

Department of Environmental Conservation Residual Waste and Emerging Contaminants Program

APPLICATION INSTRUCTIONS: Residuals Solid Waste Management Facility Certification

The management plan (Plan) submitted in support of an application for full certification must document full compliance with the Vermont Solid Waste Management Rules, effective October 31, 2020 (Rules). The Plan must present a detailed description of the facility and/or the management strategy in a manner such that any member of the public or governmental agency can examine the Plan, understand all aspects of the project, and determine how it complies with the Rules. The Plan must detail all aspects of biosolids, septage, or other residual waste's management from the time it becomes subject to jurisdiction under the Rules until its final disposal or disposition.

Therefore, in preparing an application and Plan for full certification, the following must be done:

- 1) Submittals must include a fully completed application form and a check (payable to "Treasurer State of Vermont") for the appropriate application fee (see the instructions for Line 5 for the applicable fees). Be sure that the application form bears all required signatures. Applications submitted without a fully completed application form, any required signatures, or the required fee will be considered an improper application and will be returned to the applicant.
- 2) For recertification of a facility that has previously been certified under one or more full certification(s), the Rules do allow (at the Secretary's discretion) you to reference information submitted in a previous Plan, so long as that information has not changed since it was originally submitted. In these cases, the new Plan must specifically state what information from the previous submittal is included by reference and where it is located in the previous plan. Any information that has changed since the date that the previous Plan was submitted must be revised and updated in the new Plan.
- 3) A fully completed checklist must be submitted as a part of the application package. Applications submitted without a checklist will be considered administratively incomplete and will not be reviewed any further until a completed checklist is submitted.
- 4) The Plan must contain information such that the "YES" or "N/A" box on the checklist can be checked for every item, as appropriate. Please note that not all sections on the checklist may apply to a given project. For example, if no storage is proposed in the application and Plan, then those sections relating to storage facilities and their closure do not apply and need not be addressed in the application. In such cases, the "N/A" column should be checked on the checklist for the non-applicable sections.
- 5) On the checklist, reference the page where each item is addressed in the Plan. The completed checklist may be submitted with the application as an attachment to the Plan or may be incorporated into the Plan as the index.
- 6) The Plan should be put together so that its sections generally follow the subchapters of the Rules in its arrangement.

Please be aware that the checklist only serves as a general guide for preparing a full certification application and Plan. The following pages contain a broader description of what is expected of an application and Plan. Each line on the checklist is numbered and corresponds to the line instructions which follow. However, these two documents are not a substitute for a thorough examination of the Rules to produce a Plan which addresses and demonstrates the details of their intent and requirements. Vermont Natural Resources Atlas is an approved tool to indicate requirements for the plan. Link is provided below:

https://anrmaps.vermont.gov/websites/anra5/

Applicants are strongly urged to contact the Residuals Management & Emerging Contaminants Program staff (a staff listing is available at http://dec.vermont.gov/waste-management/contacts), to discuss a project prior to submitting an application. By doing so, Rule interpretations and Program concerns can be addressed earlier in the design and permitting process.

If you are required to submit personal history and business disclosure statements in support of the application, pursuant to 10 V.S.A. §6605f; those forms should be submitted with the application to expedite their timely review.

An outline of the application review and public notification process is presented on page 29 of these instructions.

Within the application, application instructions, and checklist, specific state and federal regulations are referenced, and cited as the following:

- Vermont Statutes Annotated are referenced with the title and statute. (ex. 10 V.S.A. §6605f).
- Vermont Solid Waste Management Rules are referenced with a subchapter and rule (ex. §6-503(a)).
- Code of Federal Regulations is referenced with title and subpart (ex. 40 CFR Part 503).

JURISDICTION

- In general, a residual material becomes a solid waste, and its management is subject to the Rules, at the point in a process when it is removed from active biological treatment. The jurisdictional line may vary from project to project. You should contact the Residuals Management & Emerging Contaminants Program staff for a definitive determination.
- 2. In a municipal or industrial wastewater treatment facility (WWTF), sludge or biosolids are subject to regulation under the Rules at the time that the waste is removed from a digester or lagoon. If the waste is comprised of undigested solids, jurisdiction is effective at the time of their removal from the treatment process.
- 3. Facilities producing Exceptional Quality (EQ) biosolids by employing a "Process to Further Reduce Pathogens" (PFRP) (e.g., high temperature anaerobic digestion, composting, heat drying, etc.) for distribution must be certified regardless of their location.

- 4. Septage becomes a solid waste subject to regulation under the Rules at the time that it is pumped from a septic tank or portable toilet. Simply pumping septage and taking the waste to a municipal WWTF for disposal does not require a solid waste management facility certification.
- 5. Other materials become solid wastes subject to regulation at the time that they are removed from the equipment in which they were generated. For example, wood ash becomes a regulated solid waste when it is removed from the combustion unit.
- 6. Installations where mobile dewatering equipment will be operated and where there is fixed piping to return the removed liquid to the wastewater treatment process is considered a transfer station and is subject to jurisdiction under the Rules.
- 7. Residual wastes that are stored on-site in a storage tank, holding tank, bunkers, drying beds, etc. are subject to certification requirements unless those facilities are located within the fenced area of a domestic wastewater treatment facility. See § 6-302 of the Rules for the certification requirement exemptions.
- 8. All septage and biosolids destined for land application or distribution are subject to regulation under the Rules and their management requires certification.

LINE-BY-LINE CHECKLIST GUIDANCE

REQUIREMENTS OF THE STATUTES 10 V.S.A. §6-605(c) - Planning requirements

Line 1

• For certification of a facility, it must be included in an adopted solid waste management implementation plan (SWIP) for the area in which the facility is sited and the SWIP must be consistent with the state solid waste plan and in conformance with any municipal or regional plan(s) for the area in which it is sited. The SWIP must specifically identify the facility and its location.

This statute specifically exempts biosolids and septage land application projects from this requirement.

This exemption is provided because land application sites tend to be relatively short-term use facilities and it would be cumbersome for a district or municipal entity to have to go through the process of amending its SWIP every time a new land application site was proposed for certification or an existing site was removed from a management program. It must also be noted that those facilities which are provided an exemption from having to be certified (under the provisions of either §6-302(a)(8) or §6-1302(a) of the Rules) do not need to be included in the SWIP.

For the purposes of this statutory demonstration, facilities which produce and distribute EQ or Class A biosolids in a "Process to Further Reduce Pathogens" are <u>not</u> considered to be land application projects, regardless of whether the final product they produce is ultimately managed via application to the land.

Evidence of inclusion in an adopted SWIP and of the SWIP's conformance with regional and municipal plans must be documented by submitting copies of the applicable section(s) of the approved SWIP, regional, and municipal plans. If there is no adopted municipal and/or regional planning document for the area in which the facility is sited, the application should state so clearly. The absence of an adopted municipal and/or regional planning document will not preclude certification of the proposed facility. However, if no SWIP has been adopted and approved for the area in which the facility is sited, the proposed facility cannot be issued a certification.

- For recertification, the existing Facility must also meet the following requirement:
 - The project must be in conformance with any municipal and/or regional plans for the area in which the facility is sited. Such plans are not SWIP's, but rather, municipal, or regional planning documents. Also note that the exemption afforded elsewhere to land application projects does <u>not</u> apply here.

To document conformance with regional and municipal plans, the applicant must submit a copy of the applicable section(s) of the approved plan(s). A sign-off letter from the municipal or regional planning organization is not acceptable. If there is no adopted municipal and/or regional planning document for the area in which the facility is sited, the application should state so clearly. The absence of an adopted municipal and/or regional planning document will not preclude certification of the proposed facility.

10 V.S.A. §6605 (f) – Notification

Line 2

• The application and Plan must confirm that the notification required under 10 V.S.A. Chapter 170 has been conducted at, or prior to, the date the application was submitted. This confirmation must include a copy of the notification letter(s) and a certificate of service indicating who was notified and on what date notification was provided. A sample notification letter template is included in the Applications section of the Residuals Management Program's website.

10 V.S.A. §6605f – Disclosure statements

Line 3

- 10 V.S.A. §6605f requires certain applicants to submit personal history and business disclosure statements providing information on their company, its officers, and its key employees.
- This statute requires any non-governmental entity that is applying for a solid waste management facility certification under 10 V.S.A. §6605f or §6605(b), or that is applying for a Commercial Waste Hauler Permit under 10 V.S.A. §6-607(a), to submit personal history and business disclosure statements. A non-governmental entity that contracts with an applicant governmental entity to operate any portion of the facility is also subject to the personal history and business disclosure requirements unless the solid waste management activity is comprised only of on-site storage or treatment of waste generated solely on the site or at another site under the sole control of the applicant and which does not accept any other solid waste.
- Owners of land application sites who are non-governmental entities and who are not the applicant or co-applicant do not have to submit disclosure statements.
- Examples of applicants or their contractors that must submit disclosure statements include (but are not limited to):

- private companies providing contract operation of a municipal wastewater treatment facility or its biosolids management activities where the application seeks certification of disposal type management activities.
- private companies applying for certification of biosolids management projects; and
- septage haulers applying for certification of septage land application projects.

REQUIREMENTS OF THE SOLID WASTE MANAGEMENT RULES

SUBCHAPTER 1 - Purpose

Line 4

- The submittal must include a copy of the Plan and the appropriate application form that:
 - has been signed by the applicant or its authorized representative, the facility's owner or their designated representative, the landowners of each proposed site, and prepared by a licensed professional of the State of Vermont. Landowners must sign both the application form and any landowner agreements for land application sites.
 - includes the name of the municipality, septage hauling business or other business concern.
 - includes the names, mailing addresses and phone numbers of the owner and/or authorized representative and the contact person for the facility.
 - includes the names, mailing addresses, telephone numbers, and has been signed by the owner(s) of land application sites.
- Submittals that are received with an improperly or incompletely completed application form will be returned.

Line 5

 The application must be accompanied by the appropriate fee, in the form of a check made payable to Treasurer - State of Vermont, when submitted to the Agency. Current application fees are:

\$1,000. land application projects or facilities that further reduce

pathogens and non-minor amendments.

\$125. all other applications

Applications that are submitted without the applicable fee will be returned.

SUBCHAPTER 3 – Applicability, Exemptions, and Prohibitions

Line 6

- The following list gives examples of how the various types of facilities are considered with respect to the Rules:
 - Storage: tanks, bunkers, stockpiles, lagoons, drying beds, holding tank
 - Treatment: lime stabilization vessels, composting facility, heat drying facility, ATAD facility
 - Transfer Stations: installed pads at WWTF for mobile dewatering where there is piping back to headworks.
 - Diffuse Disposal Facility: land application site
- Please note that facilities are not necessarily restricted to those listed above.

Line 7

 Waiver of Technical Standards must meet requirements set forth in § 6-303. If conditions are met complete the information designated in § 6-507 – Application for Variance from Solid Waste Rules Lines 27 through 32 of the Checklist.

Subchapter 5 – General Application Submittal Requirements

Line 8

- Types of Residual Facilities applicable for Type 2 certification include:
 - Solid waste storage facilities, transfer or processing facilities and recycling facilities
 - Treatment, storage, or disposal facilities for any waste derived solely or in part from domestic wastes, unless residual material is only managed via landfill disposal and is authorized under a Sludge Management Plan as established in §6-1302(a).
 - Land application sites for non-EQ biosolids, or domestic septage.

Line 9

 Application to Minor Amendments/Type 4 apply to minor amendments made towards an existing Certification as deemed in Act 150 or insignificant waste management event approvals or categorical solid waste certifications under 10 V.S.A. chapter 159 and § 6-902(a) and § 6-1002(a) of the Rules.

Line 10

 Application for Emergency Permit and Registrations/ Type 5 applies to the issuance of emergency sludge and septage disposal approvals under 10 V.S.A. 6605.

§ 6-504 – Full Certification Application; Interim Certification Submissions

Line 11

Applications 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.

Line 12

• Identification of the type of solid waste management facility as discussed in Line 6 of the checklist, and include all operational units (monitoring well network, storage tank, etc.)

Line 13

• The application must provide the location of the facility. The Rules stipulate that the location must be determined using either the Vermont plane coordination system on the appropriate Vermont orthophoto tax map, or through use of a GPS system. If using the Vermont plane coordination system, the northing and easting locations should be provided to the nearest meter. If using a GPS system, the latitude and longitude should be provided to the nearest second. The location must be provided for the approximate center point of each unit located outside of a WWTF fence, and/or for the approximate center point of the WWTF for any unit(s) located within the fence.

Identify a 911 physical address for the Facility location.

Line 14

• Evidence of ownership of facility or property: This shall include a copy of a fee simple title to the property or a lease agreement. This evidence of ownership requirement does not apply to land application facilities.

Line 15

 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 13.

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.

Line 16

 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 including the site characterization and facility design criteria identified in Lines 52 – 59.

Line 17

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.

This requirement shall not apply to land application sites.

Line 18

• Evidence that the property on which the facility is located is classified as a Class III or Class IV groundwater area.

Line 19

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

Line 20

 Listing of the types and quantity of material that will be managed at the Facility during the certification period (gallons or wet tons).

Line 21

 Municipal facilities shall only provide permitted design capacity estimates. Private facilities shall list amounts for the permitted design capacity of the facility and may list an operating capacity.

Line 22

An operator training plan includes 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.

Line 23

 Closure plan that satisfies the applicable criteria of § 6-1309 or Lines 133 - 138 of the Checklist.

Line 24

 Evidence of compliance with the financial responsibility and capability requirements of Subchapter 8 of the Rules or Lines 68 – 71 of the Checklist, or a plan for achieving compliance with these requirements which will result in compliance prior to the issuance of the draft certification. Facilities applying for the land application of biosolids or stabilized septage are exempt from the requirement unless the facility plans to construct or utilize onsite storage or transfer operations.

Line 25

 A signed solid waste certification application form providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant. A copy of the certification application public notice template is provided on the Program's website.

Line 26

Provide other information the Secretary may require.

§ 6-507 – Application for Variance from Solid Waste Rules

Line 27

Provide the specific Rule provision(s) for which the variance is sought including a
written demonstration of need for the variance, and the specific authority under 10
V.S.A §6613(d) including adequate prevention, abatement, or control of the air and
water pollution, extent or cost, time schedule, justification to relieve or prevent hardship
of a kind except that in the case of a variance from the siting requirements for a solid
waste management facility.

Line 28

 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 human health or safety.

Line 29

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).

Line 30

 Propose duration required to demonstrate the requested variance with meet compliance with the Rule or an alternative duration for approval by the Secretary.

Line 31

 Provide information demonstrating the variance will not generate, transport, treat, store, or dispose of hazardous waste in a manner less stringent than that required by Subtitle C of the Resource Conservation and Recovery Act of 1972.

Line 32

• A statement that notice(s) of application have been provided by the applicant to adjoining property owners and provide names of parties.

Subchapter 7 - General Siting, Design and Operating Standards

Line 33

Please note that as of the date of these instructions' latest revision, there are no Class I
Groundwater Areas designated in the state and only one Class II Groundwater Area
located in northeast Brandon. Unless that facility is located in Brandon, a location
review by the Drinking Water and Groundwater Protection Division is not required and a
statement in the Plan noting that the facility is not located in the area will suffice.

Line 34

 Demonstration the Facility is not located in a Class I or Class II wetland and their associated buffer zones. Agricultural exemptions through the Vermont Agency of Agriculture Food and Markets may apply.

Line 35

 Demonstration the Facility is not located in a Class III wetland and their associated buffer zones. Agricultural exemptions through the Vermont Agency of Agriculture Food and Markets may apply.

Line 36

• For reviews regarding the prohibition of siting within a National Wildlife Refuge, note that there are only two NWRs in located in Vermont. The Missisquoi National Wildlife Refuge is located in Swanton. The Silvio O. Conte National Wildlife Refuge is comprised of numerous non-contiguous parcels of land in the Connecticut River watershed. Unless the facility is located in Swanton or in the Connecticut River watershed, a statement in the Plan noting that the facility is not located in either of these areas will suffice. If the facility is located in Swanton or within the Connecticut River watershed, then a siting determination must be conducted and the findings must be submitted with the Plan.

Line 37

For reviews regarding the prohibition of siting within a Wildlife Management Area as
designated by the Agency, these areas only exist on state owned lands. If the facility is
not located on state owned lands, a location review by the Department of Fish & Wildlife
is not required and the plan should clearly state that this is the case.

Line 38

Demonstration the facility is not located in a threatened or endangered species habitat.
 If necessary, a location review by the Department of Fish & Wildlife may be required.

Line 39

 Floodway and Special Flood Hazard Area status should be documented by submitting FEMA flood plain mapping (if it exists) for the Facility, or a statement that the facility is not proximate to any surface waters or to any surface water that has been mapped for its flood plain. The Facility boundaries must be clearly delineated on the FEMA maps. The criterion does not apply to storage, or transfer facilities certified prior to the date of these Rules where there is no expansion of the Facility.

Line 40

 Demonstration that the facility boundaries are not located within a river corridor. Land application Facilities are exempt from the criteria.

Line 41

 Demonstration the facility is not located in a watershed for a Class A Waters as designated by the Agency of Natural Resources

Line 42

Demonstration the facility is not within 500 feet of an Outstanding Resource Water. The
criteria does not apply to storage, or transfer facilities certified prior to the date of these
Rules where there is no expansion of the facility.

§ 6-703 Siting Standards

Line 43

 The management plan must contain a discussion of how the isolation distances to seasonal high groundwater, surface water, bedrock, and drinking water supplies are sufficient to assure any release or emission from the facility will unduly harm public health and safety and will have the least possible impact on the environment by demonstrating the requirements of Lines 44 - 50.

Line 44

 Management plan should demonstrate the required isolation distances to the seasonal high-water table and the vertical separation to bedrock. Site specific required distances detailed in Table B: Required minimum isolation distances of the Rules.

Line 45

 Management plan should demonstrate the required isolation distances to public and private drinking water sources to ensure an emission or discharge form the facility will not adversely affect drinking water. Site specific required distances detailed in Table B: Required minimum isolation distances of the Rules.

Line 46

 The plan must describe how the isolation distances to property lines, homes, public buildings, or places of public assembly are sufficient to assure that there will not be objectionable odors, an unreasonable visual impact, or an unreasonable increase in noise levels created off-site. Site specific required distances detailed in Table B: Required minimum isolation distances of the Rules.

Line 47

• The plan must describe how the facility will not results in objectionable odors off site.

Line 48

 The plan must describe how the facility will not result in unreasonable level of noise or visual impacts off site.

Line 49

 The plan must describe how the facility is not located in appears that have development limitations such as highly erodible soils, steep slopes, or do not have the physical capability to support the facility.

Line 50

 The plan must demonstrate that the facility (or access road) is accessible from a state highway, federal highway or from a Class III or better town highway. This is best achieved by submittal of town highway maps showing the facility access points.
 Transportation from the treatment facility to each management facility, including the vehicle type and transportation route must be discussed in the management plan.

§ 6-704 Site Characterization and Facility Design

Line 51

 The facility management plan (FMP) shall describe the basis of design and operational plans for all facility components and at minimum will include criteria designated in Lines 52 to 59 of the Checklist.

Line 52

• The number of employees that will be utilized to properly operate the facility.

Line 53

A description of the types of vehicles which will use the facility.

Line 54

A description or diagram of vehicle flow at permitted design capacity.

Line 55

• The type, number and handling capacity of the equipment used.

Line 56

• Storage capacity at the facility, including the waste transfer schedule.

Line 57

Describe the facility's hours of operation (e.g., daily, weekly).

Line 58

A site plan map of the facility at a scale of 1:100 or greater that contains means to
prevent unauthorized entry, access roads, location of waste management transfer,
storage, treatment, and processing areas as well as facility and property boundaries.

Line 59

A contingency action plan which 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 may include failure of facility design, 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.

§ 6-705 - Operational Standards

Line 60

 Each owner and operator shall ensure that activities conducted at a facility under qualified personnel.

Line 61

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

I ine 62

 All samplings 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.

Line 63

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

Line 64

 Demonstration the operator will take all practicable steps to prevent the inclusion of hazardous wastes, into the waste stream being managed by the facility.

Line 65

 Access to the facility shall be controlled at all times to prevent unauthorized access to the facility.

§ 6-706 Reporting & § 6-707 Recordkeeping

Line 66

 Plan to maintain records to be submitted to the Secretary on a quarterly basis including the quantity of wastes, by type managed, sources and quantity of all solid wastes managed, and destination of all solid wastes managed by the facility. Land application operations should designate specific site or field applied.

Line 67

- The owner and/or operator shall plan to report to the Secretary any non-compliance with any term or condition of certification, the Rules, or other operating authority. At minimum report of discharge shall include:
 - State of Vermont Waste Management & Prevention Division shall be contacted within 24 hours of any unpermitted discharge from a facility or facility activities which poses a threat to public health, public safety, or the environment.
 - Within 7 days of discharge a written report submitted to all appropriate emergency response authorities including the type, quantity, and quality of waste discharged, and the actions taken by the owner, operators, or other responders to correct the problem.

Subchapter 8 - Financial Responsibility, Capability, and Estimates

Line 68

Owners and operators of solid waste management facilities shall demonstrate evidence
of financial responsibility for closure and, as appropriate, post-closure care of the
facility. Financial responsibility shall be provided 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.

Land application facility applicants without plans of onsite storage are exempt from the requirements of Subchapter 8.

Line 69

- Evidence of financial responsibility shall be submitted by an approved instrument.
 - A trust fund maintained by the applicant for the benefit of the Agency with a surety bond guaranteeing full payment into the fund.
 - A surety bond guaranteeing performance of closure or post-closure care.
 - An irrevocable standby letter of credit.
 - Other financial responsibility instruments that the Secretary may deem appropriate.

Line 70

• Financial responsibility instruments shall be in the amount of the total of the cost estimates for closure care based on each activity that would be required for a third-party contractor to perform closure in accordance with the closure plan.

Line 71

- The facility closure plan shall include 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. At minimum, the following factors shall be included in the plan:
 - (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) plans and methods of disposal at the facility
 - (5) the location of the facility and the character of the surrounding area
 - (6) requirements for surface drainage
 - (7) environmental quality monitoring systems, as required
 - (8) structures and other improvements to be dismantled and removed
 - (9) facility storage capacity for the types of wastes being received
 - (10) off-site disposal requirements
 - (11) an appropriate forecasted average rate of inflation over the active life of the facility
 - (12) vector control requirements

Subchapter 13 – Residuals Management Facilities § 6-1303 – Exceptional Quality Biosolids

Line 72

 EQ biosolids or EQ biosolids products produced in, or imported into, the State of Vermont shall meet the lower pollutant limit established in the Rules (§6-1306(o)), 40 CFR 503.13 – Table 3, or corresponding pollutant limits of the jurisdiction in which generated or prepared.

Line 73

• EQ biosolids or EQ biosolids product shall meet one of the pathogen reduction requirements established in 40 CFR Part 503.32(a) (3, 4, 7 or 8)

Line 74

 EQ biosolids or EQ biosolids product shall meet one of the vector attraction reduction requirements established in 40 CFR Part 503.33 Alternatives 1 – 8

Line 75

 EQ biosolids or EQ biosolids product shall be tested for all parameters listed under § 6-1306(n)

Line 76

 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 methods approved in the Rules § 6-1303(a)(5)

§ 6-1303(b) – Exceptional Quality Biosolids Applicability

Line 77

- Eq biosolids or EQ biosolids product generator shall provide a label to all person is plan is to market or distribute. Labeling requirement shall at minimum designate:
 - (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) of the Solid Waste Management Rules
- (6) recommendations for acceptable uses and non-uses of the material
- (7) suggested application rates for the recommended acceptable uses
- (8) suggested methods of application for the recommended uses.

Line 78

 Operators plan to submit quarterly report to the Secretary including total volumes distributed, analytical reports meeting contaminant standards, Class A pathogen reduction alternative demonstrated, vector attraction reduction alternative demonstrated, and a signed statement by the generator expressing the EQ biosolids or EQ biosolids product meets the requirements of the Rules.

Line 79

 Operators plan to comply with the record keeping requirements including retention of records shall be kept in a dry and secure location by the product generator for a minimum of five (5) years following the date on which the applicable report was submitted.

Line 80

 Applicable to 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. Generator shall meet the requirements of EQ biosolids or EQ biosolids product standards and bear labeling requirements of the Vermont Solid Waste Management Rules Effective Date 10/31/2020 Subchapter 13.

§ 6-1304 – Residuals Management Facility Siting Standards

Line 81

 For land application sites, demonstration that the facility is not located within zone 1 or zone 2 of an approved Public Water Supply Source Protection area. 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

Line 82

 For land application sites, demonstration that the facility is not located in a location with hydric soils.

§ 6-1305 – Residuals Management Facility Design Standards § 6-1305(a) – Treatment Facilities: General

Line 83

Demonstration facility is 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.

Line 84

• Demonstration facility is designed to prevent the reduction of the quality of the material, such as the rotting or contamination of stored wastes.

Line 85

Demonstration facility is designed to protect surface water, groundwater, and the air.
 Establish the monitoring network to detect potential emission or discharge of contaminants from the facility to surface water, groundwater, or the air.

Line 86

 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, an operator training plan 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, and 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.

§ 6-1305(b) – Treatment Facilities: Exceptional Quality Biosolids

Line 87

 Demonstration that 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 are met through completing Lines 88 – 91.

Line 88

• Demonstration EQ biosolids meets a process to further reduce pathogens as defined in 40 CFR 503.32(a) (3,4,7, or 8).

Line 89

• Demonstration Eq biosolids meets one of the vector attraction reduction standards

established in 40 CFR Part 503.33 Alternative 1 – Alternative 8.

Line 90

 Demonstration the EQ biosolids meet the contaminant standards established in § 6-1303(a)(1).

Line 91

 EQ biosolids or EQ biosolids products produced by composting processes shall meet the stability requirements of § 6-1303(a)(4)

Line 92

• Demonstration the facility will provide adequate storage for curing EQ biosolids or EQ biosolids product produced by composting processes.

Line 93

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.

§ 6-1305(c) – Land Application Facilities

Line 94

Wastewater treatment facilities certifying for the land application of biosolids 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. Provide details on storage design with site
schematic.

Line 95

- A soil survey map of each land application site must be included in the Plan, if available.
 A soil series description must be included for the soils of each land application site. Test pit logs should also confirm the mapping data.
 - Soil test pit and boring logs for each management site, including profile descriptions, depths to groundwater, depths to bedrock or other impervious strata, and any other relevant soil, geologic, or hydrogeologic information, must be included in the Plan.

 Soil chemistry data for each land application site, including total metals, pH, liming requirement, available and reserve phosphorus, available potassium, and available magnesium must be included in the Plan.

Line 96

The type of crop currently grown on each land application site, and the crop that will be
planted after application, must be included in the Plan. Also, the nutrient requirements
and anticipated yield of each crop must be discussed.

Line 97

The usable acreage of each land application site must be calculated. In general, this
will be the total area of a field, less those areas necessary to create the required
isolation distances and buffer zones. Indicate usable acreage on a site schematic
identifying isolation distances and buffer zones.

Line 98

 Floodplain status must be documented by the submittal of FEMA floodplain map. The site(s) boundaries must be clearly delineated on all maps. If FEMA floodplain maps are not available, a discussion of the site's potential for flooding by nearby surface waters must be presented.

Line 99

 The Plan must discuss any seasonal restrictions that may preclude or delay use of sites. Such restrictions may include seasonal high groundwater, low permeability soils that may delay drying after spring melt-off or heavy precipitation, cropping practices, etc.

Line 100

The Plan must document all known prior waste management activities at each site.
 Information presented must include details on the volumes of wastes applied to the sites, waste chemistry, and loading of regulated contaminants, if known. It is acceptable to report such information in tabular form by calendar year.

Line 101

 The remaining life of each waste management site, based on prior waste applications, waste metals concentrations, and anticipated application rates, must be calculated.

Line 102

• The Plan should include calculated application rate(s) for the first year of certification. Rates are determined based upon crop nitrogen and phosphorus demand as determined by the current University Cooperative Extension System's "Nutrient Recommendations for Field Crops in Vermont" handbook. Calculations should be based on a representative sampling and analysis of the material to be applied, the crop nutrient requirements, site soil, other nutrient sources used (including septage/biosolids, manures or chemical fertilizers) or other limiting factors.

Line 103

• The application must include a chemical analysis of the biosolids or other waste residual proposed for management. Laboratory analysis results should be submitted for all parameters specified by the Rules, plus the metals arsenic, molybdenum, and selenium which are regulated under 40 CFR Part 503. A list of the regulated parameters is presented in § 6-1306(n) of the Rules. The Plan should discuss historical biosolids quality data, any problems or exceedances of standards experienced, and implications to the proposed management strategy.

Line 104

• The Plan should document the most likely points of public access, and how public access to the sites will be controlled (posting, fencing, etc.). A detailed map showing the location of each land application site, access to each site, and measures to control public access must be included. The language used to inform the public about the nature of the site, and why public access is restricted, must be included. An example of acceptable language is "Restricted Area - Processed Septage/Biosolids Application for Agricultural Purposes," "NO TRESPASSING" signs have also been deemed to be acceptable.

Line 105

• Describe in the plan how stockpiles shall be managed to prevent leaching to groundwater and surface runoff.

Line 106

 Stockpile 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.

Line 107

 Plan of stockpile management to prevent the generation of nuisance odors beyond the facility boundary.

Line 108

 Demonstration that the liner composition shall be compatible with the material to be stored in a lagoon. Documented design of lagoons depicting a minimum of two (2) feet of freeboard.

§ 6-1306 – Residuals Management Facility Operating Standards

Line 109

 Plan should describe intended facility operations such that operations will not result in abnormal nutrient loss, runoff, or threat to human health or the environment. Include description of prohibited timeframes and limitations for application.

Line 110

 Demonstrate that all biosolids and septage land application sites are 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 Solid Waste Management Rules, the Vermont Required Agricultural Practices, and the Vermont USDA NRCS Nutrient Management Plan 590 Standard.

Line 111

The Plan should include calculated application rate(s) for the first year of certification.
Rates are determined based upon crop nitrogen and phosphorus demand as
determined by the current University Cooperative Extension System's "Nutrient
Recommendations for Field Crops in Vermont" handbook. Calculations should be based
on a representative sampling and analysis of the material to be applied, the crop
nutrient requirements, site soil, other nutrient sources used (including septage/biosolids,
manures or chemical fertilizers) or other limiting factors.

Line 112

 Plan to demonstrate 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.

Line 113

 Plan to demonstrate Cadmium concentrations shall be limited to 0.45 pounds per acre (0.5 kilograms per hectare) in any 365-day period.

Line 114

 If land application facility is determined to be within the 100-year floodplain describe management strategies intended to reduce nutrient loss, runoff, or threat to human health or the environment (incorporation, no-till management, cover crop, perennial crop)

Line 115

 Provide a site schematic identifying land application boundaries are not within the floodway portion of the 100- year floodplain.

Line 116

• Plan should describe the monitoring of groundwater to ensure three (3) feet to the bottom of the zone of incorporation prior to any land application operations.

Line 117

 Provide documentation that the Facility is not located within a Class I or Class II groundwater area.

Line 118

 Provide documentation that the Facility is not located in a watershed for a Class A stream or stream segment.

Line 119

 Plan to demonstrate that prior to the land application, intended biosolids or septage derived from domestic waste, is to be treated, by lime stabilization, pyrolysis, or by other chemical, biological, or physical processes, to significantly reduce or further reduce pathogens.

Line 120

 Plan to demonstrate that prior to the land application, intended biosolids or septage derived from domestic waste, is to be treated to meet the vector attraction reduction requirements.

Line 121

 Plan to demonstrate that prior to the land application, intended biosolids or septage derived from domestic waste, is to be treated to and assure that the final product is homogenous and not otherwise deleterious in character.

Line 122

- For land application sites used for biosolids or septage management describe how the Facility plans to follow restrictions the site use restrictions throughout the term of the certification.
 - (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.

Line 123

• Describe the facilities plan to monitor EQ biosolids, biosolids and septage intended for land application, soil, groundwater, surface water, and plant tissue. The Plan must identify who will be conducting all sampling and analysis of the various media under the certification. It is not necessary to identify a specific consultant or laboratory if one has not been selected. In such cases, the Plan should state that sampling and analyses will be conducted by qualified independent contractors. If facility personnel will be conducting these activities, the Plan must document those persons qualifications and experience in sampling and analyses. Facilities land applying residual materials will require groundwater monitoring. The Residuals Management Section requires the installation of up-gradient (background) and down-gradient wells or soil lysimeters for each land application site, to adequately assess any effects on groundwater. An appropriate groundwater monitoring plan must be included in the Plan. If no monitoring is proposed, the Plan must fully justify why no monitoring is appropriate. For applications which address residual waste management, the Plan must propose a schedule of the parameters and frequency of monitoring of the waste, site soils, groundwater, surface water, and plant tissues. In addition, the monitoring plan should provide a basic description of what sampling and analysis protocols will be employed. Generally, a reference to pertinent sections of SW-846 or the "Standard Test Methods for Water and Wastewater" will suffice.

Line 124

 Plan to prevent the inclusion of hazardous wastes in residual materials intended for land application.

Line 125

If land application of domestic septage is intended, include a plan to screen material to
the greatest reasonable extent of any debris, trash, non-biodegradable, or other
deleterious objects or removal plan of debris, trash, non-biodegradable, or other
deleterious objects from the land application site. Include the plan to dispose of
collected refuse at a municipal solid waste landfill.

§ 6-1308 - Residuals Management Facility Reporting and Recordkeeping

Line 126

 Plan to keep all reports, records, data, or other information required to demonstrate compliance in a dry and secure location by the biosolids or biosolids product generator or septage manager. All records are to be kept for a minimum of ten (10) years following the date on which the applicable quarterly report was submitted to the Secretary.
 Maintenance of records in an electronic format is acceptable.

Line 127

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). Identify the facility's plan to report the quantity of biosolids, septage, or residual wastes managed, location, volume received (if applicable), facility monitoring data, and fee (septage managers per 3 V.S.A §2822(j)(33)).

Line 128

 Plan for reporting information indicating non-compliance with the Certification or the Rules.

Line 129

 Plan for reporting any discharge or emission from the Facility posing a threat to public health & safety or the environment or resulting in the creation of a public nuisance.

Line 130

Plan for reporting any complaints received about Facility operations.

Line 131

 If a "commercial hauler" (per 10 V.S.A. § 6607a), documentation of registration for a DMV Waste Hauler Permit

Line 132

 Septage managers plan to track volumes for corresponding fees per 3 V.S.A §2822(j)(33)).

§ 6-1308 – Residuals Management Facility Closure

Line 133

 Facility closure plan should include the requirements identified in Line 134 to 138 and a financial instrument sufficient to cover the anticipated costs of a closure plan. Such financial instruments shall be in conformance with Subchapter 8 of these Rules.

Line 134

Describe the necessary step to close the Facility,

Line 135

Identify the labor, materials, and testing necessary to close Facility(s)

Line 136

• Include in the Facility closure plan a schedule for closure activities including estimate year of closure not to exceed the expiration of the certification.

Line 137

Individualized cost estimate for all necessary steps to close the Facility.

Line 138

• Plan for annual revision of the Closure Plan and financial instrument (If applicable).

Act 150 Notice and Comment Period Requirements By Permit Type

Notice Type	Upon Application Submittal	Administratively Complete Application	Draft Decision (DD)	Comment / Meeting Request Period	Public Meeting	Post-Meeting Comment Period	Final Decision
Type 1 Federal General Permits & Individual Clean Air/Water Act	Applicant notices adjoining property owners by US mail	Notice sent to all federally required parties. For individual permits, notice of complete application required ≥15 days prior to draft decision	Notice posted to ENB & all related documents that were considered for the decision. Factsheet posted with Draft Decision. Draft decision cannot be posted w/in 15 days of Administratively Complete notice. *Newspaper noticing required for permits under Clean Water Act	≥ 30 days after draft decision posted. Meeting request can be made any time during the comment period	Must be announced for ≥30 days prior to meeting date	Lasts ≥ 7 days after public meeting	Notice posted to ENB with final decision, response to comments, and factsheet.
Type 2 Individual Permits	Applicant notices adjoining property owners by US mail	Notice posted to ENB	Notice and documents posted to ENB	≥ 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 ENB with final decision and response to comments.
Type 3 State general permits	No notice required to adjoining property owners	Notice posted to ENB	Notice and documents posted to ENB	≥ 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 ENB with final decision and response to comments.
Type 4 Includes most NOIs; Minor amendments for issued permits	No notice required to adjoining property owners	Notice posted to ENB	Notice and documents posted to ENB	≥ 14 days after draft decision posted.	N/A	N/A	Notice posted to ENB with final decision and response to comments.
Type 5 Emergency Permits	N/A	N/A	N/A	N/A	N/A	N/A	Notice posted to ENB with final decision.

NOTES:

- Each notice or comment time period in the chart is inclusive of weekend days.
- There are three kinds of amendments under Act 150. Those are administrative, minor, and major. The kind of amendment will dictate the type of notice needed.
 - Major = Same process as original permit
 - Minor = Treated as a Type 4 permit
 - Administrative = No notice procedures required
- Unless indicated in the chart above, all notices are sent by email.
- Further details may be found in <u>VSA Title 10 Chapter 170</u>

SAMPLE: LANDOWNER AGREEMENT

This is a sample of an agreement between a Permittee and the owner of a proposed site for sewage biosolids management via land application. A similar agreement would also be executed between a septic service or other waste manager for other types of residual waste and the owner of a proposed management site. Good relations between the waste manager and the landowner are very important for smooth operation of a waste management facility. The agreement is a good place to call out, or put in writing, the responsibilities of site management. The assignment of responsibilities is open to negotiation, and there are no legal requirements regarding the assignment of responsibilities. Such responsibilities include monitoring the site for the required parameters, allowing for access to take monitoring samples, maintaining the soil pH within the required range, managing the site in regard to crop harvesting/use and nutrient requirements, controlling public access to the site, and meeting all other conditions in the certification issued by the Agency of Natural Resources. This sample agreement should be edited to fit the actual activities being proposed. Please note that it is not necessary to execute a landowner agreement if the Permittee is also the owner of the proposed management site.

This is a sample agreement, not a form for submittal.

Agreement is made this [insert date], by and between the [insert name of permittee], a [municipality/business] in [insert location], Vermont, hereinafter referred to as the "Permittee," and [insert landowner's name], of [insert landowner's town of residence], Vermont, hereinafter referred to as the "Landowner," for the development and implementation of a sewage biosolids management plan which includes land application on the property of the Landowner, located on [insert location] in the Town of [insert town name], Vermont, and containing approximately [insert number] acres.

For the consideration and on the terms and conditions hereinafter set forth, the Landowner authorizes the Permittee or its authorized representatives, to apply treated sewage biosolids to the approved Landowner's site(s) for a period of five (5) years, commencing on [insert date], and ending on [insert date].

- 1. Landowner Responsibilities:
 - A. The Landowner shall permit the Permittee, or representatives of the Agency of Natural Resources (the "Agency"), to enter each site for the purposes of performing soil tests and other investigations, to determine the suitability of the site to receive treated sewage biosolids, and to perform such monitoring of soil, groundwater, surface water, and vegetation, as may be required to comply with the Permittee's certification and any other federal, state, or local regulations.
 - B. The Landowner shall comply with all Agency regulations and guidelines applicable to use of each site. These include, but are not limited to: restricting public access for at least twelve (12) months following the last application of waste to the site; following harvesting requirements for proper site management; not growing crops for direct human consumption for at least thirty-eight (38) months following last application; not pasturing domestic food source animals for at least six (6) months following last application; not harvesting a feed crop from an amended site for at least five (5) weeks following last application; and not feeding silage from the site to domestic food source animals for at least four (4) months following last application. The Landowner shall also notify the Permittee of on-site activities such as manure or fertilizer applications, to ensure that the site crop nutrient requirements are not exceeded.
 - C. The Landowner shall allow employees of the State of Vermont to enter the subject property for the purpose of processing the application for certification.
- 2. Permittee Responsibilities:
 - A. The Permittee shall obtain all necessary permits, certifications, and other approvals required by federal, state, and local authorities for the land application of treated sewage biosolids.

- B. The Permittee shall bear the responsibility for all costs associated with obtaining the necessary approvals to apply treated sewage biosolids to each site and shall be responsible for the costs of site testing, sampling, and analysis of the biosolids, compliance with certification conditions, liming of sites, the rental or purchase of necessary equipment, and the appropriate application of treated sewage biosolids to the sites.
- C. The Permittee agrees to sample and analyze the treated sewage biosolids at a frequency determined by the Agency, and to provide a copy of the analysis to the Landowner. The parameters of the analysis will be determined by the Agency and stated in the Permittee's certification. They will include, but not necessarily be limited to:

Nutrients: Total Kjeldahl Nitrogen (TKN) Ammonia Nitrogen (NH3-N)

Nitrate Nitrogen (NO3-N)

Total Phosphorus (TP)

Total Potassium (TK) Water Extractable Phosphorus

Metals: Aluminum Arsenic Barium Cadmium

Chromium Copper Lead Molybdenum Nickel Selenium Silver Zinc

Other Parameters: pH Percent Solids

Total PCB's per- and polyfluoroalkyl substances (PFAS)

- D. The Permittee agrees that the application of treated sewage biosolids will be coordinated with the Landowner, and that the application will be in conformance with the Permittee's certification, issued by the Agency, and any subsequent applicable regulations or guidelines for land application. Conditions may include, but are not limited to, incorporation of the biosolids into the soil, within forty-eight (48) hours of application, where a site lies within a 100-year flood plain.
- E. The Permittee shall maintain the soil pH of each site between 6.5 and 8.0, while the site is receiving treated sewage biosolids. Records of the site pH, liming requirement, and amounts of lime applied shall be kept by the Permittee.
- F. The Permittee shall maintain records of the quantities of treated sewage biosolids applied to each site. The Permittee shall give a copy of these records to the Landowner.
- G. Party to this agreement shall have the right to terminate said agreement upon thirty (30) days prior written notification to the other party.

In Witness whereof, and dated at town, Vermont, this Date.

WITNESS:	Print Name as Signed
I ANDOWNED.	Drint Name on Signed
LANDOWNER:	Print Name as Signed
PERMITTEE:	Print Name as Signed

rev. 4/15/2021