

September 12, 2017 File No. 76400.01

Board of Selectmen Town of Allenstown 16 School Street Allenstown, New Hampshire 03275 Attn: Shaun Mulholland, Town Administrator Phone (603) 485-4276

Re: Proposal for Services - 2017 GMP Water Quality Monitoring, PFAS Sampling and Periodic Summary Report Allenstown Landfill Allenstown, New Hampshire NHDES No. 199012032 / Project No. 2574

Dear Mr. Mulholland:

Nobis Engineering, Inc. (Nobis) is pleased to offer this proposal to the Town of Allenstown (Client) for Groundwater Management Permit (GMP) water quality monitoring at the above-referenced facility during 2017. This monitoring is intended to fulfill the requirements of New Hampshire Department of Environmental Services (NHDES) GMP GWP-199012032-A-003 issued June 15, 2016. The GMP expires on June 14, 2021.

The most recent GMP requires that water quality monitoring be conducted during the month of November each year. For this proposal, groundwater monitoring results for the last two years are to be submitted to NHDES in a Periodic Summary Report in January 2018. In addition, NHDES is requiring additional parameters be tested for at specific locations as a statewide screening initiative.

#### SCOPE OF SERVICES

The following GMP sampling and additional work will be performed:

#### Task 100 – GMP Groundwater Monitoring

Nobis will perform water quality monitoring in November 2017 in accordance with the requirements of the GMP. Water levels (where applicable), specific conductance, pH, and temperature will be measured in the field and samples will be collected from existing monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5; surface water location SW-1; and the site water supply (DW-1).

The samples will be submitted to Eastern Analytical, Inc. of Concord, New Hampshire (a state-certified laboratory) for analysis. The parameters required by the GMP for November 2017 are chloride, sulfate, nitrate, total Kjeldahl nitrogen (TKN), iron, and manganese.

**Client-Focused, Employee-Owned** 

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The Lump Sum budget estimate for Task 100 is \$1,400 to be billed following the sampling round.

The discounted laboratory fees for the 2017 GMP monitoring are estimated to be \$650 to be billed separately by the laboratory and not included in the cost estimate for this task.

#### Task 110 – PFAS Sampling and Reporting

In accordance with the May 18, 2017 letter sent by email from NHDES requiring sampling for Per- and Polyfluoroalkyl Substances (PFAS), the Town of Allenstown, as permittee, has indicated the PFAS sampling would be conducted during 2017. Nobis developed an approach and NHDES approved the sampling for PFAS at three well locations and a quality control sample in their September 8, 2017 email correspondence as follows

MW-4 – upgradient to most of site and on Town property (near site water supply well)
DW-1 – Water Supply Well (not used for consumption)
MW-5 - downgradient well (historically elevated manganese) / downgradient of most facility activity
Trip Blank for Quality Control

Therefore, during the November 2017 GMP sampling round conducted as part of Task 100 at seven locations, samples from three of the locations will be collected for PFAS analyses. A trip blank will be collected for quality control purposes. NHDES protocols will be followed in addition to uploading the PFAS data to the NHDES Environmental Monitoring Database (EMD), as required. Note this is a separate submittal from the GMP-required PSR described below in Task 200.

The Lump Sum budget estimate for Task 200 is \$1,200.

The laboratory fees for the PFAS analyses are estimated to be \$1,150 to be billed separately by the laboratory and not included in the cost estimate for this task.

#### Task 200 – GMP Periodic Summary Report (PSR)

Laboratory and field data from the November 2016 and November 2017 monitoring rounds, as well as historical data, will be provided to NHDES in a Periodic Summary Report (PSR) required to be submitted to NHDES in January 2018. The report will include tabulated summaries of groundwater elevations and laboratory results for the project to date, presentation and assessment of historical data trends, groundwater contour map utilizing the most recent representative groundwater elevation data, and possible recommendations for revisions to the GMP. In accordance with the GMP the annual inquiry about the potential presence of new water supply wells on the abutting Allenstown Aggregate lot will be made and included in the data submittal. The submittal will meet the specified NHDES requirements for the site with regard to GMP compliance.

The Lump Sum budget estimate for Task 200 is \$1,900.

#### Task 300 – Meetings and Discussions

Nobis has included a budget allowance for discussions with Town representatives and attendance at meetings with NHDES. The Annual Financial Audit report for the Town is included in this task. Nobis will notify the Town if requested services exceed the budgeted amount prior to incurring costs. Nobis has assumed approximately two labor hours of a Senior Project Manager for this task, which will be



dependent on Town's approach with the abutting landowner and NHDES officials.

The Time and Materials budget estimate for Task 300 is \$350.

#### FEES AND BUDGET

For the performance of these water quality sampling services, the following budget is estimated.

Engineering Fees	Contractors
\$1,400	\$650
\$1,200	\$1,150
\$1,900	
\$350	
\$4,850	\$1,800
	Engineering Fees \$1,400 \$1,200 \$1,900 \$350 \$4,850

Following review by Nobis, contractor (i.e., laboratory) invoices will be forwarded to the Town for direct payment. Discounted laboratory fees for the 2017 monitoring are estimated to be \$1,800. No mark-up will be applied to laboratory contractor invoices and the Town may take advantage of prompt-payment discounts, where available.

# The budget estimate (billed by Task) for the scope of work described above is \$4,850 for engineering services and \$1,800 for other contractors, for a total of \$6,650 for GMP services in 2017.

Services requested outside the scope of work will be billed on a time and materials basis, per the attached 2017 Schedule of Fees.

#### TERMS AND CONDITIONS

We will perform the services outlined herein in accordance with the Statement of Terms and Conditions included with our contract dated November 2, 2004. Please note that Article 12.0 of our Terms and Conditions includes a "Limitation of Liability" clause by which you agree to limit our liability for any damages arising out of our professional negligence to \$50,000 or our fees, whichever is greater. You may request an increase to this limitation by making the request in writing and by paying an additional fee. This proposal is valid for 30 days from the date of issue.



Thank you for the opportunity to provide these services to the Town of Allenstown. If you have any questions or need additional information, please do not hesitate to call the undersigned.

Very truly yours,

#### Nobis Engineering, Inc.

hours ABoleun ly.

Thomas S. Bobowski, P.E., P.G., C.G. Associate / Sr. Project Manager (603) 724-6239, <u>TBobowski@nobiseng.com</u>

Attachments: 2017 Schedule of Fees Groundwater Management Permit GWP-199012032-A-003

For Town of Allenstown

#### ACCEPTANCE

This contract for services and its attachments are hereby accepted by the Town of Allenstown as evidenced by the signatures below, and such persons so executing the same on behalf of the Town of Allenstown do hereby warrant full authority to act for, in the name of, and on behalf of the Town of Allenstown. This proposed contract is valid for 30 days from the date of issue.

Signature \_\_\_\_\_

Date

Title

Please indicate your acceptance by signing and returning <u>one</u> copy of this proposal. Retain the second copy of this proposal for your records.





### SCHEDULE OF FEES

CATEGORY	HOURLY RATE
Principal	\$190.00
Senior Project Manager IV/LSP	\$170.00
Senior Project Manager III	\$160.00
Senior Project Manager II	\$155.00
Senior Project Manager I	\$145.00
Senior Client Manager	\$130.00
Senior Landscape Architect	\$130.00
Project Manager III/LSP	\$140.00
Project Manager II	\$135.00
Project Manager I	\$125.00
Senior Project Engineer/Geologist/Scientist II	\$150.00
Senior Project Engineer/Geologist/Scientist I	\$120.00
Project Engineer/Geologist/Scientist III	\$110.00
Project Engineer/Geologist/Scientist II	\$105.00
Project Engineer/Geologist/Scientist I	\$ 95.00
Staff Engineer/Geologist/Scientist III	\$ 90.00
Staff Engineer/Geologist/Scientist II	\$ 85.00
Staff Engineer/Geologist/Scientist I	\$ 75.00
Technician III	\$ 85.00
Word Processor/Clerical II	\$ 60.00
Word Processor/Clerical I	\$ 50.00

#### **REIMBURSABLE EXPENSES**

Report Materials	at cost
Travel, Field and Miscellaneous Services	Cost Plus 15%
Subcontracted Services	Cost Plus 15%

**<u>NOTE</u>**: 1) Fees charged to the project will be in accordance with these rates for all work performed.

2) Fee Schedule effective through March 31, 2018.



## **REIMBURSABLE EXPENSES**

#### FIELD EQUIPMENT

Photoionization Detector (PID)	\$	90.00/	dav
4-Gas Meter	\$	94.00/	day
Water Level Meter	\$	15.00/	dav
Interface Probe	\$	25.00/	day
pH, Conductivity and Temperature Meter	\$	20.00/	day
Dissolved Oxygen Meter	\$	30.00/	day
Oxidation Reduction Potential (ORP) Meter	\$	30.00/	day
Metal Detector	\$	15.00/	day
Air Sampling Pump	\$`	100.00/	day
Data Logger Pressure Transducer	\$`	100.00/	day
Disposable Bailers	\$	12.00/	each
Field Supplies	\$	25.00/	day
Groundwater Sampling Filter	\$	20.00/	each
Groundwater Sampling Pump	\$	40.00/	day
Low-flow sampling systems	\$´	175.00/	day
Hand Auger	\$	15.00/	day
Level, Tripod, Rod/Prism, Tape/Chain	\$	41.80/h	alf day
Transit, Tripod, Rod/Prism, Tape/Chain	\$	41.80/h	alf day
Multi Channel Data Logger	\$2	250.00/	day
Hand-held GPS Unit	\$	30.00/	day
Trimble GPS Unit	\$2	200.00/	day
Turbidity Meter	\$	15.00/	day
Horiba Multimeter	\$	80.00/	day
Field PDA	\$	25.00/	day
Digital Camera	\$	15.00/	day
Expenses, Field Supplies, Travel and Subcontracted Services	(	Cost Plu	s 15%



# The State of New Hampshire **DEPARTMENT OF ENVIRONMENTAL SERVICES**



#### Thomas S. Burack, Commissioner

#### EMAIL ONLY

June 15, 2016

Shaun Mulholland, Town Administrator Board of Selectmen Town of Allenstown 16 School Street Allenstown, NH 03275

Subject: Allenstown – Town of Allenstown Landfill, 152 Granite Street DES Site #199012032, Project #2574

Groundwater Management Permit Renewal Application and Periodic Summary Report (Application/Report), prepared by Nobis Engineering, Inc., dated January 28, 2016

Dear Mr. Mulholland:

Please find enclosed Groundwater Management Permit Number **GWP-199012032-A-003**, approved by the Department of Environmental Services (Department). This permit is issued for a period of 5 years to monitor groundwater quality at the Allenstown Landfill site, and is a renewal of the permit which expired on April 20, 2016.

A recommendation was made in the Application/Summary Report to reduce sampling from annual to biennial permit monitoring. At this time, this request is not accepted by the Department, based on the following site-specific considerations:

- The prior (March 2014) permit revision reduced the sampling frequency to annually from the previous twice-yearly sampling program; thus, the site has only been in annual sampling for two years; and,
- The site has not been formally closed with an engineered cap as it has been accepted as a "Brady Bill" (RSA 149-M:9, XIII) Town. As such, the landfill is considered an inactive facility, but has not completed final closure. To maintain this status under the requirements of the Brady Bill, the facility must continue to show that it is having no adverse impact through active groundwater monitoring.

Additionally, please note that Special Permit Condition #14 remains in effect. This permit condition is required because even though municipal water is available on Granite Street at Map 106, Lot 18, connection to the municipal water supply is not mandatory upon site development. Therefore, please include reference to Special Permit Condition #14 in future annual (data and/or summary) reports as required in the permit condition.

The documentation of the site review and the letter sent provided in the subject Application/Report is acceptable to the Department for purposes of current compliance with the intent of the Special Condition. If a response is received by the Town, it is requested that documentation of the response be provided to the Department for our files.

Shaun Mulholland Site #199012032 June 15, 2016 Page 2 of 2

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 Department identification number for the site (DES #199012032).

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

Sincerely,

Pit. 2. Bellonshi

Peter L. Beblowski, C.P.G. Hazardous Waste Remediation Bureau Groundwater Remediation & Permitting Tel: (603) 271-2999 Fax: (603) 271-2181 Email: <u>peter.beblowski@des.nh.gov</u>

ec: Pamela Hoyt-Denison, PE, Waste Division Administrator Paul Rydel, PG, HWRB-GR&P, Supervisor Thomas Bobowski, PE, 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

to the permittee

#### TOWN OF ALLENSTOWN

to monitor the groundwater quality at the

ALLENSTOWN LANDFILL (165 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 2016, 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 Expiration: June 14, 2021

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

#### STANDARD MANAGEMENT PERMIT CONDITIONS

- 1. The permittee shall not violate Ambient Groundwater Quality Standards adopted by the Department (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-Ws 1700) in any surface water body.
- 3. The permittee shall allow any authorized staff of the Department, 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, the Department. 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, signature of the current and future permittee, and a summary of all monitoring results to date.
- 6. The Department reserves the right, under N.H. Admin. Rules Env-Or 600, to require additional hydrogeologic studies and/or remedial measures if the Department receives information indicating the need for such work.
- 7. The permittee shall maintain a water quality monitoring program and submit monitoring results to the Department's Waste Management Division no later than 45 days after sampling. Samples shall be taken from monitoring wells and surface water sampling points as shown and labeled on the referenced site plan and other sampling points listed on the following table in accordance with the schedule outlined herein:

Monitoring Locations	Sampling Frequency	Parameters
MW-1, MW-2, MW-3, MW-4, MW-5, SW-1	November each year	Specific Conductance @ 25° C, pH, Temperature, Chloride, Sulfate, Nitrate, TKN, Iron, Manganese, and Static Water Elevation (in monitor wells)
Site Supply Well: DW-1	November each year	Specific Conductance @ 25° C. pH, Temperature, Chloride, Sulfate, Nitrate, TKN, Iron, and Manganese.
DW-1	November 2020	NHDES Waste Management Division Full List of Analytes for Volatile Organics, and Drinking Water Metals.

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 the New Hampshire Department of Environmental Services pursuant to Env-C 300.

All overburden groundwater samples collected for metal analyses (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 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.

Summaries of water quality shall be submitted biennially in even numbered years to the Department's Waste Management Division, with the next summary due in January 2018, using a format acceptable to the Department. The Biennial Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

The Biennial 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 the Department file DES #199012032. The Department 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 the Department in writing. Within 60 days of discovery, the permittee shall submit recommendations to correct the violation. The Department shall approve the recommendations if the Department 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 lots, or portions thereof, as listed and described in the following table:

Tax Map / Lot No.	Property Address	Owner Name and Address	Deed Reference (Book / Page)
Map 106/ Lot 19	Allenstown Landfill 161 Granite Street Allenstown, NH 03275	Town of Allenstown 16 School Street Allenstown, NH 03275	Book1812/ Page 560 & Book 1179/ Page 384-388
Map 106/ Lot 18*	Allenstown Aggregate 169 Granite Street Allenstown, NH 03275	Allenstown Aggregate, LLC PO Box 221 Auburn, NH 03032	Book 2698/ Page 0280

\*Portion of the Allenstown Aggregate property included as part of the GMZ is described as follows:

Commencing at an iron pipe at the southwest corner of Town of Allenstown Map 106, Lot 19, said point being 629.37 feet S38 $_{0}$  19' 46" E of the northwest corner of Tax Map 106, Lot 19; thence S 70 $_{0}$  03' 28" W at a distance of 199.86 feet to an iron pin (#5 rebar) on to Map 106, Lot 18; thence S 53 $_{0}$  38' 51" E at a distance of 717.92 feet to an iron pipe as the point of origin as the southeast boundary point of the Town of Allenstown Map 106, Lot 19.

- 13. The permittee shall update 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.
- 14. UNDEVELOPED LOTS WITHIN THE GROUNDWATER MANAGEMENT ZONE

Consistent with Env-Or 607.06(d), for each undeveloped lot, or portion thereof, which is within the Groundwater Management Zone and lacks access to a public water supply, the permittee shall contact the property owner annually to determine if a water supply well has been installed. The results of these inquiries shall be reported to the Department Annually. Upon discovery of a new drinking water supply well within the Groundwater Management Zone, the permittee shall provide written notification to the Department and, to ensure compliance with Env-Or 607.06(a), submit a contingency plan to provide potable drinking water in the event the well is or becomes contaminated above the ambient groundwater quality standards. The potable water supply shall meet applicable federal and state water quality criteria. This plan shall be submitted to the Department for approval within 15 days of the date of discovery.

The permittee shall sample the new supply well within 30 days of discovery. The well shall be sampled for all the analytical parameters included in Standard Condition # 7, unless otherwise specified in writing by the Department. The permittee shall forward all analytical results to the Department's Waste Management Division, the Department's Environmental Health Program, and the owner of the drinking water supply well within 7 days of receipt of the results.

If the results for the new well meet the ambient groundwater quality standards, the permittee shall continue to sample the new wells annually as part of the permit.

If the results for the new well indicate a violation of the ambient groundwater quality standards, the permittee shall notify the owner immediately and conduct confirmatory sampling within 14 days of receiving the original results.

Upon confirmation of a violation of the ambient groundwater quality standards in a new drinking water well, the permittee shall immediately implement the contingency plan to provide a potable drinking water supply that meets applicable federal and state water quality criteria.

Joh m. Ry

John M. Regan, P.G., Administrator Hazardous Waste Remediation Bureau Waste Management Division

(continued)

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 <u>http://nhec.nh.gov/</u> (or more directly at <u>http://nhec.nh.gov/waste/index.htm</u>). Copies of the rules also are available from the DES Public Information Center at (603) 271-2975.

GWP-199012032-A-003