



The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

June 11, 2021

**CERTIFIED MAIL  
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RETURN RECEIPT REQUESTED**

**LETTER OF DEFICIENCY  
No. WMD LOD 21-016**

Jim Wheeler, Public Works Director  
City of Berlin  
168 Main Street  
Berlin, NH 03570  
Email: [jwheeler@berlinnh.gov](mailto:jwheeler@berlinnh.gov)

**SUBJECT:** Berlin East Milan Road Landfill, East Milan Rd., NH  
Solid Waste Permit No. DES-SW-SP-1977-002  
**Letter of Deficiency – Methane Lower Explosive Limits (LEL) Exceedance**

Dear Mr. Wheeler:

The New Hampshire Department of Environmental Services, Waste Management Division (NHDES) issues this Letter of Deficiency (LOD) to the City of Berlin (City) because NHDES has identified compliance deficiencies concerning post-closure inspection, monitoring and maintenance at the above-referenced landfill. Pursuant to the NH Solid Waste Management Rules (Rules), Env-Sw 100 et seq., the City is required to ensure that the landfill's decomposition gas control system is controlling gas migration through soil in accordance with Env-Sw 806.07, *Decomposition Gas Control Requirements*. To demonstrate the system is functioning as required to protect public health safety and the environment, the Rules require that methane gas concentrations not exceed 50% of the lower explosive limit (LEL) in soil at the property line. Reporting for the above-referenced landfill indicates that decomposition gases, also known as landfill gases (LFG) are not controlled to the standards set forth in Env-Sw 806.07(b)(2) and thus pose potential risks to health and safety. Therefore, as discussed during your May 4, 2021 remote meeting with Laurel Pushee, Jaime Colby and Debra Sonderegger of the NHDES Solid Waste Management Bureau, NHDES hereby requests the City of Berlin to promptly address these compliance deficiencies in the manner specified below in ***bold italic type***.

Deficiencies.

- 1. Failure to ensure that the decomposition gas control system is performing as required by Env-Sw 806.07(a) and (b).**

Data provided to NHDES in the 2019 PCR identified exceedances of the limits specified in Env-Sw 806.07(b) have occurred since at least 2005. These exceedances indicate that the decomposition gas control system has not been performing in the manner required to control gases to prevent hazards to health, safety or property as required in Env-Sw 806.07(a).

**Requested Response Action:**

***NHDES requests the City engage the services of a qualified professional engineer to implement the recommendation made by CMA engineers in their November 19, 2018 letter to increase LFG***

[www.des.nh.gov](http://www.des.nh.gov)

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***monitoring and construct or improve the existing LFG system. To accomplish this NHDES requests the City (1) submit monthly status reports showing the results of gas monitoring to NHDES via OneStop beginning July 1, 2021. However, while continued monitoring is important to protecting health and safety, it does not solve the problem. Therefore, NHDES requests the city to evaluate options to permanently reduce methane concentrations to less than 50% of the LEL at the property line and to limit the migration of methane gas off-site and report to NHDES, by October 1, 2021, on the selected option(s) for permanent reduction of LFG migration and a proposed schedule for implementation of the selected option(s). NHDES also requests that starting October 1, 2021 the city begin to include status updates on the progress made towards implementing the selected option(s) as part of the monthly status reports requested above until the city has demonstrated that LFG levels are consistently below 50% of the LEL at the property line.***

**2. Failure to implement contingency procedures pursuant to Env-Sw 806.07(e).**

The City has reported intermittent implementation of contingency procedures over the last several years when methane concentrations have exceeded the limits specified in Env-Sw 806.07(e). Based on the information provided to NHDES, the City has not consistently implemented contingency procedures.

**Requested Response Action:**

***By July 1, 2021, please provide NHDES with a copy of the City's contingency procedures to be implemented when methane concentrations exceed the limits specified in Env-Sw 806.07(b). NHDES also requests, when the methane or explosive gases are detected above the limits specified in Env-Sw 806.07(b), the City immediately notify NHDES and implement the landfill's contingency procedures to ensure gas migrating away from the landfill does not pose a threat to health and safety.***

**3. Failure to implement a decomposition gas monitoring program pursuant to Env-Sw 806.07(c).**

On March 31, 2021, NHDES received the 2020 annual post-closure report for the subject landfill. The permittee reported that gas monitoring was not conducted in 2020. The permittee is required to implement a gas monitoring program in accordance with Env-Sw 807.05(b)(9), Env-Sw 806.07(c), and the facility's closure plan.

**Requested Response Action**

***NHDES requests that the City provide the current monitoring plan by July 1, 2021, immediately conduct monitoring of the facility's existing gas probes and vents, and continue monitoring as required by the facility's closure plan. If the concentrations of methane in gas probes exceed the action levels in Env-Sw 806.07(b), implement the contingency procedures (See No. 2 above).***

Please submit the reports requested above through NHDES OneStop by following the [Solid Waste Management Bureau Electronic Submittal Guidelines](#).

Address all matters related to this Letter of Deficiency to:

Laurel Pushee, Waste Management Specialist  
NHDES/WMD  
P.O. Box 95

Concord, NH 03302-0095  
Email: [Laurel.c.Pushee@des.nh.gov](mailto:Laurel.c.Pushee@des.nh.gov)  
Telephone: 603-271-2938

A copy of the New Hampshire Solid Waste Rules, Env-Sw 100 et seq. is available on the NHDES website at <http://des.nh.gov/organization/commissioner/legal/rules/index.htm> or by contacting the Public Information Center at (603) 271-2975. Statutes are available via the State of NH website, [www.nh.gov](http://www.nh.gov).

Thank you in advance for giving this Letter of Deficiency immediate attention. Failure to respond as requested may result in enforcement action pursuant to RSA 149-M with regard to the noted deficiencies. Potential enforcement actions include issuance of an administrative order or referral to the New Hampshire Department of Justice (NHDOJ) for enforcement. Also, please be advised that issuance of this Letter of Deficiency and your response actions do not limit NHDES from seeking monetary penalties for the noted deficiencies, either administratively pursuant to RSA 149-M or by referral to the NHDOJ.

Thank you for your attention to this matter.

Sincerely,



Sarah Yuhas Kirn, P.G., Assistance Director  
Waste Management Division  
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cc: Shelli Fortin, Town Clerk, Town of, Email: [sfortin@berlinnh.gov](mailto:sfortin@berlinnh.gov)  
Paul Grenier, Mayor, City of Berlin, Email: [pgrenier@berlinnh.gov](mailto:pgrenier@berlinnh.gov)  
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NHDES Legal Unit