

**Solid Waste Management Facility
Fact Sheet
March 2016**

APPLICANT: Town of Benson
Benson, Vermont

OPERATOR: Town of Benson

AUTHORIZED REPRESENTATIVE: Guy Charlton, Selectman

SOLID WASTE I.D. NUMBER: SW-107

PROJECT I.D. NUMBER: RU98-0314

FACILITY DESIGNATION: Biosolids land application facility

I. GENERAL

This fact sheet is required by Section 6-305(a)(6) of the Vermont Solid Waste Management Rules, effective March 15, 2012 (Rules). Section II of this fact sheet sets forth the basis of the draft certification by detailing how the application by the Town of Benson (Applicant) conforms to Rule requirements. For clarity, actual Rule language is highlighted, followed by the Applicant's response to show conformance. Sections of the Rules which are not germane to this application have been omitted and are not referenced herein.

The application submitted is for the certification of one agricultural field located in the Town of Benson, Vermont, to be used for the management of wastewater treatment sludge (biosolids).

II. BASIS OF THE DRAFT CERTIFICATION

A. General

This basis of the draft certification relies upon the data, judgment, and other information supplied by the operator, the hired professional consultants and other experts who have participated in the preparation of the application.

1. Certification of the Applicant's solid waste management facility (Facility) is required by 10 V.S.A. §6605 and Section 6-303 of the Rules.

2. On January 16, 2015, the Applicant submitted an application to the Agency of Natural Resources, Department of Environmental Conservation (Department) for certification of a facility for the management of biosolids via land application.
3. The application consisted of a plan (Plan) for the management of wastewater treatment biosolids via land application, January 12, 2015. The recertification application was prepared by Mary Ellen Hayward Parkman, PE of Parkman Engineering, Chelsea, Vermont.
4. The Facility consists of one (1) agricultural site totaling 10 ± usable acres on a farm property owned by Jeffrey L. Noble, and any vehicles or other equipment necessary for proper operation of the Facility.
5. The application was reviewed by the Department and determined to be administratively incomplete on January 26, 2015. Upon submittal of additional information by the Permittee, the application was determined to be administratively complete on October 30, 2015.
6. The application was reviewed on its technical merits and was determined to be technically complete on March 8, 2016.

B. Conformance with the statutes

10 V.S.A. §6605 (c) - Planning

(c) The secretary shall not issue a certification for a new facility, except for a sludge or septage land application project, unless it is included in an implementation plan adopted pursuant to 24 V.S.A. § 2202a, for the area in which the facility is located. The implementation plan must be consistent with the state plan and in conformance with any municipal or regional plan adopted in accordance with 24 V.S.A. chapter 117. After July 1, 1990, the secretary shall not recertify a facility except for a sludge or septage land application project unless it is included in an implementation plan adopted pursuant to 24 V.S.A. § 2202a, for the area in which the facility is located. The implementation plan must be consistent with the state plan, unless the secretary determines that recertification promotes the public interest, considering the policies and priorities established in this chapter. After July 1, 1990, the secretary shall not recertify a facility, unless it is in conformance with any municipal or regional plan adopted in accordance with 24 V.S.A. chapter 117.

Response: The Town Plan for Benson is silent on biosolids application.

10 V.S.A. §6605 (f) - Notification

(f) On or before the date of filing any certification or permit application for a facility, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located, and any adjacent Vermont municipality if the land is located on a boundary. The applicant shall furnish to the certifying or permitting authority the names of those furnished notice of application. Notwithstanding the provisions of subsection (c) of this section, the secretary shall not issue a certification for a new facility or a recertification for an existing facility unless the town, city, or village in which the facility is located has been notified.

Response: The Applicant submitted documentation that this notification had been conducted in accordance with the provisions of this statute.

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

(a) Disqualifying criteria. Any nongovernmental entity or person applying for a certification under sections 6605, 6605a or 6606 of this title, for interim certification under section 6605b of this title, or for a waste transportation permit under section 6607a of this title, shall be denied certification or other authorization if the secretary finds:

(1) that the applicant or any person required to be listed on the disclosure statement pursuant to subdivision (b)(1) of this section has been convicted of any of the following disqualifying offenses in this or any other jurisdiction within the 10 years preceding the date of the application: [see statute for list of offenses]

(2) that the applicant or any person required to be listed on the disclosure statement pursuant to subdivision (b)(1) of this section, alone or taken together, have committed more than one violation of environmental: statutes; rules; orders; certifications; or permits, issued by any jurisdiction, which have the potential to significantly harm the public health, public safety or the environment, giving due consideration to the size and scope of the applicant's business operations.

Response: The applicant is a municipality and exempt from this requirement.

Rule 6-304 - Application For Certification

- (6) **the location of the facility, using the Vermont plane coordination system on the appropriate Vermont orthophoto tax map or through use of a ground position system.**

Response: The land application site is located in the Town of Benson. The approximate center point of the agricultural site is:

Latitude 43⁰ 41' N
Longitude 73⁰ 18' W

- (12) **evidence of fee simple title in or an unencumbered right to possession of the property to be used for the facility, except that this is not required for diffuse disposal facilities;**

Response: The Applicant provided evidence of this requirement.

SUBCHAPTER 5 SITING

Rule 6-502 Prohibited Areas

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

- (1) **In the case of discrete disposal facilities, in the Green Mountain National Forest except for a one half (0.5) mile corridor drawn from the centerline of the right-of-way of each Federal and secondary highway or as approved by the National Forest Service. This prohibition does not apply to diffuse disposal facilities;**

Response: The Facility is not a discrete disposal facility.

- (2) **Class I and Class II Groundwater Areas;**

Response: No Class I and Class II Groundwater areas are designated in the State of Vermont.

- (3) **Class I and Class II wetlands and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless a Conditional Use Determination has been issued by the Agency;**

Response: The Department's Watershed Management Division has reviewed the location of the facility and determined it not sited in a Class I or II wetland.

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

Response: The Department's Watershed Management Division has reviewed the location of the facility and determined it is not sited in a Class III wetland.

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

Response: There are only two National Wildlife Refuges in the State of Vermont and they are located in Swanton and in Putney.

- (6) **A wildlife management area as designated by the Agency;**

Response: A review of the facility's location by the Department of Fish & Wildlife has documented that the Facility is not sited in a wildlife management area as designated by the Agency.

- (7) **A threatened or endangered species habitat area as designated by the Agency, except for diffuse disposal facilities;**

Response: A review of the facility's location by the Department of Fish & Wildlife has documented that no threatened or endangered species habitat area is designated at the sites by the Agency.

- (8) **A watershed for a Class A Waters; as designated by the Vermont Water Resources Board;**

Response: A review of the facility's location by the Department's Watershed Management Division documented that the facility is not sited within the watershed for a Class A stream or stream segment.

- (9) Discrete disposal within the floodway portion of a one hundred (100) year floodplain or below the one hundred (100) year flood stage elevation;**

Response: The Facility is not discrete disposal facilities.

- (10) In the case of diffuse disposal facilities, within the floodway;**

Response: A review of the facility's location by the Department's Watershed Management Division documented that the facility is not sited within a floodway.

- (11) Within five hundred (500) feet of an Outstanding Natural Resource Waters as provided for in Water Quality Standards and as designated by the Vermont Water Resources Board.**

Response: The Applicant has demonstrated that the site is not within five hundred (500) feet of an Outstanding Natural Resource Waters.

- (12) In cases of diffuse disposal facilities, within zone 1 or 2 of an approved Public Water Supply Source Protection Area, except that the Secretary may, on a case-by-case basis, make a determination that a diffuse disposal facility may be sited in zone 2 of an approved surface water a Public Water Supply Source Protection Area.**

Response: The Applicant has demonstrated that the Facility is not located in a Public Water Supply Source Protection Area.

- (13) In the cases of discrete disposal, no facilities shall be located:**
- (A) within the Source Protection Area of a public water system using a groundwater source.**
 - (B) within zone 1 or zone 2 of a Source Protection Area for a public water system using a surface water source.**

Response: The Facility is not a discrete disposal facility.

Rule 6-503 Siting Standards

(a) General Performance Standard: Facilities shall be located such that an emission or discharge from the facility will not unduly harm the public health and will have the least possible reasonable impact on the environment, regardless of the technology used to minimize and emission or discharge.

(b) In order to meet the general performance standards of subsection (a) of section 6-503, the operator must satisfactorily demonstrate the following:

- (1) that the isolation distances to high seasonal groundwater, bedrock and surface waters are sufficient to assure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and rules.**

Response: This requirement uses an isolation distance to assure an emission or discharge will meet applicable environmental quality, public health standards, and rules. Isolation distances to surface water, groundwater, and bedrock do pertain in this case. The Applicant has demonstrated that all applicable isolation distances are met. Discharges and emissions to the environment should be in compliance with applicable environmental quality and public health standards and rules if the Facility is properly operated.

- (2) that the isolation distance to drinking water supplies is sufficient to assure that an emission or discharge from the facility will not adversely affect drinking water;**

Response: The isolation distance to drinking water supplies is in excess of 2500 feet, sufficient to assure that an emission or discharge from the Facility will not affect drinking water sources if the facility is properly operated. The required minimum siting distance from drinking water sources is 300 feet.

- (3) that the isolation distances to property lines, will be no less than fifty (50) feet or as determined by**

the Secretary, and that isolation distances to homes, public buildings (including schools, hospitals, and nursing homes), or places of public assembly are sufficient to assure that the facility will not:

(A) result in objectionable odors off site of the facility;

Response: The odor control measures and normal operation of the biosolids management facility are sufficient to assure the Facility will not result in objectionable odors off site. The standard of care elicited in the described operation of the Facility should be sufficient to assure odor control.

(B) result in an unreasonable visual impact for anyone off site of the facility;

Response: For all practical purposes, operation of the land application site will be visually indistinguishable from conventional agricultural activities occurring at the site.

**(C) unreasonably increase the level of noise detectable by persons off site of the facility;
or**

Response: Proper operation of the Facility should not increase the level of noise detectable off site.

(D) otherwise adversely affect public health.

Response: Because of the factors inherent in the Facility design and site location, efforts have been made to ensure the Facility should not otherwise adversely affect public health.

(4) that any facilities or activities meet the minimum criteria in the following table;

CATEGORY	FACILITY TYPE			
	Diffuse Disposal Injection	Other	Discrete Disposal	Subchapter 12 facilities
Minimum vertical separation from high seasonal groundwater	3'	3'	6'	n/a
Minimum vertical separation to bedrock	3'	3'	10'	n/a
Minimum distance to waters of the State, including intermittent streams and all larger water bodies	50'	100'	300'	100'
Distance to drinking water source from the waste management boundary	300'	300'	1000'	100'
Distance to property line	25'	50'	50'	50'

NOTE: The shaded column applies to this Facility.

Response: The Application adequately demonstrates that all applicable siting isolation distance criteria are met or exceeded. Specific isolation distances are listed in section 6-606(b)(1)(B)(c).

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

Response: A review of soil descriptions and maps, topographic maps, and other supporting documents demonstrates that the site

does not have serious development limitations and is suitable for the land-based management of biosolids.

- (6) **that the facility is accessible from a state or federal highway or a Class III or better town highway.**

Response: The land application site is accessed from Stage Rd. This road is a Class III or better town highway.

SUBCHAPTER 6 DESIGN STANDARDS

Rule 6-602 Submittals

- (a) **The management plan documentation shall be prepared under the direction of an engineer, licensed in the State of Vermont, unless waived by the Secretary.**

Response: The application was prepared by Mary Ellen Hayward Parkman, PE and certified to conform to the Rules. Ms. Parkman is a Professional Engineer licensed to practice in the State of Vermont.

- (b) **The engineer shall make appropriate use of available expertise for evaluating geology and hydrogeology, soil science, air pollution control and impacts, and other areas of specialized knowledge which may be required to assemble a management plan.**

Response: The Application provided evidence of the use of appropriate science and technology for the identification and evaluation of applicable siting criteria.

Rule 6-603 Site Characterization

A facility management plan must be developed by the Applicant. This document shall include information necessary to fully characterize the site... At a minimum, the site characterization must address, unless deemed nonapplicable by the Secretary:

(a) soils and surficial geology,

Response: Information submitted regarding site soil characteristics indicates that the site is suitable for the land application of biosolids. The information consists of test pit logs and Natural Resource Conservation Service mapping and soil series descriptions. The Applicant's consultants reported that field investigations confirm soil type and characterize the soil as follows:

The entire site is comprised of Kingsbury silty clay loam. Kingsbury soils are characterized by poor permeability. However, the plan states that the biosolids will be incorporated into the soil in order to increase the permeation as well as to decrease the attractiveness to vectors.

Soil pH (aqueous) was determined in June, 2011 to be 6.4 S.U. (Standard Units). Agricultural lime will be applied to the site at a rate sufficient to raise the soil pH to 6.5 S.U. before any land application event.

Use of the site for land application of biosolids is specifically prohibited if the soil pH is not within the specified range of 6.5 S.U. to 8.0 S.U. (aqueous).

Soil metal and nutrient analysis revealed nutrient and metals concentrations within an acceptable range.

(b) bedrock geology,

Response: Bedrock beneath the site is deep (40' – 60'), stratified, highly fractured limestone or dolomite. Depth to bedrock exceeds three (3) feet in all portions of the usable acreage.

(c) integrated groundwater geology and geochemistry,

Response: Groundwater monitoring wells are no; installed at the site, as it is expected that land application will only occur every 10 years or more. If more frequent land application events are needed to manage the biosolids, groundwater monitor wells will be

installed. No manure or chemical fertilizer is used at the land application site.

(d) topography,

Response: Slope on the sites was determined to be less than 5% (percent). The Applicant has proposed to incorporate all biosolids below the soil surface within 48 hours of application in order to facilitate infiltration and to reduce the attraction of vectors.

(e) surface water,

Response: The land application site is not within a mapped 100 year floodplain.

The land application site is not located within a mapped floodway.

(f) groundwater location and flow direction,

Response: Groundwater depth varies during the year, depending on season and weather conditions. Groundwater flow direction is predicted to be in a southerly direction toward Hubbarton Brook.

(g) air quality, and

Response: Air quality at the site is typical of an agricultural setting in western Vermont. There are no significant sources of air pollution proximate to the site, and site activities should not produce any adverse impacts on the quality of the local airshed.

Rule 6-606 Disposal Facilities

(a) General Performance Standards

- (1) Facilities shall be designed to minimize, to the greatest extent feasible, the possibility of an emission or discharge of contaminants from the facility and, should an emission or discharge occur, the threats from the emission or discharge to public health and the environment.**

Response: The Facility is designed specifically to minimize any such potential impacts by the very nature of its being a land based

management system. The standard of care established in daily operations and the sampling and analyses required by the certification are sufficient to meet these criteria.

- (2) **Facilities shall be designed to provide for a positive means to control odor, vectors, and dust so as to preclude hazards to public health and safety or the creation of nuisance conditions.**

Response: Biosolids generated at the wastewater treatment facility will be stabilized via the addition of hydrated lime in accordance with the standards and procedures set forth in the certification, the Rules, and in 40 CFR Part 503 to reduce and control odors, vectors, dust, and nuisance conditions. Land application of biosolids on the proposed site shall be conducted in accordance with the conditions set forth in the certification which are intended to prevent such conditions from developing.

- (3) **Facilities shall be designed to protect surface water and groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to the surface water, groundwater, or the air.**

Response: The monitoring plan as set forth in the certification is adequate to detect any such emissions. Facility design and operating conditions are adequate to minimize the risk of such a release.

- (4) **Facility management plans shall include provisions for contingencies for the proper management of waste during both planned and unplanned events when the facility is not in operation.**

Response: As a contingency management plan, the Applicant proposes shipping biosolids to the Rutland City Wastewater Treatment Facility.

- (5) **Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of waste receive organized instruction that teaches them to perform their duties in a way that ensures the facility's compliance with these rules and conditions of certification.**

Response: The Applicant proposed an acceptable means of training facility personnel.

(b) Standards For Specific Facilities

(1) Diffuse Disposal Facilities

- (A) Facilities shall be designed to provide for an aggregate storage volume for five (5) months of the waste generated to account for storage during winter months, inclement weather, and normal agricultural and silvicultural activities. Alternatives which provide the equivalent of storage are acceptable if adequately documented.**

Response: The Applicant is able to manage biosolids during times when land application is precluded or prohibited by allowing it to remain in the treatment lagoons until the proper conditions exist.

- (B) Design documentation shall detail each disposal site with respect to soil character, cropping practices, usable area, floodplain and seasonal restrictions, application area and rates, and site life, as these affect the management of the facility.**

Response: Applicant has submitted documentation of all these aspects. A brief review shows:

The Application proposes land application of biosolids on one (1) agricultural site constituting a total of 10± acres.

(b) Application Rates

Based upon average crop nitrogen demand of 150 lbs/acre, the following maximum application rate was reported:

6.23 Dry Tons / Acre

Continued annual applications of biosolids is not anticipated.

(c) Isolation Distances

The following isolation distances were used in the determination of usable acreage for the land application of biosolids, all of which were met:

<u>CRITERIA</u>	<u>REQUIRED</u>	<u>AVAILABLE</u>
Depth to Water Table	3 ft.	>3 ft.
Surface Waters	50 ft.	apx. 1300 ft.
Occupied Dwellings	100 ft.	apx. 2800 ft.
Property Lines, Roads	25 ft.	apx. 30 ft.
Depth to Bedrock	3 ft.	>10 ft.
Private Drinking Water	300 ft.	apx. 2800 ft.

(d) Soils Information and Site Characteristics

Soil and site descriptions are located in Section 6-603(a).

(e) Site Life:

Site life calculations for the facility were not done due to the infrequency of land application at the site. It is anticipated biosolids will be land applied every +/- 10 years.

(C) Land application rates shall be based on agronomic rates unless otherwise limited by the Secretary. Waste quality must be fully documented as required in §6-702(a)(10).

Response: Application rate is based upon the agronomic requirements of the crop to be grown (hay). Application rate calculations are based on the results of waste analyses, soil analyses, past biosolids applications, and all other sources of nutrients applied to the sites. Based on the most recent biosolids analysis (June 2011), the maximum calculated application rate is 6.23 dry tons per acre. New rates will be calculated before the next disposal event.

(D) Design shall show obvious points of public access and provide for any appropriate measures to control public access.

Response: The Application adequately documents site access and provides for means to control public access to the sites. The site will be properly posted to control public access.

SUBCHAPTER 7 OPERATIONS STANDARDS

Rule 6-701 General Standards Applicable to All Facilities

- (a) Adequate and qualified personnel must be retained to operate solid waste management facilities.**

Response: The Facility will be operated by individuals trained in the operations of the equipment and the process.

- (b) Before a solid waste management facility may commence operations, the engineer for the facility must certify it was built in accordance with requirements of the certification and furnish a complete set of as-built drawings to the Secretary.**

Response: No construction of new facilities is authorized by this certification.

- (c) Operators of a solid waste management facility shall adhere to all conditions of the facility certification and these rules.**

Response: The operator(s) will be instructed and required to adhere to the requirements of the Facility's certification and the Vermont Solid Waste Management Rules.

- (d) At least one contact person identified in the certification application shall be on site during all hours of operation, unless specifically waived by the Secretary, in which case a contact person must nevertheless be able to be contacted at all times.**

Response: Primary contact: Guy Charlton, Selectman
Town of Benson
802-537-2611

Secondary contact: Edward Tracey, Chief Operator
Town of Benson WWTF
802-468-5315

- (e) All sampling must be performed by properly trained and qualified personnel. Qualified personnel must have a minimum three (3)**

months training and (6) six months experience in sampling or analysis.

Response: The Applicant will ensure that adequately trained and experienced staff will conduct all monitoring and sampling. Analysis of samples will be conducted by an appropriate independent laboratory.

- (f) The owner and operator shall take all steps necessary to prevent and/or control spills, nuisance dust, vectors, and odors.**

Response: Appropriate preventative and control measures for mitigating spills and other discharges have been incorporated into the Facility design. Should any spill or discharge occur which threatens the public health and safety, or the environment, or may create a nuisance condition, the operator is required to contact the Department, the local health officer, and select persons of the affected municipalities. Requirements established in the certification establish a reasonable standard of care to prevent and/or control emissions or discharges from the Facility.

- (g) The operator shall take all practicable steps to prevent the inclusion of hazardous wastes, as defined and regulated by Vermont's Hazardous Waste Management Regulations, into the waste stream being managed by the facility.**

Response: The Facility's waste stream is derived via the municipal sewer collection system, the operation of which is governed by the Applicant's NPDES Permit and other applicable State and Federal permits.

- (h) Access to the facility shall be controlled, as appropriate, in a manner approved by the Secretary.**

Response: Access to the application site will be restricted by posting appropriate signs that warn the public of the regulated activities.

Rule 6-702 Standards for Disposal Facilities

(a) Diffuse Disposal Facilities

- (1) Application of wastes to frozen ground or on top of snow covered ground is prohibited.**

Response: This prohibition is specifically stated in the certification.

- (2) Application rate shall be determined on the basis of representative sampling and analysis of the waste applied, the crop nutrient requirements, other sources of nutrients used, and limited by other factors such as metals.**

Response: The application rate is calculated as specified by this Rule. The application rate must be evaluated and recalculated before each disposal event to account for changes in biosolids quality and land use practices.

- (3) Cadmium application shall be limited to 0.45 pounds per acre annually, and 4.5 pounds per acre cumulatively.**

Response: Cadmium application will be 0.022 lb Cd/acre if biosolids are applied at the maximum allowable rate. The cumulative Cadmium loading rate at the site is 0.0001 lb Cd/acre.

- (4) The pH in the zone of incorporation for all sites used for application of solid wastes shall be maintained between 6.5 and 8.0 during the time of application.**

Response: Control and monitoring of the site's soil pH is a condition specifically stated in the certification. The Certification will establish that the Applicant shall not apply biosolids to the site when the soil pH is not within the required range.

- (5) Application of waste is prohibited on the 100 year floodplain unless incorporated within 48 hours of application.**

Response: The floodplain designation for the site indicates the site is not within a mapped 100 year floodplain.

- (6) Application of waste is prohibited at times when groundwater is within three feet of the zone of incorporation.**

Response: The certification requires depth to groundwater be verified prior to land applying the biosolids by direct measurement of the depth to saturated soil.

- (7) Application of waste is prohibited in Class I and Class II Groundwater Areas.**

Response: No Class I or Class II Groundwater Areas have been designated in the State of Vermont.

- (8) Application is prohibited in a watershed for a Class A stream or stream segment.**

Response: The Applicant has demonstrated that the site is not located in such an area.

- (9) Where solid waste is a domestic waste unless otherwise directed by the Secretary, the following restrictions shall apply:**

- (A) Provisions for controlling public access shall be established and maintained for the duration of disposal, and for twelve months beyond the last disposal episode.**
- (B) Domestic food source animals shall be prohibited from grazing on disposal facilities for the duration of the project and for six months beyond the last disposal episode.**
- (C) Sites amended by waste application shall not be used for production of crops for direct human consumption, for the duration of the project and for thirty six months beyond the final disposal episode.**
- (D) Feed crops grown on waste amended disposal facilities shall not be harvested for a period of five weeks beyond the last disposal episode.**
- (E) Silage to be used as a feed crop, from waste amended sites shall not be fed to domestic food source animals for a period of four months after the last application of waste.**

Response: All site use and access restrictions are a requirement of the certification.

(10) The following requirements for sampling, analysis, and standards shall be met:

(A) All wastes intended for diffuse disposal shall be sampled and analyzed for the following parameters. The frequency will be established in each certification.

(i) The waste must pass the Extraction Procedure (EP) Toxicity Test Method (or other EPA approved extraction procedure). This can be done one of two ways; through sampling and analysis or calculation.

(ii) The waste must be tested for total metals concentration for the following metals.

Cadmium, chromium, copper, nickel, lead, zinc, mercury.

Note that arsenic, silver, barium, and selenium must be analyzed if the calculation method, Subsection (10) above is chosen.

(iii) The waste must be tested for total polychlorinated biphenyls (PCBs).

(iv) The waste shall be tested for the following nutrients, if land application is the chosen disposal method.

Percent solids, pH, total Kjeldahl nitrogen, ammonia nitrogen, nitrate nitrogen, total phosphorus, and total potassium.

Response: Waste testing and analysis requirements which meet or exceed the minimum requirements of the Rule are specifically designated in the certification.

(B) All wastes intended for diffuse disposal, or for processing at a composting or co-composting facility, must meet the following standards. At the Secretary's discretion, these standards may be made more or less stringent.

(i) EP Toxicity Test Method limits (or other EPA approved extraction procedure), or demonstrate mathematically that based on the total metals concentrations in the waste, it will not fail EP Toxicity Test Method limits.

(ii) Total metals concentrations of the wastes must be less than or equal to:

<u>Metal</u>	<u>mg/kg, dry wt.</u>
Cadmium (Cd)	25
Copper (Cu)	1000
Lead (Pb)	1000
Nickel (Ni)	200
Zinc (Zn)	2500
Chromium (Cr)	1000
Mercury (Hg)	10

(iii) Total PCB = 10 mg/kg or less

The most recent biosolids analysis results are as follows: (reported in June 2011)

<u>Metal</u>	<u>mg/kg, dry wt.</u>
Cadmium (Cd)	1.8
Copper (Cu)	440
Lead (Pb)	43
Nickel (Ni)	23
Zinc (Zn)	700
Chromium (Cr)	28
Mercury (Hg)	<0.13
Arsenic	<8.5
Selenium	<4.2
Molybdenum	<8.5

Total PCB = less than 10 mg/kg

A TCLP analysis must be performed before the next land application event.

- (iv) **Pathogen reduction standards, as applicable in subsection (a) or (b) below.**
 - (a) **Compost or Co-Compost. To be considered compost or co-compost, and eligible for disposal by general distribution, the waste must undergo a process to further reduce pathogens as defined in Appendix B.**
 - (b) **Diffuse disposal by land application. Prior to land application of solid waste derived from domestic waste, the waste must undergo a process to significantly reduce pathogens or a process to further reduce pathogens, as defined in Appendix B.**

Response: The Applicant will meet the requirements of a Process To Significantly Reduce Pathogens via lime stabilization, as follows:

adding sufficient hydrated lime, $\text{Ca}(\text{OH})_2$ or its equivalent, to raise the pH of the biosolids to greater than or equal to 12.0 standard units (S.U.) and maintain the biosolids at a pH greater than or equal to 12.0 S.U. for a minimum period of two (2) hours without the addition of additional lime.

- (11) **Testing frequency of solid waste, soil, groundwater, and surface water and plant tissue shall be performed as specified in the solid waste management facility certification.**

Response: Testing of these media is established in the certification. Parameters to be tested, and the frequency of testing, meet or exceed federal and state requirements.

- (12) Only those marketing and distribution methods authorized in the solid waste management facility certification are allowed.**

Response: The facility will not produce a commodity for marketing and distribution.

Rule 6-703 Reporting

- (a) The operator shall make quarterly reports to the Secretary... Such reports shall include but are not limited to, information on: (1), (2), (3)**

Response: Rule 6-703 Reporting, requires that the operator submit quarterly reports to the Secretary. The forms for the quarterly reports will be provided by the Secretary.

- (b) The operator 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.**

Response: Should the operator become aware of any information indicating non-compliance with any term or condition of the Facility certification or other operation authority, the operator shall submit a report to the Secretary within five (5) working days.

- (c) Any discharge or emission from a site which poses a threat to public health and safety, a danger to the environment, or the creation of a public 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 municipality. A written report shall be submitted to the parties to whom the event was reported within seven days of the discharge or emission.**

Response: As previously indicated, should any spill, discharge or emission occur that is either a threat to public health and safety, a danger to the environment, or which results in the creation of a nuisance, it must be reported within 24 hours to the Department.

Rule 6-704 - Record Keeping

- (a) The following records must be kept in a dry and secure location by the owner and/or operator of the facility: (1), (2), and (3)**

Response: The certification requires record keeping in accordance with this rule.

- (b) All records must be kept for the time period specified below:**
 - (2) For diffuse disposal facilities, from the date on which the application for initial certification is signed through the date of closure of the facility;**
 - (3) For sludge and septage storage and treatment facilities located at wastewater treatment facilities, for five years.**

Response: The certification requires record keeping in accordance with this rule.

SUBCHAPTER 9 - FINANCIAL RESPONSIBILITY AND CAPABILITY

Rule 6-902 Public Facilities

- (b) Documentation of Financial Capability**

Response: The Applicant is exempt from the closure requirements of Subchapter 9.

SUBCHAPTER 10 -CLOSURE AND POST-CLOSURE

Rule 6-1002 Closure Plan

- (a) A closure plan is required for all facilities operating on the effective date of these rules and all new facilities required to obtain certification under these rules, except the following:**
 - (2) land used for diffuse land application of septage, sludge, or other appropriate wastes; and**
 - (3) Septage and sludge storage facilities located at domestic wastewater treatment plants.**

Response: The facility is a diffuse disposal facility and is therefore exempt from the requirements of this subchapter.