Collection and application to composting piles in a manner detailed in the facility management plan and approved by the Secretary,

(C) Treatment on site in a manner approved by the Secretary;

(D) Collection and land application under a nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management provided that the following restrictions shall apply:

(i) Application rate shall not exceed an appropriate agronomic rate based upon soil analysis and the corresponding agronomic recommendations. In no cases shall an application rate exceed 25,000 gallons per acre per day.

(ii) Liquid application shall not occur when the fields are saturated, frozen, or snow covered or when ponding occurs.

(iii)The application shall not result in an offsite discharge or a discharge to surface water.

§ 6-1108 Medium and Large Compost Facility Operating Standards

(a) Medium and Large Scale Composting Facilities shall comply with the following operating standards:

(1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.

(2) The facility shall be managed to properly compost materials, destroy pathogens, not create a threat to public health and safety or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions.

(3) The operation of the facility shall comply with the Vermont Groundwater Protection Rule and Strategy as may be amended.

(4) Unless an alternative is approved as a part of the facility management plan the initial compost mix shall result in:

(A) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1.

(B) A bulk density of less than 1,200 pounds per cubic yard.

(C) A pH in the range of six to eight S.U.

(5) A facility that uses animal mortalities, offal, or butchering waste as a compost feedstock shall comply with the requirements of § 6-1108(c).

(6) Compost Stability. Finished products marketed or distributed for sale shall be tested for two of the following methods listed below:

(A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.

(B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

(C) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.

(D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a maturity index score equal or greater than six.

(E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

(F) Reduction in organic matter (ROM) of at least 60 %

(G) Plant tests conducted in a manner approved by the Agency.

(7) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following metals concentrations. One test for these parameters shall be conducted annually.

Parameter	Maximum Total Concentration (mg/kg dry weight)
Arsenic	15
Cadmium	21
Chromium	1,200
Copper	1,500

Lead	300
Mercury	10
Nickel	420
Zinc	2,800

(8) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters shall be conducted annually.

Parameter	Maximum Total Concentration
Fecal Coliform	1,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)

(9) The Secretary may require additional testing of, finished compost, groundwater, leachate and run-off as necessary to protect human health and the environment.

(10) Facility operator training. A minimum of one person at the facility on any operating day shall have completed an approved operator training course within six months of the issuance of the certification. A list of approved operator training requirements can be found at the Agency's website.

(11) Leaf and yard residual facilities. Facilities that solely compost leaf and yard residuals shall also meet the following requirements:

(A) Pile Construction. Incoming leaf and yard residuals and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ten feet high by 15 to 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.

(B) Grass. Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one part grass to three parts leaf or untreated wood by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon feedstocks available to meet this ratio.

(C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.

(D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.

(12) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.

(b) Food and Food Processing Residuals

(1) Food residuals or food processing residuals shall be managed as follows:

(A) The residuals shall be incorporated into the compost mix the same day it arrives at the facility; or

(B) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of its arrival at the facility.

(2) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and non-compostable materials either manually or mechanically removed. Mechanical processing shall not result in a final particle size of non-compostable materials that is smaller than the finished screen that will be used pursuant to §6-1108(b)(3).All non-compostable materials shall be disposed of at a certified solid waste facility.

(3) Screening of finished compost. The finished compost shall be screened to remove non-compostable materials. All non-compostable materials shall be disposed of at a certified solid waste facility.

(4) Treatment of food residuals. The composting of food or food processing residuals shall use one of the following treatment methods:

(A) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher for 15 days. Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.

(B) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days followed by at least 14 days above 113 degrees Fahrenheit (45 degrees Celsius).

(C) Medium or large compost facilities may utilize another method that reduces pathogens to the extent equivalent to the reduction achieved by the methods in subsections §6-1108(b)(4)(A) and §6-1108(b)(4)(B) of this section, when approved by the Secretary.

(c) Animal Mortality Composting Facility

(1) Applicability. This section applies to a medium or large composting facility that includes animal mortalities, animal offal, or butchering waste as a compost feedstock

(2) Composting and burial prohibited. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.

(3) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the composting of animal mortalities from that event, the Secretary may authorize a one-time composting event in accordance with an issued Insignificant Waste Management Event Approval (IWMEA) as provided for in § 6-505(b). To the maximum extent practical, the disposal event shall conform to the requirements of this subsection.

(4) Compost pile management. Composting of animal mortalities, animal offal and butchering waste must comply with the same operational standards as § 6-1108 and include the following operational standards:

(A) Feedstock management. The feedstock shall be incorporated into the compost mix when it arrives at the facility.

(B) Compost pile construction. Compost piles shall be constructed in the following manner:

(i) Prepare a 24-inch depth bed of bulky, absorbent organic material such as wood chips or similar material. Ensure the base is large enough to allow for two-foot clearance around the carcass.

(ii) Lay animal in the center of the bed. Lance the rumen to avoid bloating and possible explosion.

(iii) Cover carcass with two feet of a dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process).

(iv) For small animals, layer mortalities with a minimum of two feet of carbon material between layers.

(v) Add cover material as necessary to maintain the two-foot cover.

(5) Monitoring and Turning Requirements.

(A) The composting of animal mortalities shall use one of the following treatment methods:

(i) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.

(ii) Another method that reduces pathogens to extent equivalent to the reduction achieved by the methods in subsection (f)(5)(A)(i) of this section, which is approved by the Secretary.

(B) The compost shall not be turned until at least the third month of composting.

(C) After three months treatment, if the requirements of § 6-1107(f)(5)(A) have been met, the permittee may visually examine the compost pile to determine whether the piles may be turned based upon whether the mortalities have degraded (with the exception of bones) and no odors are evident.

(6) Compost that contains specified risk material from ruminants or carcasses of ruminants greater than 30 months old cannot be distributed off-site and must be managed on land owned or controlled by the permittee.

(7) If finished compost is to be sold or distributed off-site it shall meet the testing requirements in § 6-1105 (e)(7), (8) and (9).

§ 6-1109 Medium and Large Compost Facility Applications

(a) Medium Compost Facility Application Requirements. In order to qualify for a medium scale compost certification, the applicant shall submit an application which provides the following information:

(1) The requirements of § 6-504;

(2) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading and unloading areas; wash area for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable.

(3) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting criteria and prohibited areas established under § 6-1103.

(4) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.

(5) Management plan detailing, at a minimum:

(A) expected volume and type of incoming materials;

(B) methods for achieving odor control;

(C) methods for achieving noise control;

(D) methods for controlling vectors, dusts, and litter;

(E) methods for achieving the liquid management standards at § 6-1107;

(F) methods to inspect loads and remove non-compostable materials or contaminants from the incoming feedstocks;

(G) a description of the composting process and how that process will meet the standards established under § 6-1108 including temperature monitoring protocols;

(H) fire prevention and control measures;

(I) list of equipment to be used;

(J) hours of operation;

(K) access control;

(L) product distribution; and,

(M) a sampling plan for maturity, bacteriological and metals testing of the finished compost as required by §6-1107(b)

(b) Large Composting Facility application requirements. In order to qualify for a large compost facility certification, the applicant shall submit an application which provides the following information:

(1) the complete application requirements listed in § 6-504;

(2) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading/unloading areas; wash areas for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable established by § 6-1106(b).

(3) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting features and prohibited areas.

(4) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.

(5) Management plan detailing, at a minimum:

(A) expected volume and type of incoming materials;

(B) methods for achieving odor control;

(C) methods for achieving noise control;

(D) methods for controlling vectors, dusts, and litter;

(E) methods for achieving the liquid management standards at § 6-1107;

(F) methods to inspect loads and properly screen for potential contaminants in incoming feedstocks;

(G) a description of the composting process and how that process will meet the standards established under § 6-1108 including temperature monitoring protocols;

(H) fire prevention and control measures;

(I) list of equipment to be used;

(J) hours of operation;

(K) access control;

(L) product distribution; and,

(M) plan for metals concentrations as required in § 6-1108 and stability and maturity testing of the final compost product.

(N) Privately operated large composting facilities shall pay application fees in accordance with 3 V.S.A.2822(i) and 2822(j)(6)(B).

§ 6-1110 Medium and Large Compost Facility Recordkeeping and Reporting

(a) Recordkeeping requirements. The compost facility shall keep records for the following activities at the facility office available for review in a dry and secure location for five years. At a minimum, records on the following shall be retained:

(1) The temperature of the active compost windrows shall be monitored in accordance with the protocols identified in the approved facility management plan.

(2) weekly amounts, recorded in either tons or cubic yards and types of incoming compost feedstock;

(3) annual amount of compost produced in cubic yards or tons;

(4) annual amount of physical contaminants disposed of; and,

(5) copies of all analytical results for metals and maturity testing of the final compost product as required by § 6-1108.

(b) Recordkeeping data shall be provided to the Secretary in the form of an annual report by January 20 of each year, on forms provided by the Secretary.

(c) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, and the selectpersons of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

§ 6-1111 Compost Facility Closure

(a) Closure. All compost facilities must be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant must remove all compost, wastes, feedstocks, secondary materials, and residue, including compost screenings, from the facility; and broom clean the facility structures and equipment.

Subchapter 12 – Organic Solid Waste Management Facilities

§ 6-1201 Applicability; Definitions

(a) This Subchapter applies to persons engaged in organic solid waste management activities that do not include composting (as that term is defined in Subchapter 11, § 6-1102). Activities where wastes being managed contain any amount of sewage sludge, domestic septage, or septage shall be subject to Subchapter 13 of these Rules.

(b) The definitions in Subchapter 11 (§ 6-1102) shall apply to terms used this subchapter.

§ 6-1202 Organic Solid Waste Management Facility Types; Authorization

(a) Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

Note: Facilities accepting more than 144 gallons per week of food residuals or any other materials shall obtain a certification in accordance with Subchapter 9. Any facility that collects food residuals and obtains certification under Subchapter 9 does not need to register under .§ 6-1202(a).

(b) Anaerobic Digester Facilities. Facilities that operate anaerobic digestion activities shall be subject to the certification requirements of these Rules as follows:

(1) Digesters that are located on a farm and receive unprocessed food residuals for processing prior to introduction into the digester shall apply for a full certification as an organic solid waste recovery facility, described within § 6-902(e), and according to the regulations of Subchapter 9.

(2) Digesters that are located off-farm and that process, receive or store any amount of solid waste shall apply for full certification pursuant to § 6-504 and as provided for within this subchapter.

(3) Any anaerobic digester that accepts any amount of biosolids as a feedstock shall apply for full certification as a residuals management facility pursuant to Subchapter 13.

(4) Digester facilities shall be exempt from certification under these Rules if the digester is located on a farm; and:

(A) The anaerobic digester is designed, constructed and operated in accordance with the Agency Agriculture Food Markets requirements.

(B) The imported organic solid wastes are limited to:

(i) slurried food residuals

(ii) liquid food processing residuals; or

(iii) dry organic solid wastes with no potential for leachate generation and requiring no onsite processing prior to introduction into the anaerobic digester.

(C) All imported organic solid wastes:

(i) have received substrate importation form approval from the Agency of Agriculture, Food and Markets prior to management of the organic solid wastes on the farm;

(ii) are stored and handled to prevent odors, vectors, emissions and discharges.

(I) All slurried food residuals and liquid food processing residuals are pumped directly into a reception tank or an earthen pit constructed in accordance with the NRCS 313 for introduction into the digester,

(iii) are stored and handled to prevent any deterioration of the waste prior to introduction into the anaerobic digester

(D) The farm has at least 180 days of storage capacity for the liquid digestate;

(E) The liquid and solid digestate is managed in accordance with a current Agency of Agriculture, Food and Markets approved Nutrient Management plan.

(c) Organic Solid Waste Recovery Facilities (ORF). Facilities that aggregate food residuals and process them into a slurried form for delivery to an organic material management facility. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. The facilities must obtain a certification pursuant to Subchapter 9.

§ 6-1203 Organic Solid Waste Management Facility Siting

(a) Food Residual Drop-Off Facilities.

(1) The Secretary may require an organics drop-off facility to obtain a transfer station certification pursuant to § 6-504 if the Secretary determines that such certification is necessary to ensure that the facility operations meet the operational requirements of § 6-1205 of this subchapter and will not present a hazard to public health and safety or the environment, or create a nuisance.

(i) Food Residual storage containers shall be located 50 feet from property lines unless otherwise approved by the Secretary;

(ii) Drop-off locations shall be approved by the local Solid Waste Management Entity as necessary for providing convenient access to organic solid waste management and in conformance with the applicable Solid Waste Implementation Plan;

(b) Anaerobic digester facilities. A digester facility constructed after the effective date of these Rules shall meet the general siting standards of § 6-703.

§ 6-1204 Organic Solid Waste Management Facility Design Standards

(a) General requirements. All food residual drop-off facilities and off-farm anaerobic digesters shall be designed to:

(1) control vectors, and to control emissions or discharges to the environment, including odor and dust, so as to preclude the creation of nuisance conditions and undue threats to public health and safety or to the environment;

(2) prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes; and

(3) ensure the effective collection, storage, and processing of all waste materials.

(b) Food Residual Drop-off facilities. In addition to the requirements of § 6-1204(a) of this section, these facilities shall provide storage capable of preventing leaking, providing protection from precipitation

and to be secure when the drop-off is not open for drop-off activities.

(c) Off-farm anaerobic digester facilities. In addition to the requirements of § 6-1204(a) of this section and the general design requirement provided within § 6-704 of these Rules, off-farm anaerobic digestion facilities shall:

(1) Design the facility to comply with general operational performance standards;

(2) provide for access in all weather conditions, with access controlled and limited to hours of operation identified in the facility management plan;

(3) incorporate the following standards for liquid storage tanks in a collection system;

(A) tanks that are sized appropriately for the facility and volume of waste managed;

(B) tanks that are constructed of material compatible with the expected composition of the liquid; and

(C) provisions for biennial testing and inspection of the tanks;

(4) have sufficient and appropriate storage for all materials and feedstocks and any process residuals; and

(5) If utilizing an onsite depackager unit, facilities shall be designed and constructed with a tipping floor that:

(A) is enclosed within a building or covered by a roof to prevent exposure of waste to weather if temporarily depositing organic solid waste on the ground pending processing; and;

(B) incorporates a collection system that meets the requirements of § 6-904(f) and is designed to collect liquids that may be associated with incoming waste materials.

§ 6-1205 Organic Solid Waste Management Facility Operating Standards

(a) Food Residual Drop-Off Facilities

(1) The facility's operations shall comply with the following requirements:

(A) The containers used to store the food residuals shall be water tight, and have lids which can be closed securely and locked to prevent vectors, fugitive odors, and access when not operating;

(B) Facilities shall control liquids and prevent vectors and odors from the stored waste;

(C) All food residuals stored at the facility shall be removed from the facility as needed to preclude the creation of nuisance conditions and the deterioration of the material; and

(D) In no case shall food residuals managed at the facility create public nuisance conditions, including odors or vectors.

(b) Off-farm Anaerobic Digesters: In addition to the general operational requirement of § 6-704, the following specific operating requirements apply:

(1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.

(2) All stored solid waste shall be containerized or stored such there is no possibility of an emission or discharge.

(2) Digestate (liquid or solid) shall be managed in the following manner:

(A) Solid portions of digestate shall meet the treatment standards established in § 6-1108(a) by composting or other treatment options prior to distribution off-site for non-farm use, unless adequate pathogen inactivation can be demonstrated to the sufficiency of the Secretary. Collection and land application of leachate (the liquid portion of the digestate) shall meet solid waste siting and certification criteria and occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management or a plan approved by the Secretary :

(3) The facility shall be responsible for managing the collection and proper destruction of the generated biogas. The facility shall maintain a properly functioning backup method of destroying biogas. Any biogas that is not used or otherwise destroyed in the facility's combustion engine, for the production of electricity, shall be destroyed using an automatic flare system or equivalent. The backup flare shall be sized to destroy peak potential flow.

§ 6-1206 Organic Solid Waste Management Facility Applications

(a) Food Residual Drop-Off Facilities.

(1) Registration. No person shall operate a food residual drop-off without receiving prior approval from the local solid waste management entity (i.e., district, alliance, or approved town) and registering with the Secretary on a registration form provided by the Secretary. The registration application shall contain the following:

(A) The name and contact information for the facility owner/operator.

(B) The name, address, and location of the facility to be registered under this section;

(C) A letter from the host solid waste management entity demonstrating that the facility is in conformance with their approved solid waste implementation plan and demonstrating that the facility location is needed for convenient access to food residual management;

(D) Estimated amounts of food residuals that the facility will collect on a weekly and annual basis;

(E) Hours of operation for the facility;

(F) How the facility will manage material, such as the types of containers to be used, how odors and vectors will be addressed, contamination prevention methods, access control methods, facility staffing, transportation frequency and destination for the materials; and

(G) A certification by the drop-off registrant that the drop-off will be operated in accordance with these Rules.

(b) Off-Farm Anaerobic Digester Facilities: In addition to the general application requirements of Subchapter 5, the following application requirements apply:

(1) Facility Management Plan. In addition to the general requirements of § 6-504(e), the facility FMP shall include the following:

(A) Site plan map that indicate the location of the following areas of the facility: The area used for processing and handling for the feedstocks for the anaerobic digester;

(B) Wash area for totes;

(C) Areas designated for storage of non-permitted wastes delivered to or generated by the facility; and

(D) Area for scales, if any; Operational plans detailing:

(i) expected volume and type of incoming feedstocks;

(ii) methods of tracking the weight of incoming feedstocks for reporting (i.e. percent solids, gallons pumped, scales);

(iii) methods for achieving odor control;

(iv) methods for achieving noise control;

(v) methods for controlling vectors, dusts, and litter;

(vi) methods for digestate management.

(vii) methods to properly prevent or remove potential contaminants in incoming feedstocks;

(viii) fire prevention and control measures, gas leak monitoring, fire contingency and control measures;

(ix) list of equipment to be used in addition to the digester; and

(x) For facilities that use a tipping floor for the management of food residuals or food processing residuals, the tipping floor shall be managed in accordance with § 6-904. If the facility does not use a tipping floor, the facility shall be managed to prevent a discharge or emission from the containers.

(E) Engineering design plans that detail:

(i) The facility design;

(ii) A schematic of the anaerobic digester that includes any additional processes, including pasteurization, the generator unit, the gas processing unit, digestate processing or holding ponds;

(iii) A design of all operational aspects of the anaerobic digester and related components, including utility hookups;

(iv) A design and location of a flare to be used as a backup combustion method;

(v) For facilities that use a tipping floor for the management of food residuals or food processing residuals, design plans for the tipping floor that meet the requirements of § 6-904.

(F) Closure Plans demonstrating conformance with § 6-1208.

§ 6-1207 Organic Solid Waste Management Facility Recordkeeping and Reporting

(a) Food Residual Drop-Off Facilities.

(1) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:

(A) The amount of food residuals accepted by the facility. This information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.

(B) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance shall be reported within 24 hours to the Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

(2) Recordkeeping requirements. Records required in §6-1207(a)(1) above shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location for at least three years, and shall be made available to the Secretary upon request.

(b) Anaerobic Digesters.

(1) Recordkeeping requirements. The following records shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure

location for at least three years and shall be made available to the Secretary upon request.

(A) Documentation that the facility's anaerobic digestion process meets pathogen inactivation standards (if digestate is used off site or sold for public use).

(B) Weekly amounts and types of incoming feedstocks.

(C) Annual amounts of liquid and solid digestate produced and description of each is managed.

(2) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:

(A) Any discharge or emission from a facility which poses a threat to public health and safety or the environment or has the potential for creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to these same parties within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, they type, quantity and quality of the waste and the actions taken to correct the problem.

(B) The following information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.

(i) Annual amounts and types of incoming feedstocks;

(ii) Annual tonnage of solid waste, reported by type; and

(iii) Annual amount of liquid and solid digestate produced and description of how each is managed.

§ 6-1208 Organic Solid Waste Management Facility Closure

(a) Food Residual Drop-Off Facilities. The facility shall be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant shall transfer all wastes to an appropriately certified facility, remove secondary materials and residues from the facility; and broom clean the facility structures and equipment. The registrant shall send the Secretary a notice of closure completion within 30 days after the date that the final volume of

waste is received at the facility.

(b) Off-farm anaerobic digesters shall be closed according to the same requirements of § 6-907 for Storage, Transfer, Recycling and Processing Facility closure.

Subchapter 13 – Residuals Management Facilities

§ 6-1301 Residuals Management Facility Types

(a) Sewage Sludge, Biosolids, and Septage Storage and Transfer Facilities: these include, but are not limited to the following: storage tanks, bunkers, stockpiles, storage lagoons, drying beds, and holding tanks.

(b) Sewage Sludge, Biosolids and Septage Treatment Facilities: these include, but are not limited to the following: lime stabilization vessels, dewatering equipment, drying beds, biosolids drying facilities, biosolids composting facilities and any facilities for the production of EQ biosolids or EQ biosolids products.

(c) Land Application Site: agricultural, silvicultural, or reclamation sites used for the management of non-EQ biosolids or septage by application to the land as a nutrient source or soil conditioner. Also known as a "diffuse disposal site" or "land application facility".

§ 6-1302 Residuals Management Facility Exemptions

(a) Exemptions from Certification: Treatment or storage facilities for sewage sludge, biosolids, or septage that are located inside the fenced area of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from obtaining a certification provided that:

(1) the treatment facility does not utilize a process to further reduce pathogens in order to produce EQ biosolids or EQ biosolids products for distribution and marketing to the general public; and

(2) a Sludge Management Plan for the facility, as specified in § 6-1307(f), has been submitted to the Secretary and the Secretary has approved the Plan.

(b) General Exemption: EQ biosolids or EQ biosolids products that are imported to into the State of Vermont solely in individual bags or containers having a net weight of fifty (50) pounds or less are exempt from these Rules except for the standards established in § 6-1303(a), the labeling requirements of § 6-1304(g), and the recordkeeping requirements of § 6-1304(i)(3).

§ 6-1303 Exceptional Quality Biosolids

(a) EQ biosolids or EQ biosolids products produced in, or imported into, the State of Vermont shall:

(1) Meet the lower of:

(A) The pollutant limits established in § 6-1306(o);

(B) the contaminant standards established at 40 CFR 503.13 – Table 3;

(C) the corresponding pollutant limits of the jurisdiction in which they are generated or prepared, even if any given parameter is not otherwise regulated under these Rules or 40 CFR Part 503.

(2) Meet one of the pathogen reduction requirements established in 40 CFR Part 503.32(a)(3, 4, 7 or 8);

(3) Meet one of the vector attraction reduction requirements established in 40 CFR Part 503.33 Alternatives 1 – 8;

(4) Be tested for all parameters listed under § 6-1306(n); and

(5) Compost Stability. Finished composted EQ biosolids or composted EQ biosolids products marketed for sale or distributed in the State of Vermont shall be tested annually for two of the following methods listed below:

(A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.

(B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

(C) Specific Oxygen Uptake Rate (SOUR). To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.

(D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.

(E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

(F) Reduction in organic matter (ROM) of at least 60 %

(G) Plant tests conducted in a manner approved by the Agency.

(b) Applicability

(1) EQ biosolids or EQ biosolids product generators who treat or prepare sewage sludge, domestic septage, or a biosolids product in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution as an EQ biosolids or EQ biosolids product to the general public as a commodity pursuant to §6-301(a)(5), shall:

(A) comply with the labeling requirements of § 6-1303(g); and

(B) comply with the reporting requirements of § 6-1303(h), except that the operator shall submit quarterly reports, rather than an annual report, to the Secretary. Quarterly reports shall be submitted to the Secretary on or before the fifteenth (15^{th}) day of the month following the end of each calendar quarter, i.e. January 15^{th}, April 15^{th}, July 15^{th}, and October 15^{th}, of each year; and

(C) comply with the record keeping requirements of § 6-1303(i); and

(D) utilize only the marketing and/or distribution plan authorized in the solid waste management facility certification; and

(E) be exempt from the provisions of subsections (c), (d), (e), and (f) of this section.

(2) In order for sewage sludge, domestic septage, or a biosolids product that has not been treated or prepared to EQ biosolids standards in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution to the general public in the State of Vermont as a commodity pursuant to § 6-302(a)(2), the EQ biosolids or EQ biosolids product generator shall first obtain a Certificate of Approval from the Secretary unless the material is marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less.

(3) EQ biosolids or EQ biosolids marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less shall nonetheless meet the requirements of § 6-1303(a), (i)(3), and bear labeling or be accompanied by an informational flyer that meets the

requirements of subsection (g) of this section.

(c) Certificate of Approval

An application to the Secretary for a Certificate of Approval shall consist of the following information. If the application is for multiple generating facilities under the EQ biosolids or EQ biosolids product generator's ownership, the required information shall be submitted for each generating facility:

(1) an application form approved by the Secretary, which shall include the following information:

(A) the name, mailing address, and telephone number of the EQ biosolids or EQ biosolids product generator;

(B) the name, mailing address, telephone number, and physical location of the facility generating the EQ biosolids or EQ biosolids product;

(C) the name, mailing address, and telephone number of a primary and secondary contact person for the EQ biosolids or EQ biosolids product generator;

(D) the estimated annual volume of EQ biosolids or EQ biosolids product, in tons per year, that will be so managed; and

(E) the signature of the EQ biosolids or EQ biosolids product generator or an authorized representative of the EQ biosolids or EQ biosolids product generator.

(2) Information documenting the pathogen reduction and vector attraction reduction treatments to which the EQ biosolids or EQ biosolids product is subjected and chemical analyses conducted on the EQ biosolids or EQ biosolids product, which shall include the following:

(A) for facilities that commenced operation two years or more prior to effective date of these Rules:

(i) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);

(ii) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 - Alternative 1

through VAR Alternative 8;

(iii) the results of all chemical analysis of the EQ biosolids or EQ biosolids product completed in the two (2) year period preceding the date of application. The results shall document that the treated EQ biosolids or EQ biosolid product has been tested for parameters in § 6-1306(n) and also meets the lowest of:

(I) the contaminant ceiling concentrations established in § 6-1306(o);

(II) the contaminant standards established at 40 CFR 503.13 – Table 3; or

(III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3;

(B) for facilities that commenced operation less than two years prior to the effective date of these Rules:

(i) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);

(ii) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8;

(iii)records sufficient to document that the treated EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and also meets the lowest of:

(I) the contaminant ceiling concentrations established in § 6-1306(o);

(II) the contaminant standards established at 40 CFR 503.13 – Table 3; or

(III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3.

(3) a copy of the informational flyer, fact sheet, or label that will be provided by the EQ biosolids or EQ biosolids generator to each recipient of the treated material.

(4) a monitoring and sampling plan which assures that every batch of EQ biosolids or EQ biosolids product released for marketing and/or distribution in the State of Vermont is tested and demonstrated to meet the requirements of § 6-1303(a).

(d) A Certificate of Approval shall be issued by the Secretary, in writing, and shall not be valid for a period of more than five (5) years from the date of issuance.

(e) Non-conformances

(1) Upon receipt by the EQ biosolids or EQ biosolids product generator of any information documenting failure an exceedance of any ceiling concentration established in §6-1307(o) or any failure to meet the Class A pathogen reduction standards established in 40 CFR 503.32 (a)(3, 4, 7, or 8)) or the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8, the following shall occur:

(A) The EQ biosolids or EQ biosolids product generator shall notify the Secretary of the non-conformance within twenty-four (24) hours or on the next business day; and

(B) the Certificate of Approval for the generating facility involved shall immediately become suspended for a minimum period of thirty (30) days. In such instances, the EQ biosolids or EQ biosolids product from the affected generating facility, if managed in the State of Vermont, shall be managed only in accordance with the Vermont Solid Waste Management Rules. If the Certificate of Approval covers more than one generating facility under the control of a single generator, only the Certificate of Approval for the generating facility so involved shall be considered suspended; and

(C) within five (5) days of receipt by the EQ biosolids or EQ biosolids product generator of the information, the generator shall submit a written report to the Secretary. The report shall identify the nature of the non-conformance and the actions taken or anticipated to be taken to correct the problem; and

(D) the EQ biosolids generator or EQ biosolids product generator shall make any other reports that may be reasonably required by the Secretary.

(2) Upon a determination by the Secretary that the testing requirements established in §6-1303 (4) were not met, the Secretary may suspend the Certificate of Approval.

(3) Upon a determination by the Secretary that the storage or use of EQ biosolids or an EQ biosolids product that is used in the State of Vermont under this section has created a nuisance, the Secretary shall suspend the Certificate of Approval.

(f) Reapproval: The Certificate of Approval for a generating facility that has been suspended pursuant to subsection (e) of this section may be reinstated at the discretion of the Secretary upon submittal of the following relevant to the non-conformance causing the suspension:

(1) the results of a chemical analysis of four (4) consecutive weekly samples of EQ biosolids or EQ biosolids product generated at the involved facility documenting that the EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and material quality once again is in compliance with the most restrictive of:

(A) the contaminant ceiling concentrations established in § 6-1306(o);

(B) the contaminant standards established at 40 CFR 503.13 – Table 3; or

(C) the contaminant ceiling concentrations established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated even if any given parameter relevant to either (A) or (B) is not otherwise regulated under these Rules.

(2) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established 40 CFR 503.32 (a)(3, 4, 7, or 8).

(3) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8.

(4) evidence sufficient to demonstrate that storage or use of the EQ biosolids or EQ biosolids product will no longer create a nuisance, as necessary to document that the cause or causes for the Certificate of Approval having been voided have been corrected and that the EQ biosolids or EQ biosolids product once again meets the applicable standard(s).

(5) a written explanation of how the non-conformance occurred and a written explanation of steps that have been taken to prevent a recurrence of the non-conformance.

(6) any other reports that may be required by the Secretary.

(g) Labeling: The EQ biosolids or EQ biosolids product generator shall provide to all persons to whom materials regulated under this section are marketed or distributed a flyer, fact sheet or label which, at a

minimum, shall provide the following information:

(1) the name, address, and telephone number of the generator;

(2) a statement that the product is derived or partially derived from sewage sludge or domestic septage;

(3) a statement that the product may contain per- and polyfluoroalkyl substances (PFAS);

(4) the concentration of total nitrogen, available phosphorus, and total potassium in the material. Any such products which are marketed and distributed in the State of Vermont with a guaranteed nutrient content shall be registered as a fertilizer with the Vermont Agency of Agriculture, Food, & Markets in accordance with 6 V.S.A. §364;

(5) the concentration in the material of the metals regulated under §6-1306(o);

(6) recommendations for acceptable uses and non-uses of the material;

(7) suggested application rates for the recommended acceptable uses; and

(8) suggested methods of application for the recommended uses.

(h) Reporting

(1) The EQ biosolids or EQ biosolids product generator shall report to the Secretary on an annual basis, the following information for each calendar year. The annual report of the preceding calendar year's activity shall be submitted to the Secretary on or before February 19th of each year.

(2) The annual report shall, at a minimum, provide the following information for all EQ biosolids or EQ biosolids product regulated under this section that is marketed or distributed in the State of Vermont:

(A) the total volume of EQ biosolids or EQ biosolids product that was marketed or distributed in the State of Vermont in the calendar year;

(B) analytical reports documenting that the EQ biosolids or EQ biosolids product met the contaminant standard of § 6-1303(a)(1);

(C) the Class A pathogen reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1303(a)(2);

(D) the vector attraction reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1304(a)(3);

(E) analytical reports documenting that the EQ biosolids or EQ biosolids product were tested per § 6-1303(a)(4);

(F) a statement signed by the EQ biosolids or EQ biosolids products generator that all EQ biosolids or EQ biosolids products that were marketed or distributed in the State of Vermont met the requirements of these rules; and

(G) any additional records required to be kept under this section, as the Secretary may require upon request in order to demonstrate compliance with these rules.

(i) Recordkeeping

(1) The following records shall be kept in a dry and secure location by the EQ biosolids or EQ biosolids product generator:

(A) all reports, records, data or other information required to demonstrate compliance with this section;

(B) copies of the annual reports that have been submitted to the Secretary;

(C) copies of any reports, records, data or other information required to be submitted to the Secretary under subsection (h)(2) of this section;

(D) copies of any reports, records, data, certifications, or other information required under 40 CFR 503.17.

(1) All records shall be kept for a minimum of five (5) years following the date on which the applicable annual report was submitted to the Secretary.

(2) Producers of EQ biosolids or EQ biosolids products which are imported into the State of Vermont solely in individual bags or containers weighing 50 pounds or less shall keep the following records for a minimum of five (5) years following importation and shall submit such records to the Agency upon request by the Secretary:

(A) all reports, records, data, certifications required under 40 CFR 503.17 or other information required to demonstrate compliance with this section; and

(B) records of the annual volume of EQ biosolids or EQ biosolids products imported into the State of Vermont.

(4) Maintenance of records in an electronic format is acceptable.

§ 6-1304 Residuals Management Facility Siting Standards

In addition to the general siting requirements of Subchapter 7, the following facility specific siting requirements apply:

(a) Sewage Sludge, Biosolids and Septage Storage and Transfer Facilities: Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sludge and septage and which are located inside the fence of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this subsection.

(b) Land Application Sites:

(1) Are prohibited from being sited within zone 1 or zone 2 of an approved Public Water Supply Source Protection area.

(2) The Secretary may, on a case-by-case basis, make a determination that a land application site may be sited in zone 2 of an approved surface water Public Water Supply Source Protection Area.

(3) Are prohibited in locations with hydric soils.

§ 6-1305 Residuals Management Facility Design Standards

In addition to the general design requirements of Subchapter 7, the following facility specific design standards apply. Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sewage sludge, biosolids and septage and which are located inside the fence of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this section.

(a) Treatment Facilities: General

(1) Facilities shall be designed to provide adequate storage to assure the protection of public health and safety and the environment and to assure that the disposal of stored material occurs at proper times and under environmentally sound conditions.

(2) Facilities shall be designed to prevent, to the greatest extent feasible, the reduction of the quality of the material, such as the rotting or contamination of stored wastes.

(3) Facilities shall be designed to protect surface water, groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to surface water, groundwater or the air.

(4) Facility management plans shall include provisions for contingencies for the proper management of material during both planned and unplanned events when the facility is not in operation.

(5) Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of material receive organized instruction that teaches them to perform their duties in a way that ensure the facility's compliance with these rules and conditions of certification.

(6) Facility management plan must include estimates of amounts and types of solid wastes and other regulated material brought to storage facilities, and a schedule for transport, disposal or use of these materials.

(b) Treatment Facilities: Exceptional Quality (EQ) Biosolids

(1) To meet the requirements for distribution and/or marketing, any solid wastes derived or partially derived from a domestic waste to be considered EQ biosolids or an EQ biosolids product shall:

(A) undergo a process to further reduce pathogens as defined in 40 CFR Part 503.32(a)(3,4,7, or 8) or other treatment processes deemed appropriate for other pathogen containing waste;

(B) meet one of the vector attraction reduction standards established in 40 CFR Part 503.33 Alternative 1 – Alternative 8;

(C) meet the contaminant standards established in § 6-1303(a)(1);

(D) EQ biosolids or EQ biosolids products produced by composting processes shall meet the stability requirements of § 6-1303(a)(4), and

(E) design documentation must demonstrate the capability to meet these standards.

(2) The design shall provide adequate storage at the treatment facility for curing EQ biosolids or EQ biosolids product produced by composting processes, and for periods of time when the EQ biosolids or EQ biosolids products are not in demand.

(3) For EQ biosolids or EQ biosolids products derived or partially derived from a domestic waste a feasible marketing and distribution plan discussing how, where, and under what conditions the EQ biosolids of EQ biosolids product will be marketed, distributed or disposed is required for certification.

(c) Land Application Facilities

(1) Facilities shall be designed to provide for an aggregate storage volume for six months of the biosolids generated to account for storage during winter months, inclement weather and normal agricultural and silvicultural practices. Alternatives, such as but not limited to landfill disposal, which provide the equivalent of storage are acceptable if adequately documented.

(2) Design documentation shall detail each land application site with respect to soil character, cropping practices, usable area, floodplain and seasonal restrictions, application area and rates, and site life.

(3) Land application rates shall be based on agronomic rates unless otherwise limited by the Secretary. Application rates shall be calculated using a method approved by the Secretary.

(4) Biosolids quality must be fully documented as required in § 6-1306(n) and (o) prior to application to the land.

(5) Design shall show obvious points of public access and provide for any appropriate measures to control public access.

(d) Stock Piles Intended for Land Application

(1) Stock pile storage areas shall be of adequate volume to contain the waste in accordance with the generation, transport and application schedule contained in the facility management plan.

(2) Stock piles shall be managed to prevent leaching to groundwater and surface runoff. .

(3) Stock piles shall be managed to prevent the generation of nuisance odors beyond the facility boundary.

(4) Stock piles of biosolids located at land application sites are prohibited except for short term staging (less than two weeks) prior to an application event.

(e) Lagoons

(1) The liner composition shall be compatible with the material to be stored in a lagoon. Lagoons shall be designed to provide a minimum of two (2) feet of freeboard at all times.

§ 6-1306 Residuals Management Facility Operating Standards

In addition to the general operating requirements of Subchapter 7, the following facility specific operational standards apply:

(a) Application of biosolids or septage derived from domestic waste to the land shall be limited per this subsection. However, the Secretary may approve application on a case-by-case basis upon a determination that current weather conditions and application techniques to be used will not result in abnormal nutrient loss, runoff, or threat to human health or the environment.

(1) Application of biosolids or septage on frozen ground or on top of snow-covered ground is prohibited.

(2) Application of biosolids or septage to the land is prohibited between December 15 and April 1 of consecutive years.

(3) Application of biosolids or septage to the land is prohibited between October 16 and April 14 of consecutive years in areas of land with frequently flooded soils.

(4) Application of biosolids or septage to the land is prohibited between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary of Agriculture, Food, & Markets determines that due to weather conditions, soil conditions, or other limitations, the application of manure to land would pose a significant potential of runoff to waters of the State.

(b) All biosolids and septage land application sites shall be incorporated in a field by field nutrient management plan developed by a certified nutrient management planner or the permittee. Development and implementation of the nutrient management plan shall meet or exceed the standards of

Vermont Required Agricultural Practices and the Vermont USDA NRCS Nutrient Management Plan 590 Standard.

(c) The application rate for biosolids, except for domestic septage, shall be determined using a calculation method approved by the Secretary, performed in accordance with "Nutrients Recommendations for Field Crops in Vermont" published by the University of Vermont Extension, and based on a representative sampling and analysis of the material applied, the crop nutrient requirements, other sources of nutrient used, and limited by other factors as determined by the Secretary.

(d) The application rate for domestic septage shall be determined by the following formula, unless the Secretary approves an alternative calculation method:

$AAR = \frac{N}{0.0026}$ - the amount of nitrogen provided by all other sources

where: AAR = annual application rate (in gallons per acre) and N = amount of nitrogen (in pounds per acre per growing season) needed by the crop grown on the land.

(e) The pH of the soil in the zone of incorporation for all land application sites shall be maintained between 6.5 S.U. and 8.0 S.U. during the certification period. Biosolids or septage shall not be applied to a land application site if the soil's pH is not within the specified range, except for when biosolids or septage that have been stabilized by an alkaline stabilization process and the pH of the biosolids or septage is 11.0 S.U. or greater at the time that it is applied to the land and the soil's pH is in the range 5.0 S.U. to 6.5 S.U.. In such cases, the soil's pH shall, if necessary, immediately be raised to the range 6.5 S.U. to 8.0 S.U. by other lime addition if the application of alkaline stabilized biosolids or septage was not sufficient to raise the soil's pH to within the range 6.5 S.U. and 8.0 S.U.

(f) Cadmium application shall be limited to 0.45 pounds per acre (0.5 kilograms per hectare) in any 365-day period.

(g) Application of biosolids or septage is prohibited on the 100-year floodplain unless:

(1) The biosolids or septage is incorporated within 48 hours of application; or

(2) The site is in no-till management and

(A) is cover cropped; or

(B) is planted to hay, pasture, or other perennial crop.

(h) Application of biosolids or septage within the floodway portion of the 100-year floodplain is prohibited.

(i) Application of biosolids or septage is prohibited at times when groundwater is within three (3) feet of the bottom of the zone of incorporation.

(j) Application of biosolids or septage is prohibited in Class I and Class II Groundwater areas.

(k) Application of biosolids or septage is prohibited in a watershed for a Class A stream or stream segment.

(l) Land Application. Prior to the land application of biosolids or septage derived from domestic waste, the waste must be treated, by lime stabilization, pyrolysis, or by other chemical, biological, or physical processes, to:

(1) meet the requirements of a process to significantly reduce or further reduce pathogens as established in 40 CFR Part 503.32(a)(3, 4, 7 or 8) or 40 CFR Part 503.32(b) ; and
(2) meet the vector attraction reduction requirements established in 40 CFR Part 503.33; and,
(3) assure that the final product is homogeneous and not otherwise deleterious in character.

(m) For land application sites used for biosolids or septage management, unless otherwise directed by the Secretary, the following restrictions shall apply:

(1) Public access shall be controlled for twelve (12) months after the last application of biosolids or septage.

(2) Domestic food source animals shall be prohibited from grazing on land application sites for twelve (12) months after the last application of biosolids or septage.

(3) The production of crops for direct human consumption, is prohibited for thirty-eight (38) months after the last application of biosolids or septage.

(4) Feed crops shall not be harvested for a period of five (5) weeks after the last application of biosolids or septage.

(5) Silage to be used as a feed crop, shall not be fed to domestic food source animals for a period of four (4) months after the last application of biosolids or septage.

(6) Turf shall not be harvested for a period of one (1) year after the last application of biosolids or septage.

(n) The following requirements for sampling, analysis, and standards shall be met:

(1) All sludges, biosolids or septage intended for land application, and EQ biosolids and EQ biosolids products shall be sampled and analyzed for the following parameters. The frequency

will be established in each sludge management plan or certification. Any biosolids or EQ biosolids products that are imported into Vermont shall also be analyzed for any parameters not established herein for which a regulatory standard is established in the jurisdiction in which they were produced or prepared.

(A) The material shall be analyzed for the total concentration of the following metals:

Arsenic (As)

Cadmium (Cd)

Chromium (Cr)

Copper (Cu)

Lead (Pb)

Mercury (Hg)

Molybdenum (Mo)

Nickel (Ni)

Selenium (Se)

Zinc (Zn)

(B) The material shall be analyzed for total percent solids.

(2) Biosolids or septage intended for land application and EQ biosolids <u>and EQ biosolids</u> products shall be analyzed for following parameters:

Total polychlorinated biphenyls (PCB);

pH,

Total Kjeldahl Nitrogen (TKN),

Ammonia-Nitrogen (NH_4-N),

Nitrate-Nitrogen (NO_3-N),

Total Phosphorus (TP),

Total Potassium (TK),

Water extractable phosphorus (WEP); and

Per- and polyfluoroalkyl substances (PFAS) in accordance with this subdivision;

(A) PFAS regulated by the Secretary; and any other PFAS that the Secretary has determined may pose a risk to human health or other living organism and for which the Secretary has determined that a reliable testing and analytical methodology is available. The Secretary may require the material to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials.

(o) All biosolids or septage intended for land application, or for management at a facility preparing EQ biosolids, shall meet the following standards. At the Secretary's discretion, these standards may be made more or less stringent.

(1) Total metals concentrations in the material must be no more than the concentrations established in the following table:

PARAMETER	CONCENTRATION (mg/kg, dry wt.)
Arsenic (As)	15
Cadmium (Cd)	21
Chromium (Cr)	1,200
Copper (Cu)	1,500
Lead (Pb)	300
Mercury (Hg)	10
Molybdenum (Mo)	75
Nickel (Ni)	420
Selenium (Se)	100
Zinc (Zn)	2,800

(2) The concentration of total PCB must be no more than 1 mg/kg, dry weight.

(3) The material shall undergo a process to significantly reduce pathogens as defined in 40 CRF Part 503.32(b) or a process to further reduce pathogens as defined in 40 CRF Part 503.32(a)(3,4,7, or 8).

(p) The cumulative loading rate for each metal on a land application site shall not exceed the cumulative loading rate limits for the metals in the following table:

Metal	Kilograms per Hectare	Pounds per Acre
Arsenic (As)	15	(13.4)
Cadmium (Cd)	5	(4.5)
Chromium (Cr)	1200	(1071.6)
Copper (Cu)	1500	(1339.5)
Lead (Pb)	300	(267.9)
Mercury (Hg)	17	(15.2)
Molybdenum (Mo)	75	(66.0)
Nickel (Ni)	420	(375.1)
Selenium (Se)	100	(89.3)
Zinc (Zn)	2800	(2500.5)

Note: the established regulatory standards are those given in units of kilograms per hectare. Those numbers in parentheses (pounds per acre) are rounded conversions of the officially established standards and are provided for informational purposes only.

(q) Facilities covered under a Sludge Management Plan shall test sludge at the more frequent of the rate specified in the Sludge Management Plan or in Table 1.

Table 1

Amount of sludge produced in the preceding 365 days*; dry weight	Monitoring Frequency
> 0 – 290 metric tons (> 0 – 319 US tons)	Once per year
> 290- 1,500 metric tons (>319 – 1,650 US tons)	Once per quarter (four times per year)
> 1,500 – 15,000 metric tons (>1,650 – 16,500 US tons)	Once per sixty (60) days
>15,000 metric tons (>16,500 dry US tons)	Once per month
For lagoon type treatment works producing sludge	
Any amount	Once each time sludge is removed from the lagoon; or, according to Table 1 non-lagoon type schedule if sludge is routinely removed

*If the amount of sludge produced in a non-lagoon type treatment works at any time in a rolling period of the preceding 365 days either increases or decreases such that it triggers a different monitoring frequency category in the table above, the monitoring frequency shall be adjusted accordingly unless otherwise established in a certification.

(r) For facilities covered under a solid waste certification, the monitoring frequency of EQ biosolids, biosolids and septage intended for land application, soil, groundwater, surface water, and plant tissue shall be performed at the more frequent of the rate specified in the solid waste management facility certification or in Table 2.

Table 2

MEDIA	PARAMETERS	MONITORING FREQUENCY
EQ biosolids; biosolids and septage intended for land application	As established in § 6-1306(n) or as otherwise specified in the facility certification	1) At the greater of the frequency established in the table § 6-1307(q), every batch of biosolids applied to the land, or as otherwise specified in the facility certification. 2) For domestic septage applied to a land application site: once per year, or as otherwise specified in the facility certification.
Soil	As established in the facility certification	Once per year or as otherwise specified in the facility certification.
	Total PCB	Once per certification period or as otherwise specified in the facility certification.
	PFAS	Once per year or as otherwise specified in the facility certification.
Groundwater	As established in the facility certification	Once per year or as otherwise specified in the facility certification.
	PFAS	Once per year or as otherwise specified in the facility certification.
Plant Tissue	As established in the facility certification	Once per certification period or as otherwise specified in the facility certification.
	PFAS	Once per certification period or as otherwise specified in the facility certification.

(s) The Secretary may require the materials in Table 2 to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials

(t) For EQ biosolids derived or partially derived from a domestic waste, only those marketing and distribution methods authorized in the solid waste management facility certification are allowed.

(u) Only domestic septage may be managed by application to the land. The management of portable toilet waste, holding tank waste, cesspool waste and waste from Type III marine sanitation devices by application to the land is specifically prohibited.

(v) Domestic septage applied to a land application site shall either be:

(1) screened prior to application to remove to the greatest reasonable extent, any debris, trash, non-biodegradable, and other deleterious objects; or,

(2) if not screened for the removal of debris, trash, non-biodegradable, and other deleterious objects prior to application to a land application site, the operator shall physically remove such objects from the site on each day that domestic septage is applied to the site; and,

(3) refuse removed by screening or manual removal shall be stored in a manner that prevents any release to the environment and shall be disposed only at a municipal solid waste landfill.

§ 6-1307 Residuals Management Facility Applications

In addition to the general application requirements of Subchapter 5, the following facility specific requirements apply:

(a) Either approved Sludge Management Plans or Solid Waste Management Certifications are required for all wastewater treatment facilities that generate sewage sludge.

(b) Solid Waste Management Certifications are required for the land application sites where either septage, non-EQ biosolids, or residual dairy wastes are managed.

(c) Solid Waste Management Certifications are required for all sewage sludge, biosolids, and septage storage, treatment or transfer facilities located outside the fenced area of a wastewater treatment facility except for transfer facilities operated in accordance with § 6-302(a)(7) and (8) of these Rules.

(d) The Secretary may not certify a land application site unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

(e) Solid Waste Management Certifications are required for facilities that prepare EQ biosolids or EQ biosolids products.

(f) Sludge Management Plans shall include the following:

(1) All owners of wastewater treatment facilities that generate sludge as a result of the treatment process and that do not manage or dispose of sludge at a facility under their control or ownership shall submit Sludge Management Plans to the Secretary for review and approval in all cases where a Solid Waste Management Certification is not required by these Rules. The Plans shall:

(A) identify the owners and operators of the facility and their contact information;

(B) include a contingency disposal plan, a spill response plan and a reporting plan;

(C) include a schematic diagram of the facility;

(D) present information demonstrating conformance with an approved Solid Waste Implementation Plan; and

(E) present information regarding methods of sampling and disposal.

(2) The Secretary shall append a schedule of parameters and frequency of monitoring sludge to an approved Sludge Management Plan.

§ 6-1308 Residuals Management Facility Reporting and Recordkeeping

In addition to the general reporting and recordkeeping requirements of Subchapter 7, the following facility specific requirements apply:

(a) Recordkeeping

(1) The following records shall be kept in a dry and secure location by the biosolids or biosolids product generator or septage manager:

(A) all reports, records, data or other information required to demonstrate compliance with this section; and

(B) copies of the quarterly report forms that have been submitted to the Secretary; and

(C) copies of all certifications required under 40 CFR 503.17.

(2) All records shall be kept for a minimum of ten (10) years following the date on which the applicable quarterly report was submitted to the Secretary.

(3) Maintenance of records in an electronic format is acceptable.

(b) Reporting: All owners of wastewater treatment facilities that generate sewage sludge as a result of the treatment of domestic waste, all producers of biosolids or EQ biosolids, all owners of companies that manage septage, and all commercial haulers of residual wastes subject to the permit requirements of 10 V.S.A. 6607(a) shall report to the Secretary on a quarterly basis on forms provided by the Secretary. Reports are due on the 15th day of the month following the end of each calendar quarter (January 15, April 15, July 15 and October 15). The reports shall include:

(1) the quantity of sludge, biosolids, septage, or residual wastes disposed or managed;

(2) the location where the sludge, biosolids, septage, or residual waste was delivered for management, disposal, or end use;

(3) the volume of sludge, biosolids, septage, or residual waste received from other generators or managers of those materials;

(4) sludge, biosolids, or septage, or residual waste quality and other facility monitoring data, including documentation of testing per §6-1306(n), when required; and

(5) where required for septage managers, the fee established under 3 V.S.A §2822(j)(33) for the volume of septage managed shall be submitted with each quarterly report for the corresponding quarter's septage management activities. The fee is calculated based on the volume of septage generated in Vermont regardless of where it is disposed or managed and on all septage disposed or managed in Vermont regardless of where it was generated. The fee is owed by the person who first pumped the septage from a septic tank, holding tank, or cess pool.

§ 6-1309 Residuals Management Facility Closure

(a) A closure plan is required for all facilities except:

(1) Land used for the land application of septage, biosolids, or other residual wastes, as determined appropriate by the Secretary; and

(2) Septage, sludge, biosolids, or other residual waste facilities located inside the fence of a domestic wastewater treatment facilities or drinking water treatment facilities .

(b) At the Secretary's discretion, a financial instrument sufficient to cover the anticipated costs of a closure plan may be required. Such financial instruments shall be in conformance with Subchapter 8 of these Rules.

Subchapter 14 – Special Topics

§ 6-1401 Special Waste Designations

(a) The Secretary may designate that certain types or categories of solid wastes are special solid wastes if he or she determines that the waste pose special environmental or public health and safety concerns, or have other characteristics (e.g. size, composition) that cause problems in handling or management.

(b) Subsequent to a special waste designation issued pursuant to subsection (a) of this section, the Secretary may require that such wastes be subject to management requirements as may be necessary to ensure the protection of public health and safety and the environment. Such management requirements may be included as conditions of a certification or other approval issued pursuant to these Rules.

§ 6-1402 Approval for Acceptable Uses of Solid Waste

(a) Any person may request a written determination by the Secretary of an acceptable use designation of a type or category of solid waste. This section shall not apply to:

(1) Activities which require a solid waste certification, including land application of sludge and septage wastes;

(2) Disposal activities of limited duration which require an insignificant waste management event approval (IWMEA);

(3) Materials or activities which are exempt from these Rules;

(4) Material which is reused;

(5) Solid waste which is recycled (recycling does not include incineration of solid waste to produce energy or fuel products);

(6) solid waste which: contains, or the use of which will create a hazardous waste;

(7) solid waste the use of which will result in a threat to human health and safety or to the environment, or will cause a nuisance;

(8) solid waste that contains asbestos;

(9) solid waste that contains infectious waste; or

(10) solid waste that is incinerated to produce energy or fuel products.

(b) Any person who wishes to receive written approval for acceptable use of a solid waste shall submit a written request to the Secretary. The request shall be in writing and contain the following:

(1) A description of the proposed solid waste to be used, including identification of the source of the waste, characteristics of the proposed waste (physical, chemical and biological) and the quantities to be used;

(2) A description of the proposed use of the solid waste, including:

(A) Where the material will be used;

(B) The duration of use;

(C) A description of any manufacturing or processing by which an end product is produced; and

(D) Characteristics of the end product (physical, chemical and biological); if an end product is to be marketed.

(3) A written demonstration that the proposed use will not adversely affect human health and safety and the environment or create a nuisance. This demonstration shall contain one or more of the following:

(A) A characterization plan;

(B) Historic analytical test data;

(C) Risk assessment; and

(D) A risk management plan;

(E) Another type of assessment that has been approved in writing by the Secretary.

(4) A written management plan which addresses the management of the solid waste from its source through its final use, including, but not limited to, storage of the waste prior to use, quality control/quality assurance, stormwater control, risk management, application rates, monitoring and a contingency plan that addresses how the solid waste will be managed if the proposed use

of the material becomes unviable.

(5) If required by the Agency, financial assurance in an amount deemed by the Secretary to be sufficient to cover the costs associated with implementing the approved contingency plan.

(c) Approval: If the Secretary finds that the solid waste and proposed use of that waste is not Determinations made regarding acceptable uses of materials and associated activities shall be published by the Secretary. A determination for acceptable use of a solid waste may apply to uses by other persons of the same solid waste(s) for the activities and uses specified in the written designation.

(d) Denial: If the Secretary determines that the use of the solid waste will result in a threat to human health and safety or to the environment, or will cause a nuisance; then the acceptable use determination will be denied or rescinded.

§ 6-1403 Standards for Hazardous Household and Very Small Quantity Generator Wastes

(a) Very Small Quantity Generator (VSQG) hazardous waste and household hazardous waste (HHW) may be accepted for management only by solid waste facilities certified or approved by the Secretary to manage these wastes according to the provisions of Subchapter 9 of these Rules.

(b) Collection Events.

(1) HHW/VSQG hazardous waste collection events shall take place only at certified solid waste facilities or at other locations specifically approved by the Secretary pursuant to § 6-505(b). Collection events shall be pre-approved and operated under the requirements of this section. A certified solid waste facility shall not hold a collection event unless the facility management plan for the facility specifies the wastes to be managed and the activities to be conducted during the event.

(2) To obtain approval for a collection event not located at a certified solid waste facility, the applicant shall submit the following:

(A) A complete HHW/VSQG hazardous waste collection event approval form; and

(B) A safety, accident and contingency plan for the site. This plan shall address:

(i) Public/transport;

(ii) Emergency contacts, plan of action;

(iii) Location and distance to closest hospital; and

(iv) Chain of command

(C) If the collection event location has not been assigned a permanent EPA Identification Number, the applicant is required to obtain either a permanent or temporary EPA Identification Number prior to holding the collection event. Permanent and temporary EPA Identification Numbers may be obtained by contacting the Vermont Hazardous Waste Management Program. Temporary EPA Identification Numbers are only valid for one year.

(3) Approval for a HHW/VSQG hazardous waste collection event location is only required one-time. Subsequent events in the same location may operate on the previous approval provided that the safety, accident and contingency plan for the specific site has not changed. The event operator shall send in notification that the safety, accident and contingency plan has remained unchanged at least 30 days prior to the event.

(4) All wastes managed during the collection event must be handled by personnel trained in accordance with § 6-905(g)(2)(A).

(5) At the end of an event, all VSQG hazardous waste collected during the event shall be packaged, labeled, and transported off-site by a permitted hazardous waste transporter and in accordance with Vermont Hazardous Waste Management Regulations.

(6) At the end of an event, all HHW collected during the event shall be removed from the site by a permitted hazardous waste transporter. The waste may be managed as a regulated hazardous waste as provided in § 6-1403(b)(5) above or may be transported to a solid waste facility certified to accept HHW/VSQG Hazardous Waste.

(c) Mobile HHW/VSQG Hazardous Waste Collection Units.

(1) Mobile HHW/VSQG Hazardous Waste Collection Units shall meet the requirements of § 6-1403(b) for collection events and the following requirements:

(A) The operator of the mobile collection unit shall be permitted as a hazardous waste transporter at the time that VSQG hazardous wastes are collected;

(B) The mobile collection unit shall return to a solid waste facility certified to to accept HHW/VSQG hazardous waste upon completion of each collection event; and

(2) Collected HHW and VSQG hazardous wastes may remain in the mobile unit while at the certified HHW/VSQG hazardous waste collection facility for no more than 10 days from the date

of collection after which it shall be transferred to another permitted hazardous waste transporter, a certified hazardous waste treatment, storage or disposal facility, or to a HHW/CEG hazardous waste collection facility.

§ 6-1404 Waste Incineration

(a) Waste incineration facilities shall be designed to ensure that there is complete combustion as evidenced by the greatest practical reduction in content of carbon compounds in the waste of all wastes to be incinerated.

(b) Facility operations shall include methods to separate from the incinerator those wastes that may not or cannot be burned.

(c) A waste incineration facility shall apply for full certification following the application requirements for a solid waste treatment facility under § 6-504 of these Rules. In addition to the requirements in § 6-504, the facility management plan shall include the following:

(1) the amounts and types of waste to be treated;

(2) the air and water pollution control devices to be used;

(3) plans for the proper storage and handling of incoming wastes and of residues;

(4) plans for the disposal of incinerator ash and of solid wastes nor processed by the incinerator;

(5) a description of testing requirements for waste generated by an incineration unit, using a federally accepted test procedure with frequency of testing determined on a case by case basis, but not less than annually; and

(6) a written describe of how all ash residue will be properly wetted or contained to prevent dust emissions or discharges during on-site storage, loading, transport, and unloading. Stored ash must be kept in watertight containers approved by the Secretary. Containers used for the transport of ash must be watertight, leach resistant, have covers, and be approved by the Secretary. Containers shall be prominently marked with an identification coding system so that it is possible to maintain records of what containers are used for ash transport.

§ 6-1405 Animal Burial Standards Categorical Certifications

(a) Composting and burial prohibition. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.

(b) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the disposal of animal mortalities from that event, the Secretary may authorize a one-time disposal event in accordance with § 6-505(b). To the maximum extent practical, the disposal event shall conform to the requirements of § 6-1108(c).

(c) Applications for animal burial shall apply for a permit as follows:

(1) The facility shall be sited in conformance with § 6-1106.

(2) The facility shall meet the following:

(A) The pit must be managed so that the carcasses do not attract pests or vectors;

(B) Upon deposit in the pit the carcasses shall be:

(i) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 2 feet of soil; or

(ii) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 6" of soil and covered with boards; or,

(iii) managed in an alternative manner if approved in advance by the Solid Waste Program;

(C) Active pits must have snow fencing, or equivalent around the perimeter until the top of pit is at ground level;

(D) No carcasses shall be deposited within two feet of the surface;

(E) Final cover shall consist of at least two feet of compacted soil.

Appendix A

Specific Requirement for Financial Responsibility Instruments

A-1 Trust Fund with Surety

(a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by establishing a trust fund for the benefit of the Agency according to the requirements of this section and subsections A-2 (b), (c), (f), (g), (h), (i), (k), and (l). The surety bond must guarantee full payment into the trust fund of the cost estimate for closure or post-closure plan submitted with the certification application. The trustee for the trust fund must be a bank or financial institution which has the authority to act as a trustee and whose operations are regulated and examined by the State of Vermont. The surety for the bond must be a surety company licensed to operate as a surety in the State of Vermont and shall be approved by the secretary.

(b) The trust agreement and surety bond shall be executed in the form provided for such purposes by the Secretary.

(c) Payments to the trust fund must be made annually by the certification holder over the term of the state certification issued for such facility or over the life of the facility if such facility life is shorter than the term of the state permit. Payments must be made as follows:

(1) The first payment shall be made when the trust is established and shall be at least equal to the cost estimated divided by the number of years in the term of the permit or life of the facility, whichever is the shorter.

(2) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be the cost estimate minus the current value of the trust fund, divided by the number of years remaining in the term of the certification or the remaining number of years in the life of the facility, whichever is the shorter.

(d) The certification holder may accelerate payments into the trust fund or he may deposit the full amount of the cost estimate at the time the fund is established. However, the value of the fund must be maintained at no less than the value would have been if annual payments were made as specified in paragraphs a and c of this subsection.

(e) Whenever the cost estimate changes after the pay-in period is completed, the certification holder shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new cost estimate, the certification holder must, within 90 days of the change in the cost estimate, deposit a sufficient amount into the fund so that its value after payment at least equals the amount of the new estimate, or obtain other financial assurance as specified in subchapter 9 to cover the difference. if the value of the trust fund is

greater than the total amount of the cost estimate, the certification holder may submit a written request to the secretary for release of the amount which is in excess of the cost estimate.

(f) If the certification holder substituted other financial responsibility as specified in subchapter 9 for all or part of the trust fund, he may submit a written request to the secretary for release of the amount which is greater than the amount required as a result of the substitution.

(g) Within 60 days after receiving a request from the certification holder for release of funds specified in paragraphs e and f of this subsection, the secretary will instruct the trustee to release to the certification holder such funds as the secretary specifies in writing.

(h) After beginning final closure or during the period of post-closure care, a certification holder or any other person authorized to conduct closure, may request reimbursement for closure or post-closure expenditures respectively by submitting itemized bills to the secretary within 60 days after receiving bills for closure or post-closure activities. The secretary shall instruct the trustees to make reimbursement in those amounts as the secretary determines are in accordance with the closure or post-closure plan or are otherwise justified.

(i) The secretary shall agree to terminate the trust when:

(1) The certification holder substitutes alternate financial responsibility as specified in subchapter 9; or

(2) The secretary notifies the certification holder that he is no longer required by subchapter 9 to maintain financial responsibility for the closure or post-closure of the facility.

(j) The term of the surety bond shall be for the pay in period of the trust fund.

(k) The bond must guarantee that the certification holder will:

(1) Fund the trust in the amount of the cost estimate by the end of the pay-in period; or

(2) During the pay-in period, fund the trust in the amount of the cost estimate within 15 days after an order to begin closure or post-closure care by the secretary or by a court, or following issuance of a notice of revocation of the certification; or

(3) Provide alternative assurance within 90 days after receipt by the secretary of a notice of cancellation of the bond by the surety.

A-2 Surety Bonds

(a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by obtaining a surety bond according to the requirements of this section and by submitting the original copy of the bond with the facility closure or post-closure plans with the certification application. Only

bonds issued by surety companies licensed to operate as sureties in the State of Vermont and approved by the secretary will satisfy the requirements of this section.

(b) A surety bond form supplied by the secretary shall be used by the applicant and the surety.

(c) The surety bond must name the applicant as the principal and name the State of Vermont as the obligee.

(d) The term of the bond shall be for the life of the facility for which a certification is applied by the applicant through the closure period. A bond used for post-closure responsibility shall extend through the post-closure period.

(e) The bond must guarantee that the certification holder will:

(1) Perform final closure or post-closure care in accordance with the closure or post-closure plan and other requirements in the certification for the facility; or

(2) Perform final closure or post-closure care following an order to begin closure or post-closure care issued by the secretary or by a court, or following issuance of a notice of revocation of the certification; or

(3) Provide alternate financial assurance as specified in this section within 90 days after receipt by the secretary of a notice of cancellation of the bond from the surety.

(f) The surety will become liable on the bond obligation when the certification holder fails to perform as guaranteed by the bond.

(g) The penal sum of the bond must be in an amount at least equal to the amount of the closure or post-closure cost estimate.

(h) Whenever the cost estimate increases to an amount greater than the amount of the penal sum of the bond, the certification holder shall, within 90 days after the increase, cause the penal sum of the bond to be increased to an amount at least equal to the new estimate or obtain other financial assurance, as specified in subchapter 9, to cover the increase. Whenever the cost estimate decreases, the penal sum may be reduced to the amount of the cost estimate following written approval by the secretary. Notice of an increase or decrease in the penal sum must be sent to the secretary by certified mail within 90 days after the change.

(i) the bond shall remain in force for its term unless the surety sends written notice of cancellation by certified mail to the certification holder and to the secretary. Cancellation can not occur, however:

(1) During the 120 days beginning on the date of receipt of the notice of cancellation by the secretary as shown on the signed return receipt; or

(2) While a compliance or enforcement action is pending.

(j) following a determination that the certification holder has failed to perform final closure or post-closure care in accordance with the approved plan and other certification requirements when required to do so, the surety shall perform final closure or post-closure care in accordance with the terms of the bond, approved plan and other certification requirements or closure order. As an alternative to performing final closure or post-closure care the surety may forfeit the full amount of the penal sum to the State.

(k) The certification holder may cancel the bond if the secretary has given prior written consent based on receipt of evidence of alternative financial assurance as specified in subchapter 9.

(l) The secretary will notify the surety if the certification holder provides alternate financial assurance as specified in subchapter 9.

(m) The surety will not be liable for deficiencies in the performance of closure by the certification holder after the certification holder has been notified by the secretary that the certification holder is no longer required by subchapter 9 to maintain financial assurance for closure or post-closure care of the facility.

(n) As performed either by the certification holder or the surety, proper closure of post-closure care shall be deemed to have occurred only when the secretary so determines according to these Rules.

A-3 Letters of Credit

(a) An applicant may satisfy the requirements of subchapter 9 by obtaining an irrevocable standby letter of credit according to the requirements of this section and by submitting the original copy of the letter of credit attached to the facility closure or post-closure plan along with the certification application. For new facilities, the letter of credit must be effective before the initial receipt of waste at the facility for which it is issued. The financial institution branch issuing the letter of credit shall be located within the United States and shall be:

(1) a federally-chartered bank or financial institution that is regulated by the Office of the Comptroller of Currency, the Federal Reserve System, or the Federal Deposit Insurance Corporation; or

(2) a state-chartered bank or financial institution:

(A) whose deposits are insured by the Federal Deposit Insurance Corporation, or

(B) is a member of the Federal Reserve System; or

(3) is a branch of a foreign bank or other financial institution that is:

(A) licensed by either the banking authority in the state in which the branch is located or the Office of the Comptroller of the Currency; and

(B) examined by the Federal Reserve Systems.

(b) The wording of the letter of credit must be approved by the secretary.

(c) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year. If the issuing institution decides not to extend the letter of credit beyond the current expiration date it must, at least 120 days before the date, notify both the certification holder and the secretary by certified mail of that decision. The 120 day period will begin on the date of receipt by the secretary as shown on the signed return receipt. Expiration can not occur, however, while a compliance or enforcement action is pending.

(d) The letter of credit must be issued for at least the amount of the closure or post-closure cost estimate.

(e) Whenever the cost estimate increases to an amount greater than the amount of credit, the certification holder shall, within 90 days of the increase, cause the amount of credit to be increased to an amount at least responsibility as specified in subchapter 9 to cover the increase. Whenever the cost estimate decreases, the letter of credit may be reduced to the amount of new estimate following written approval by the secretary. Notice of an increase or decrease in the amount of the credit shall be sent to the secretary by certified mail within 90 days of the change.

(f) Following a determination that the certification holder has failed to perform closure or post-closure care in accordance with the approved plan or other certification requirement, the secretary will draw on the letter of credit.

(g) the certification holder must establish alternate financial responsibility as specified in subchapter 8 and obtain written approval from the secretary within 90 days after receipt by both the certification holder and the secretary of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date. if the certification holder does ;not establish such alternative financial responsibility within the 90 days, the secretary will draw on the letter of credit. If the issuing institution grants an extension of the term of credit, the secretary may do the drawing during the last 30 days of credit if the operator has failed to provide alternative financial responsibility as specified in subchapter 9 and obtain written approval of such responsibility from the secretary .

(h) The secretary shall return the original letter of credit to the issuing institution for termination when:

(1) the certification holder substitutes alternate financial responsibility for closure or post-closure as specified in subchapter 9; or

(2) The secretary notifies the certification holder, in accordance with section 6-901(l) of these Rules, that they are no longer required to maintain financial responsibility for closure or post-closure of the facility.

Appendix B

Fee Schedule for Applications for Certification

Fees related to these Rules are established in 3 V.S.A. §2822(j). Fees shall be applied according to statute, as may be amended, . As of the effective date of this rule these fees are as follows:

Original and renewal applications – excluding recycling and composting facilities and categorical solid waste facilities	$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification
Original and renewal applications for recycling and composting facilities, excluding categorical solid waste facilities that solely manage recycling or composting solid waste	$100.00
Original and renewal applications for categorical solid waste disposal facilities	$100.00
Original and renewal applications for facilities certified pursuant to 10 V.S.A. §6605 and §6605b, that treat, store or dispose of waste generated solely from mining, extraction or mineral processing	If <25,000 cubic yards operational capacity - $200.00 If >25,000 cubic yards operational capacity - $0.95 per cubic yard of operational capacity Maximum annual payment, $75,000
Increase in tonnage, excluding recycling and composting facilities, and categorical solid waste facilities	$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification
Insignificant Waste Management Event Application	$100.00 per event
Sludge and Septage Facilities: Land application sites, facilities that further reduce pathogens and disposal facilities	$1,000.00
Sludge and Septage Facilities: All other facilities, and application to amend certifications for land application sites, facilities that further reduce pathogens and disposal facilities	$125.00