EMAIL & REGULAR MAIL

July 17, 2018

Michael Stark, Town Administrator
Town of Allenstown
16 School Street
Allenstown, NH 03275

Subject: Allenstown – Town of Allenstown Landfill, 161 Granite Street
DES Site #199012032, Project #2574

Periodic Summary Report 2016-2017 and November 2017 PFAS Sampling
Results, prepared by Nobis Engineering, Inc., (Nobis), dated January 25, 2018

Dear Mr. Stark:

Please find enclosed revised Groundwater Management Permit Number GWP-199012032-A-003, approved by the New Hampshire Department of Environmental Services (NHDES). This Permit, as originally issued on June 15, 2016, is for a period of 5 years to monitor groundwater quality at the subject site. As recommended by Nobis in the subject submittal, the Permit has been revised to reflect a boundary line adjustment in which a portion of Map 106, Lot 18, which had been included with the site Groundwater Management Zone (GMZ), was acquired by the Town of Allenstown and incorporated into the GMZ as part of Map 106 Lot 19. The original recordation of the Notice of Groundwater Management Permit included the entire Map 106, Lot 18 property. NHDES is providing an original signed copy of the “Discharge and Release of Notice of Groundwater Management Permit” for Map 106, Lot 18 to be recorded at the county registry of deeds.

All monitoring summaries and all required sampling results shall be submitted to the Groundwater Management Permits Coordinator at the address below. All correspondence must contain a cover letter that clearly shows the NHDES identification number for the site (DES Site #199012032, Project #2574).

Please note the site water quality monitoring program requires a Summary Report be submitted in January 2020, following the preceding November monitoring round. Please note that regular Permit monitoring data collected in November 2018 and 2019 still need to be submitted within 45 days of the sampling event in accordance with standard Permit conditions. Submittal of sampling data in these years (when a summary report is not required) should include a tabulated summary of analytical results, groundwater elevation data, an up to date site plan, and lab data sheets.

As part of the November 2017 Permit monitoring round, two monitoring wells and one water supply well were sampled to comply with our May 18, 2017 letter to the town requesting an initial screening effort for per- and polyfluoroalkyl substances (PFAS) in groundwater at the landfill. As discussed within the letter, NHDES has adopted an AGQS for the individual PFAS perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), of 70 parts per trillion (ppt) (0.070 µg/L), individually or as a sum total concentration of these two PFAS. Based on the results of the November 2017 sampling event at the landfill, PFOA was detected at...
concentrations exceeding AGQS at MW-4. Our review comments specific to the recent PFAS
detections are provided below.

Based on our review of the above document, we developed the comments that follow below.
Comments requiring a response from the Town and/or Nobis are summarized in **bold italicized
font**.

1. As reported by Nobis in the Summary Report, the groundwater samples collected from
monitoring wells MW-4, MW-5, and water supply DW-1 were analyzed for nine PFAS during
initial screening efforts in the November 2017 sampling round. The PFOS concentration
detected in the MW-4 sample (196 ppt) exceeded AGQS. Results from monitoring well MW-
5, also sampled during the November 2017 sampling round, detected PFOS below AGQS at
a concentration of 7.47 ppt. PFOA was also detected at MW-4 and MW-5; at concentrations
of 14.1 ppt and 9.82 ppt, respectively. PFOA and PFOS were not detected at water supply
DW-1 above laboratory reporting limits. In a phone conversation on February 16, 2018 the
Town indicated to NHDES that private water supplies in the vicinity of the landfill were going
to be sampled for PFAS. In a follow-up March 2, 2018 email from NHDES, we requested
confirmation that sampling of private water supplies had been undertaken. As of the date of
this letter, the Town of Allenstown has not responded to the request; however, Nobis
indicated that they had not been tasked with the sampling effort.

Based on the PFAS screening results for the landfill site, NHDES requires that water supply
wells at Lots 6, 7, 8, 9, 10, and 18 (Map 106), identified within Nobis’ report as part of the
town’s receptor survey, be sampled for PFAS analysis for the list of nine individual PFAS as
discussed within NHDES’ Frequently Asked Questions (FAQs) for Sampling and Analysis of
PFAS at WMD Sites. *Please proceed with the water supply sampling of Lots 6, 7, 8, 9, 10,
and 18 (Map 106) for PFAS as outlined, if not already in process. Results shall be
submitted to the NHDES no later than 60 days of the date of this letter. The Data
Transmittal should include an evaluation of the PFAS results and recommendations
for future monitoring or other actions.*

2. Please note that PFAS testing has not been added to the Permit monitoring schedule at this
time. NHDES anticipates that PFAS will be added to the Permit in the future; however, a
confirmatory sampling round is required during the November 2018 sampling event to
confirm the prior PFAS results. At a minimum, NHDES requests that the confirmatory
sampling round include analysis for at least the list of nine individual PFAS as discussed
within NHDES’ Frequently Asked Questions (FAQs) for Sampling and Analysis of PFAS at
WMD Sites. *Please complete PFAS sampling at site monitoring locations MW-1, MW-2,
and MW-4, and surface water locations SW-1 and SW-2 during the November 2018
Permit monitoring event. The PFAS monitoring results should be submitted with the
November 2018 Data Transmittal and include an evaluation of the PFAS site data and
recommendations for future monitoring.*

3. Please note that, along with the routine submittal of documents through the NHDES
OneStop, NHDES is also requesting that all PFAS analytical results be uploaded to the
NHDES Environmental Monitoring Database (EMD). Storage of PFAS analytical data in the
EMD allows NHDES to use geographic information systems (GIS) in a state-wide
assessment of the data. Guidance for the EMD upload process can be found at
Please continue to upload analytical results from future PFAS sampling events to NHDES’ EMD.

4. Please note NHDES Waste Management Division document submittal guidelines have been updated. Of note, all documents submitted electronically must include a “Report Cover Sheet,” which provides site name, site number, project number, and municipality as listed in the OneStop database. Also please note that submittals of monitoring data should also include a “Groundwater Monitoring Report Cover Sheet,” which includes a brief summary checklist regarding the data being submitted. Complete details can be found on NHDES’ Electronic and Paper Copy Submittal Guidelines memo dated November 2017. Please submit future submittals consistent with the above guidelines.

Should you have any questions, please contact me at NHDES’ Waste Management Division.

Sincerely,

[Signature]

James W. O’Rourke, P.G.
Waste Management Division
Tel: (603) 271-2909
Fax: (603) 271-2181
Email: James.O'Rourke@des.nh.gov

End: Release of Notice

ec: Paul Rydel, P.G., HWRB/NHDES
Linda Birmingham, CPM, SWMB/NHDES
Thomas S. Bobowski, P.E., Nobis Engineering, Inc.
Attention Health Officer, Town of Allenstown
The NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES hereby issues GROUNDWATER MANAGEMENT PERMIT NO. GWP-199012032-A-003 as revised to the permittee TOWN OF ALLENSTOWN to monitor the groundwater quality at the ALLENSTOWN LANDFILL (161 Granite Street) in ALLENSTOWN, N.H. via the groundwater monitoring system comprised of 5 monitoring wells, 1 surface water sampling location and 1 water supply well as depicted on the Site Plan entitled “Figure 2 – Site Sketch with Groundwater Data” dated January 2018, prepared by Nobis Engineering, Inc.

TO: BOARD OF SELECTMEN TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275

Date of Issuance: June 15, 2016 Date of Revision: July 17, 2018 Date of Expiration: June 14, 2021

Pursuant to authority in N.H. RSA 485-C:6-a, the New Hampshire Department of Environmental Services (NHDES), hereby grants this Permit to monitor past discharges to the groundwater at the above-described location for five years, subject to the following conditions:

(continued)
STANDARD MANAGEMENT PERMIT CONDITIONS

1. The permittee shall not violate Ambient Groundwater Quality Standards adopted by NHDES (N.H. Admin. Rules Env-Or 600) in groundwater outside the boundaries of the Groundwater Management Zone, as shown on the referenced site plan.

2. The permittee shall not cause groundwater degradation that results in a violation of surface water quality standards (N.H. Admin. Rules Env-Wq 1700) in any surface water body.

3. The permittee shall allow any authorized staff of NHDES, or its agent, to enter the property covered by this Permit for the purpose of collecting information, examining records, collecting samples, or undertaking other action associated with this Permit.

4. The permittee shall apply for renewal of this Permit prior to its expiration date but no more than 90 days prior to expiration.

5. This Permit is transferable only upon written request to, and approval of, NHDES. Compliance with the existing Permit shall be established prior to Permit transfer. Transfer requests shall include the name and address of the person to whom the Permit transfer is requested, the signatures of the current and future permittees, and a summary of all monitoring results to date.

6. NHDES reserves the right, under N.H. Admin. Rules Env-Or 600, to require additional hydrogeologic studies and/or remedial measures if NHDES receives information indicating the need for such work.

7. The permittee shall maintain a water quality monitoring program and submit monitoring results to NHDES no later than 45 days after sampling. Samples shall be taken from the monitoring wells and surface water sampling point as shown and labeled on the referenced site plan, and other sampling points listed in the following table in accordance with the schedule outlined herein:

<table>
<thead>
<tr>
<th>Monitoring Locations</th>
<th>Sampling Frequency</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW-1, MW-2, MW-3, MW-4, MW-5, SW-1</td>
<td>November each year</td>
<td>Specific Conductance @ 25°C, pH, Temperature, Chloride, Sulfate, Nitrate, TKN, Iron, Manganese, and static water Level elevation (in monitor wells)</td>
</tr>
<tr>
<td>Site Supply Well: DW-1</td>
<td>November each year</td>
<td>Specific Conductance @ 25°C, pH, Temperature, Chloride, Sulfate, Nitrate, TKN, Iron, and Manganese</td>
</tr>
<tr>
<td>DW-1</td>
<td>November 2020</td>
<td>NHDES Waste Management Division Full List of Analytes for Volatile Organics, and Drinking Water Metals.</td>
</tr>
</tbody>
</table>

Sampling shall be performed in accordance with the documents listed in Env-Or 610.02 (e). Samples shall be analyzed by a laboratory certified by the U.S. Environmental Protection Agency, or NHDES pursuant to Env-C 300.

(continued)
All overburden groundwater samples collected for metals analysis (iron, manganese, and Drinking Water Metals) shall be analyzed for dissolved metals; and thus must be field filtered (with a 0.45-micron filter) and acidified after filtration in the field. Surface water samples, and groundwater samples collected from bedrock or water supply wells, shall be analyzed for total metals, and shall not be filtered. As referred to herein, the term "Drinking Water Metals" refers to: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

A summary of water quality shall be submitted to the NHDES Waste Management Division in January 2020, using a format acceptable to NHDES. The Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

The Summary Report shall be prepared and stamped by a professional engineer or professional geologist licensed in the State of New Hampshire.

8. Issuance of this Permit is based on the Groundwater Management Permit Application dated January 28, 2016, and the historical documents found in NHDES file DES #199012032. NHDES may require additional hydrogeologic studies and/or remedial measures if invalid or inaccurate data are submitted.

9. Within 30 days of discovery of a violation of an ambient groundwater quality standard at or beyond the Groundwater Management Zone boundary, the permittee shall notify NHDES in writing. Within 60 days of discovery, the permittee shall submit recommendations to correct the violation. NHDES shall approve the recommendations if NHDES determines that they will correct the violation.

10. All monitoring wells at the site shall be properly maintained and secured from unauthorized access or surface water infiltration.

ADDITIONAL CONDITION FOR LANDFILLS

11. The permittee shall maintain an adequate cover over the waste mass to prevent direct contact with potential receptors at the surface and to control movement of the waste material by wind or water.

SPECIAL CONDITIONS FOR THIS PERMIT

12. Recorded property within the Groundwater Management Zone includes the lot as listed and described in the following table:

<table>
<thead>
<tr>
<th>Tax Map / Lot No.</th>
<th>Property Address</th>
<th>Owner Name and Address</th>
<th>Deed Reference (Book / Page)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map 106/ Lot 19</td>
<td>Allenstown Landfill</td>
<td>Town of Allenstown</td>
<td>1812 / 560 &amp;</td>
</tr>
<tr>
<td></td>
<td>161 Granite Street</td>
<td>16 School Street</td>
<td>1179 / 384-388</td>
</tr>
<tr>
<td></td>
<td>Allenstown, NH 03275</td>
<td>Allenstown, NH 03275</td>
<td>3565 / 1503</td>
</tr>
</tbody>
</table>

(continued)
13. The permittee shall update the ownership information required by Env-Or 607.03(a)(20) for all properties within the Groundwater Management Zone prior to renewal of the Permit, or upon a recommendation for site closure.

Kareel Kenison
Karlee A. Kenison, P.G., Administrator
Hazardous Waste Remediation Bureau
Waste Management Division

Any person aggrieved by any terms or conditions of this Permit may appeal to the N.H. Waste Management Council ("Council") by filing an appeal that meets the requirements specified in RSA 21-O:14 and the rules adopted by the Council, Env-WMC 200. The appeal must be filed directly with the Council within 30 days of the date of this decision and must set forth fully every ground upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council.

Information about the Council, including a link to the Council's rules, is available at http://nhc.nh.gov/ (or more directly at http://nhc.nh.gov/waste/index.htm). Copies of the rules also are available from NHDES' Public Information Center at (603) 271-2975.

GWP-199012032-A-003