

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

Thomas S. Burack, Commissioner



January 7, 2014

Peter Britz Environmental Planner City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801

Subject: North Hampton – Coakley Landfill Superfund Site, Groundwater Management Permit, DES #198712001, Project #431

Groundwater Management Permit Renewal Application, prepared by Summit Environmental Consultants, dated October 4, 2013

Dear Mr. Britz:

Please find enclosed Groundwater Management Permit Number **GWP-198712001-N-002**, approved by the Department of Environmental Services (Department). This permit is renewed and issued for a period of 5 years to monitor the effects of past discharges of contaminants of concern, as defined in Table 12 of the 1994 Site Record of Decision and subsequent decision documents.

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 #198712001). Please note that upon issuance of this permit, it is only necessary to submit monitoring results to the "Groundwater Management Permits Coordinator" and not to my attention.

The Groundwater Management Zone for this permit includes properties which are not owned by the permit holder and were not noticed or recorded with the original permit. Therefore, Condition #9 requires the permit holder to provide notice of the permit by certified mail, within 15 days of permit issuance, to those property owners of lots of record added to the Groundwater Management Zone since the original permit was issued. Documentation of the notification, in the form of a copy of the notice with return receipt(s), shall be submitted to the Department within 45 days of permit issuance.

Please note in future sampling & analysis plans and sampling activities the specific sampling methodologies for metals (e.g., total versus field filtered), as shown in the table under Standard Condition #7. In addition, sampling for metals (at minimum, arsenic and manganese) shall be conducted for all residential wells in the sampling program, as arsenic and manganese are above standards in certain GMZ compliance wells.

Peter Britz DES #198712001 January 7, 2014 Page 2 of 2

Also, please note that Condition #10 requires the permit holder to record "Notice" of the permit (not the permit), within 60 days of issuance, at the registry of deeds in the chain of title for each lot added to the Groundwater Management Zone since the original permit issuance. A separate Notice form for each newly added property within the Groundwater Management Zone shall be generated and recorded. The original notice on Lot 13 Map R1 should be amended to reflect the expanded GMZ within this lot.

An example Notice can be found on the Department's web page at the following link: <u>http://des.nh.gov/organization/divisions/waste/hwrb/sss/grp/documents/example_notice_gmp.do</u> <u>c</u>. A copy of each recorded Notice shall be submitted to the Department and, as appropriate, to the Towns of North Hampton, Greenland and Rye within 30 days of recordation.

Confirmation of the revised GMZ boundary for Map R1 Lot 13 is conditional upon analytical results from samples collected from four new compliance monitoring wells meeting established cleanup standards (see Special Condition 13), as discussed during a November 15, 2013 conference call.

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

Sincerely,

Andrew Hoffman Hazardous Waste Remediation Bureau Tel: (603) 271-6778 Fax: (603) 271-2181 Email: <u>Andrew.hoffman@des.nh.gov</u>

ec: Stephen B. Marcotte, Summit Environmental Greenland Health Officer North Hampton Health Officer Rye Health Officer Gerardo Millan-Ramos, EPA



The

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

GROUNDWATER MANAGEMENT PERMIT NO. GWP-198712001-N-002

to the permittee

COAKLEY LANDFILL GROUP

to monitor the past discharge of

Contaminants Of Concern (as identified in Table 12 of the 1994 Record of Decision and subsequent decision documents)

at

COAKLEY LANDFILL (480 Breakfast Hill Road)

in NORTH HAMPTON, N.H.

via the groundwater, surface water and sediment monitoring system comprised of

32 monitoring wells, 3 surface water, 2 sediment, and 1 leachate sampling locations and 5 residential drinking water supply wells

as depicted on the Site Plan and tables entitled

Environmental Monitoring Network (site plan); OU-1 Groundwater Monitoring Wells and Water Supply Wells; and OU-2 Groundwater Monitoring Wells

dated September 2013 (site plan) and July 2013 Revision 2.0 (tables), prepared by Summit Environmental Consultants

TO: COAKLEY LANDFILL GROUP 1 JUNKINS AVENUE PORTSMOUTH, NEW HAMPSHIRE 03801

Date of Issuance: January 7, 2014 Date of Expiration: January 6, 2019

(continued)

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 past discharges to the 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 and updated on the plot plan entitled "*Groundwater Monitoring Zone Plan*" prepared by Richard D. Bartlett & Associates, LLC., certified on December 11, 2013.
- 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 the renewal of this permit at least 90 days prior to its expiration date.
- 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 site monitoring wells, surface water and sediment sampling points as shown and labeled on the referenced site plan in accordance with the schedule outlined herein:

Monitoring Locations	Sampling Frequency	Parameters
FPC-4B, AE-4B	August each year	Bedrock well - field parameters, TAL metals (total, unless highly turbid), NHDES Waste Management Division full list of analytes for volatile organics (full list VOCs).
FPC-5A, MW-4, MW-9, OP-2	August each year	Overburden wells – field parameters, TAL metals (dissolved), 1,4-dioxane.
FPC-6B, FPC-8B, GZ- 105, AE-2B, AE-3B, MW-5S, MW-5D, MW-6, MW-8, MW-11	August each year	Bedrock wells – field parameters, TAL metals (t otal, unless highly turbid), full list VOCs, 1,4-dioxane.
FPC-7A, FPC-9A, FPC- 11A, AE-1A, MW-10, OP-5	August each year	Overburden wells – field parameters, TAL metals (<u>dissolved</u>)

- 3 -Monitoring Locations	Sampling Frequency	Parameters		
FPC-5B, BP-4	August each year	Bedrock well – field parameters, TAL metals (total, unless highly turbid), 1,4-dioxane.		
FPC-6A, FPC-8A, AE-2A, AE-3A	August each year	Overburden wells – field parameters, TAL metals (<u>dissolved</u>), full list VOCs, 1,4- dioxane.		
AE-4A	August each year	Overburden well – field parameters, TAL metals (<u>dissolved</u>), full list VOCs.		
FPC-7B, FPC-11B, AE-1B	August each year	Bedrock wells – field parameters, TAL metals (total, unless highly turbid).		
Residential, Surface Water, Sediment & Leachate				
368BHR (R-3), 339BHR	August & February each year	Bedrock drinking water well – Field parameters, arsenic & manganese (<u>total</u>), VOCs full list (EPA Method 524), 1,4-dioxane.		
399BHR (R-5), 346BHR, 415BHR	August each year	Field parameters, arsenic & manganese (<u>total</u>), NHDES full list (EPA Method 524), 1,4-dioxane.		
SW-4, SW-5, SW-103	August each year	Field parameters, ammonia, TAL metals (dissolved), full list VOCs.		
SED-4, SED-5	August each year	Metals (total).		
L-1	August each year	Field parameters, COD, ammonia, TAL metals (dissolved).		

Sampling shall be performed in accordance with the documents listed in Env-Or 610.02 (e) and the approved Environmental Monitoring Plan. 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 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 "TAL Metals" refers to aluminum, arsenic, barium, cadmium, calcium, chromium, copper, iron, lead, magnesium, mercury, nickel, potassium, selenium, silver, sodium, thallium, zinc, cobalt, beryllium, manganese, antimony, and vanadium.

Summaries of water quality shall be submitted annually to the Department's Waste Management Division, in the month of February, using a format acceptable to the Department. The Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

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

- Issuance of this permit is based on the Groundwater Management Permit Application dated October 3, 2013 and the historical documents found in the Department file DES #198712001. The Department may require additional hydrogeologic studies and/or remedial measures if invalid or inaccurate data are submitted.
- 9. Within 15 days of the date of Department approval of this Groundwater Management Permit, the permittee shall provide notice of the permit by certified mail, return receipt requested, to all owners of **newly added lots** of record (i.e., not noticed under original permit) within the Groundwater Management Zone (see shaded lots in Special Condition #12). The permittee shall submit documentation of this notification to the Department within 45 days of permit issuance.

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- 10. Within 60 days of the date of Department approval of this Groundwater Management Permit, the permit holder shall record notice of the permit in the registry of deeds in the chain of title for each **newly added lot** within the Groundwater Management Zone (see shaded lots in Special Condition #12). The original notice on Lot 13 Map R1 shall be amended to reflect the expanded GMZ within this lot. **Recordation requires that the registry be provided with the name of current property owner and associated book and page numbers for the deed of each lot encumbered by this permit. Portions of State/Town/City roadways and associated right-of-way properties within the Groundwater Management Zone do not require recordation.** A copy of each recorded notice shall be submitted to the Department and to the governing body of each municipality in which the site or any lot within the GMZ is located within 30 days of recordation.
- 11. 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.

SPECIAL CONDITIONS FOR THIS PERMIT

12. Recorded property within the Groundwater Management Zone shall include the lots, or portions thereof, as listed and described in the following table:

Tax Map / Lot No.	Property Address	Owner	Deed Ref. (Book / Page)
6/37	365 Lafayette Road, Rye	SNS LLC	5238/2463
10/11	355 Lafayette Road, Rye	Malcolm E. Smith III	5079/0262
17/72	67 North Road, North Hampton	Joan M Nordstrom	2416/583
17/73	65 North Road, North Hampton	Joseph F and Yolanda Fitzgerald	3007/2807
17/82	160 Lafayette Road, North Hampton	Luck Enterprises, Inc.	2473/1659
17/86	180 Lafayette Road, North Hampton	Christopher C and Louis J Fucci	3319/952
17/87	186 Lafayette Road, North Hampton	Lori A Lessard Trustee	2760/2099
21/8	188 Lafayette Road, North Hampton	Joseph J and Helen M McKittrick	2641/2656
21/10	8A Lafayette Terrace, North Hampton	John J Sr and Dorleena Wylie	4030/2567
21/11	12A Lafayette Terrace, North Hampton	Seth McAlister	5044/102
21/12	16A Lafayette Terrace, North Hampton	William and Christine Adinolfo	2963/1721
21/14	20 Lafayette Terrace, North Hampton	Joseph Hanley	4682/1265
21/14-1	40-42 Lafayette Terrace, North Hampton	James A C Jones	4451/1104
21/15	44 Lafayette Terrace, North Hampton	Joseph B and Bridget S Conner	4183/1638
21/16	46 Lafayette Terrace, North Hampton	Rodney K Booker Trustee	5196/2724

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Tax Map / Lot No.	Property Address	Owner	Deed Ref. (Book / Page)
21/17	1 Lafayette Terrace, North Hampton	Judith I and Bernard P Tracey	2450/687
21/18	3 Lafayette Terrace, North Hampton	Erin and Joshua Miller	5029/1768
21/19	5 Lafayette Terrace, North Hampton	Richard P and Kimberly M Bartlett	3824/2799
21/20	9 Lafayette Terrace, North Hampton	Alexis J Perron III	3088/1774
21/21	11 Lafayette Terrace, North Hampton	Kenneth and Tracey Margeson	3121/1606
21/22	15 Lafayette Terrace, North Hampton	Edward and Anita Gabree	3013/2221
21/23	Part of 11 Lafayette Terrace	Kenneth and Tracey Margeson	3121/1606
21/24	43 Lafayette Terrace, North Hampton	William Warman	4374/1365
21/25	45 Lafayette Terrace, North Hampton	ZCCMMXIIVOOOOOIIIII5INH LTD Partnership	2530/1863
21/26	198 Lafayette Road, North Hampton	Gozinta LLC	4275/904
21/27	206 Lafayette Road, North Hampton	206 Lafayette Road LLC	4785/379
21/27-1	200 Lafayette Road, North Hampton	Derek R Burt Trustee	5147/325
21/28	216 Lafayette Road, North Hampton	Stella A Ciborowski Trust	2414/729
21/28-1	216 Lafayette Road, North Hampton	Leo J Crotty Jr	2475/1278
21/29	212 Lafayette Road, North Hampton	S&L Realty Trust	3666/1199
21/31	224 Lafayette Road, North Hampton	SNS LLC	5238/2463
21/32	Coakley Landfill, North Hampton	Coakley Landfill LLC	3117/2934
21/33	Coakley Landfill, North Hampton	Coakley Landfill LLC	3117/2934
21/34	Lafayette Road Rear, North Hampton	James A C Jones	4451/1102
21/35	Lafayette Terrace Rear, North Hampton	James A C Jones	4451/1102
21/36	Lafayette Terrace Rear, North Hampton	James A C Jones	4451/1102
21/37	Lafayette Terrace Rear, North Hampton	Town of North Hampton	3415/1661
21/39	North Road Rear, North Hampton	Joan, Breen and Denise Grenier- Winther, Susan Sherr, and Caryn Blake	5142/2979
21/41	North Road Rear, North Hampton	Elmer M Sewall	1340/524
21/46	10 Lafayette Terrace / Part of 8A, North Hampton	John J Sr and Dorleena L Wylie	3219/2588

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Tax Map / Lot No.	Property Address	Owner	Deed Ref. (Book / Page)
*R1/13	340 Breakfast Hill Road (Portion Only)	Elmer M Sewall Rev Trust 96	3159/928
R1/9B	560 Breakfast Hill Road	Town of Greenland	3454/1131

Shaded rows indicate newly added lots that require notice per Standard Permit Conditions #9 and #10. The original notice on Lot 13 Map R1 should be amended and recorded to reflect the expanded GMZ within this lot.

*An expanded portion of the Sewall parcel (Tax Map R1 Lot #13) is included within the GMZ, as shown on the updated plot plan entitled "*Groundwater Monitoring Zone Plan*" prepared by Richard D. Bartlett & Associates, LLC., certified on December 11, 2013, and described as follows:

Commencing at a point on the easterly line of land now or formerly of the Boston and Maine Corporation, said point being a distance of 600.93 feet as measured along a curve to the left, having a central angle of 01°54'46" and a radius of 18,000.00 feet, from a steel pin set on the southerly sideline of Breakfast Hill Road marking the northeasterly most corner of said Boston and Maine land identified on tax map R1 as lot 11, thence by a curve to the left, having a central angle of 00°33'15" and a radius of 18,000.00 feet, a distance of 174.06 feet to a point, thence by a curve to the left, having a central angle of 00°24'32" and a radius of 11,425.51 feet, a distance of 81.56 feet to a point; thence S13º08'30"W a distance of 1,419.54 feet to a point; thence, N76°51'30"W a distance of 99.00 feet to a point at land now or formerly of Elmer M. Sewall Revocable Trust 96, thence, along said Sewall land, N35°09'35"E a distance of 88.02 feet to a point; thence, continuing by said Sewall land, N13º08'30"E a distance of 163.21 feet to a point; thence N76º51'30"W a distance of 434.00 feet, through said Sewall land to a point; thence S17º29'30"W a distance of 1,097.80 feet to a point on the Greenland-North Hampton town line, said point being N79°55'00"W a distance of 18.99 feet from a concrete bound, on said town line, engraved "G" and "N-H", thence, along said town line, N79°55'00"W a distance of 345.00 feet to a point; thence N23º21'55"E a distance of 2,504.63 feet to a point; thence N25º28'15"E a distance of 551.47 feet to a point; thence S72º51'15"E a distance of 221.87 feet to a point; thence S15°37'10"W a distance of 441.43 feet to a point; thence S75º34'35"E a distance of 166.70 feet continuing through said Sewall land and said Boston and Maine land to the point of beginning.

Containing 1,306,532 square feet or 29.99 acres, of which 27.42 acres is the land of the Elmer M. Sewall Revocable Trust 96 and 2.57 acres is the land of the Boston and Maine Corporation.

13. INSTALLATION OF NEW GMZ COMPLIANCE WELLS

Two well couplets (overburden and bedrock) shall be installed near the revised GMZ boundary. Locations to be confirmed with EPA & DES prior to construction. Wells shall be installed and sampled as part of the regular scheduled 2014 sampling program.

14. <u>UNDEVELOPED LOTS WITHIN THE GROUNDWATER MANAGEMENT ZONE:</u>

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 permittee shall include a report on this inquiry in the Annual Summary Report required in Standard Permit Condition #7. The results of these inquiries shall be documented in each Annual Summary Report.

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.

- 15. All monitoring wells at the site shall be properly maintained and secured from unauthorized access or surface water infiltration.
- 16. 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.

M. Baste

Carl W. Baxter, P.E., Administrator Hazardous Waste Remediation Bureau Waste Management Division

Under RSA 21-0:14 and 21-0:9-V, any person aggrieved by any terms or conditions of this permit may appeal to the Waste Management Council in accordance with RSA 541-A and N.H. Admin. Rules, Env-WMC 200. Such appeal must be made to the Council within 30 days and must be addressed to the Chairman of the Waste Management Council, c/o Appeals Clerk, Department of Environmental Services Legal Unit, 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

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