VIA E-MAIL & US MAIL

February 23, 2021

Neil Cass, Town Administrator
Town of Hopkinton
330 Main Street
Hopkinton, NH 03229
E-mail: townadmin@hopkinton-nh.gov

RE: Septage Facility Permit Modification (Renewal) Application – Comments
Hopkinton Septage Lagoons, 491 East Pembroke Road Hopkinton, NH
NHDES Permit #: **SEF-00-001**; Groundwater Permit #: **GWP-198705021-H-006.**

Dear Mr. Cass:

The NH Department of Environmental Services, Wastewater Engineering Bureau (NHDES) has reviewed the above-referenced Septage Facility Permit Modification (Renewal) Application, received on October 29, 2020. In accordance with the NHDES *Septage Management Administrative Rules* (Rules), Env-Wq 1603.06, the application has been deemed **incomplete**. Please address the following comments, and submit the requested additional/revised information to NHDES, for the application review process to continue:

1. Application Form: as described below, the Septage Management Plan and Facility Plan both need to be revised/updated. Please indicate this in item #6 of the application form, and resubmit the form.

2. Management Plan: As part of this permit renewal process, the NHDES has reviewed the septage facility's March 7, 2000 Management Plan prepared by Nobis Group (formerly Nobis Engineering, Inc.) (Nobis), received on May 9, 2000, to confirm that it meets the current rules and is appropriately up-to-date.

   Please address the following comments and submit a revised/updated Septage Facility Management Plan for NHDES review and approval:

   a. Update all Town personnel's name and contact information, throughout the document, as necessary.

   b. Add the following:

      i. a description of how and how often the lagoons are cleaned and rotated for use, and the approximate quantity and disposition of the septage solids when excavated from the lagoon(s) during cleaning, e.g. on-site land application/surface disposal or stockpiles, or disposed of off-site at a permitted site or facility; and

      ii. a statement that only domestic septage/septage solids as defined by Env-Wq 1602.12, shall be land applied on the property or at a permitted site, in accordance with Env-Wq 1602.24. All other types of septage must be disposed of at an appropriately permitted wastewater treatment facility.

   c. Add a description of:

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i. the required treatment of the septage solids for pathogen reduction and vector attraction reduction (PR/VAR) in accordance with USEPA 40 CFR 503, prior to land application/surface disposal;

ii. the method of non-biodegradable material removal, and the disposition of the removed material; and

iii. the statement that the disposition and quantity of the removed septage solids shall be included in each Septage Facility Annual Report submitted to the NHDES (per Env-Wq 1609.13(c)(5)).

d. In accordance with Env-Wq 1609.08(g)(1), as part of the Odor Control Plan for the septage facility, please add:

i. the use of the existing vegetated mat on top of the septage surface, as a means of odor control, (in addition to the stated "distance to residences); and

ii. the notification and operational procedures the facility operator must follow if an odor complaint is actually received.

e. Please add the following to the Contingency Plan, per Env-Wq 1609.08(g):

i. a description of the equipment and septage spill containment/stabilization materials (e.g. lime) to be stored at the facility, and their location;

ii. the procedures to and who is responsible for, cleaning up a septage spill at the facility; and

iii. a statement that hazardous and toxic materials or substances shall not be accepted at the septage facility.

f. A description of how all operators of the facility were/shall be instructed on the applicable requirements prior to working at the facility, must also be included in the Management Plan.

3. Facility Plan: This permit renewal process also included the review of the septage facility's Facility Plans, Figures 2 and 3, dated June 2000, prepared by Nobis, received on July 10, 2000, to confirm that they meet the current rules (Env-Wq 1609.07), and are appropriately up-to-date.

Please address the following comments, and submit a revised/updated Facility Plan(s) to NHDES for review and approval, for this permit renewal:

a. Per Env-Wq 1609.07(b)(2), please indicate the total available land area, in acres, and the specific acres used for the septage lagoon facility operations, including land application/surface disposal area and temporary stockpile locations.

b. Label the access control measures (e.g. (locked) gate, signage, etc.) for the facility, in accordance with Env-Wq 1609.07(b)(3), as well as label the lagoons for reference, (e.g. Lagoon #1, #2, #3...).

c. Add the approximate locations of and distance to all dwellings, structures, and water supply wells (including the well located east of the facility on Tax Map Lot #244/11) within 600 feet of the facility.

d. In accordance with Env-Wq 1609.07(b)(10), the name and location of all surface waters within ¼ mile of the septage lagoon facility, must be shown on the Facility Plan. According to the on-line NHDES OneStop Data Mapper (http://nhdesonestop.sr.unh.edu/html5viewer/#), there appears to be freshwater wetland areas northwest and south of the facility within ¼ mile. Please show these areas on the Facility Plan(s), along with the appropriate setback distances as described in h., below.

e. Identify measures to control surface run-off to or from the facility and stockpile locations (a note on the plan(s), is acceptable).

f. Identify the surrounding land use within 600 feet of the facility (a note on the plan(s), is acceptable).

g. Indicate the approximate temporary stockpile/berm locations for septage solids, and the approximate limits of the aforementioned land application/surface disposal areas (labeled) used for septage solids, following lagoon cleaning.

   Include the limits for all currently utilized locations, as well as any (labeled) future disposal areas. These disposal areas must also meet the septage land application setback distances required by Env-Wq 1608.10(a), Table 1608-1.

   Please note *that if these areas meet NHDES requirements for temporary stockpile locations and land application/surface disposal, they shall be the only locations approved with this permit renewal; any revision to or additional proposed areas, must be submitted with a Septage Permit Modification application for NHDES prior review and approval.*

h. Show and label all of the setback distances for the facility as required by Env-Wq 1609.09(f), Table 1609-1, including, but not limited to, the following (if there is no sensitive receptor(s), please indicate as a note on the plan(s)):

Sensitive Receptor:	Setback:
Water Supplies: Nearest Well	500 ft.(1)
Surface Water: (including wetlands):	125 ft.
Non-Tidal Drainage Ditch:	100 ft.
Nearest Residential Off-site Dwelling:	600 ft.(2)
Property Line:	500 ft.(3)

(1) The distance to the nearest water supply may be reduced based on a hydrological evaluation performed by a professional geologist or professional engineer that demonstrates that a lesser distance will not result in any degradation to drinking water at the well or surface water source.

(2) The distance to the nearest residential off-site dwelling shall be as far as practical beyond 600 feet, but may be reduced below 600 feet with the owner's prior written consent.

(3) The distance to the nearest property line shall be as far as practical beyond 500 feet, but may be reduced below 500 feet with the owner's prior written consent.

4. Groundwater Quality: As required by Env-Wq 1615.01, *"…groundwater shall be monitored and regulated at all septage facilities, in accordance with the requirements of Env-Wq 402 or Env-Or 700, as applicable…"*

   Therefore, as a part of this permit modification (renewal) application process, the NHDES has reviewed the historical and most recent groundwater quality laboratory results for the April 15, 2020 samples, submitted to NHDES Hazardous Waste Remediation Bureau (HWRB), as required by the above-referenced groundwater management permit.

   In April 2020, the following groundwater monitoring wells had exceedances (shown in **bold**) to the current NHDES Ambient Groundwater Quality Standards (AGQS) for four Per- and Polyfluoroalkyl Substances (PFAS) and Nitrate:

Date	Parameter	AGQS	LMW-2	LMW-3	LMW-4	MW-1R	MW-3S
4/15/2020	PFAS (ng/l):						
	Perfluorohexanesulfonic acid (PFHxS)	**18**	**45**	10.9	< 4.26	5.57	< 4.53
	Perfluorooctanoic acid (PFOA)	**12**	**343**	**36.2**	7.19	10.3	**18.4**
	Perfluorooctanesulfonic acid (PFOS)	**15**	**190**	< 4.34	< 4.26	< 4.47	< 4.53
	Perfluorononanoic acid (PFNA)	**11**	9.76	< 4.34	< 4.26	< 4.47	< 4.53
	Nitrate (mg/l):	**10**	**26**	**57**			

According to information provided by the HWRB, the PFAS presence in groundwater in the discharge wells LMW-2 and LMW-3, and MW-3S, is suspected to be from the septage lagoon facility. In order to confirm this, NHDES requests the following information be submitted by the Town of Hopkinton:

a. A summary of the types of septage discharged into each of the lagoons at least for the past 5 years up to the past 15 years, differentiating between septage from domestic (household/residential), and commercial, industrial, and institutional establishments, and including: year, source type, and gallons. [The information for at least the past 5 years, should be available from each of the individual septage haulers, as required by Env-Wq 1605.11(c).]

b. Submit a summary of the lagoon cleaning and septage land application/surface disposal activities for the last 15 years, including: year, disposal location (correlated with the labeled locations on the revised Facility Plan, requested above), lagoon source, and approximate volume removed, applied/disposed.

c. In accordance with Env-Wq 402.25 – Response to Exceedances: "*(i)f any regulated contaminant is detected by the permittee's monitoring at a concentration that exceeds the applicable AGQS, the permittee shall:*

(1) Within 10 days of receiving the test results that show the exceedance, notify the department of the exceedance;

(2) Within 21 days of receiving the test results that show the exceedance, test water for the regulated contaminant that exceeds the AGQS from each private or public drinking water supply well within 1,000 feet of the location where the exceedance occurred; …" (underline added for emphasis)

Per the November 26, 2019 letter from the HWRB to the Town of Hopkinton, Nobis performed a "limited Receptor Survey" for the Town to confirm active water supply wells within 500 feet of the GMZ boundary to the west and south, and sampled/attempted to sample any identified active water supplies therein, for PFAS analysis. Those wells sampled did not contain PFAS above AGQS.

However, according to the aforementioned groundwater management rule, the receptor survey is required to include those drinking water wells within *1,000 feet of the location where the exceedance occurred*. Also, it does not appear that the drinking water well on Tax Map Lot # 244/11 (Well Id/WRB#: 121.0653), was included in the Receptor Survey, or that it was sampled for PFAS in April 2020. Therefore, **the Town is required to please:**

i. confirm that all drinking water wells within 1,000 feet of LMW-2 and LMW-3, and MW-3S were included in the receptor survey and PFAS sampling event(s), and submit a **Revised** Receptor Survey, as necessary, listing the wells (by tax map/lot #, physical address, and owner) that have been sampled and those yet to be sampled (both within 1,000 feet of the on-site PFAS exceedances, and within 500 feet of the GMZ). The revised Receptor Survey must also include the drinking water well located on Tax Map Lot # 244/11 (Well Id/WRB#: 121.0653); and

ii. sample and analyze the drinking water wells identified in the Revised Receptor Survey for PFAS, **by April 26, 2021**, for the following PFAS constituents at a NH-certified laboratory, using EPA Method 537 with isotope dilution:

Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)
Perfluorohexanesulfonic acid (PFHxS)	Perfluoroheptanoic acid (PFHpA)	Perfluorobutanesulfonic acid (PFBS)
Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)

Please submit a copy of all laboratory results to NHDES immediately upon receipt.

The Town's response to this letter and submittal of requested information, as soon as possible so that the septage facility renewal application review process may continue, is greatly appreciated.

Please feel free to contact me at (603) 271 – 7888 or judith.houston@des.nh.gov with any questions or comments, or if NHDES may provide you with further guidance or technical assistance.

Sincerely,

Judith E. Sears Houston, P.E.
Permitting & Enforcement Engineer
Residuals Management Section
Wastewater Engineering Bureau

Cc./Ec. File

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