

**From:** Wimsatt, Mike <michael.j.wimsatt@des.nh.gov>  
**Sent:** Wednesday, June 12, 2024 4:14 PM  
**To:** Judy Aron <Judy.Aron@leg.state.nh.us>  
**Cc:** Scott, Robert <Robert.R.Scott@des.nh.gov>  
**Subject:** RE: NCES Leachate Hauling Emergency Issues

Caution! This message was sent from outside your organization.

Dear Representative Aron,

I am writing in response to your email dated May 27, requesting that NHDES respond to questions posed to you in an email from Jon Swan regarding management and disposal of leachate generated at the NCES Landfill in Bethlehem (NCES). As I indicated in my initial response to you on May 28, I am writing now to provide a more detailed response.

As you know, leachate is generated at all landfills as a result of precipitation that migrates through the waste mass, is collected via engineered drainage systems constructed on the landfill liners, and is pumped to temporary storage tanks. At some landfills in NH, the leachate is direct-piped to a nearby wastewater treatment plant for treatment and discharge. At others, including the NCES facility, the leachate is pumped off to tanker trucks (typically 8000-gallon capacity) and transported via highway to wastewater plants for treatment and discharge. For larger landfills, such as the NCES Landfill, leachate generation volumes require several daily pickups by tanker trucks.

NHDES rules and permits for landfills require that each facility have at least two wastewater treatment plants (WWTP) identified to receive, treat, and discharge their leachate. NCES has typically utilized the Winnepesaukee River Basin Plant in Franklin and the Concord WWTP for management of their leachate. NHDES rules and facility permits require that leachate hauling activities be conducted within the facility's operating hours.

During the first quarter of this calendar year (Jan – Mar 2024), landfill facilities across the state experienced much higher than usual precipitation. In the case of NCES, the facility reported that precipitation included an average amount of snowfall and total precipitation that was double the normal values. In addition, NCES completed construction and received approval for operation of a new phase of the landfill. Typically, when new phases are constructed and begin operation, leachate flows can significantly increase due to a large area being subjected to precipitation without the presence of waste to slow down the migration of the water to the leachate collection system.

The combination of higher-than-normal precipitation and construction/operation of a new phase of the landfill without significant diversion of rainfall to the stormwater management system contributed to higher leachate generation during the first few months of this year at NCES. Simultaneously, the Concord WWTP, which routinely receives leachate from NCES, temporarily stopped accepting leachate for a few weeks in February 2024. Then, reportedly in an effort to reduce total ammonia inputs at its facility, it reduced its daily maximum acceptance from 10-12 trucks to 2-4 trucks/day. Consequently, NCES contracted with three additional facilities, the Allenstown WWTP, the Manchester WWTP; and the Anson/Madison WWTP in Maine for treatment of its leachate. Currently, NCES is using some combination of these facilities to manage its leachate.

In mid-April, NCES contacted NHDES to notify us that it was dealing with a leachate hauling emergency\* and seeking permission to haul leachate from the facility outside its normal working hours of 6 am to 6 pm. The combination of having an unusually high amount of leachate, limited hours

for delivery at the WWTPs, greater hauling distances, and limited availability of trucks and drivers during those hours necessitated a brief period (approx. 2 weeks) of expanded hauling hours from the Bethlehem facility in order to move sufficient amounts of leachate. (Note that the facility has approximately 200,000 gallons of on-site storage capacity.)

\* Note: NCES can obtain permission to expand its hours of leachate hauling through a permit modification, but has not yet done so. Accordingly, it is only allowed to operate outside those hours in *emergency* situations. The stated emergency in this case was an inability to move enough leachate each day to stay within its on-site storage capacity. Following the two-week period during which it was authorized to haul leachate for extended hours, it has returned to routine operations and a 6 am to 6 pm hauling schedule. As we understand the current situation, that routine schedule, coupled with the expanded list of receiving facilities, allows for adequate leachate loading and off-site transport.

With respect to the questions regarding shipment of leachate from Casella's New England Waste Services Landfill in Coventry, Vermont, wastewater treatment plants may elect to accept wastewaters from out-of-state. The Concord WWTP is an example of such a facility. NHDES also notes that NCES' 2024 first quarterly operations report indicates that Vermont registered tanker trucks were used frequently to haul leachate from NCES to various wastewater treatment plants.

Pursuant to its authority under RSA 149-M, NHDES continues to evaluate the compliance status of NCES with respect to its permit and applicable rules.

In a broader context, NHDES has identified a series of issues impacting leachate generation, control, management, and disposal at all of NH's landfills. They include:

- a. Increased frequency and intensity of storm events, and overall higher annual precipitation;
- b. Performance of intermediate cover with respect to intercepting and diverting precipitation to stormwater collection systems v. entering the waste mass and contributing to leachate generation;
- c. General operational practices; and
- d. Design and construction of leachate management and stormwater management systems.

NHDES plans to address these issues with several efforts in the coming months. The proposed rules in Chapter Env-Sw 800 specify increased leachate storage capacity and increased design flow standards for both leachate management and stormwater management, acknowledging increased precipitation and intensity/frequency of storm events. They also strengthen the requirements and schedules for intermediate cover installation. The agency is also placing a focus on compliance assurance efforts relative to operational practices that influence leachate and stormwater management.

Thank you for your interest and attention to solid waste management issues in New Hampshire. I look forward to speaking with you again soon about this topic.

Sincerely yours,  
Mike Wimsatt

Michael J. Wimsatt, P.G., Director  
Waste Management Division

6/30/24, 7:17 AM

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