STATE OF NEW HAMPSHIRE

INTRA-DEPARTMENT COMMUNICATION



File
Jaime M. Colby, P.E., SWMB, NHDES
Leachate Spill on May 3, 2021 Communications Week of May 3, 2021
North Country Environmental Services, Inc. North Country Environmental Services, Inc. Landfill 581 Trudeau Road, Bethlehem, NH Permit No. DES-SW-SP-03-002
May 20, 2021

Monday, May 3, 2021

On Monday, May 3, 2021 at about 9:53 AM, I retrieved my voicemails, which included a voicemail from John ("Joe") Gay of NCES reporting a leachate spill at the subject facility. Mr. Gay stated that he was calling to report a leachate spill from one of the facility's underground storage tanks (USTs) observed by Kevin Roy, NCES, that morning. The spill appeared to be due to a "high-high cutoff [alarm that] did not shut the pump off." NCES was trying to "assess the extent of the damage", but it did appear that "some leachate [ran] into the pond." NCES was making arrangements to have the pond "vac'd out" and to "fully assess the situation." Mr. Gay stated that NCES will file an incident report. The voicemail was left at approximately 6:45 AM. NHDES' Spill Response & Complaint Investigation Section (SRCIS) and James O'Rourke, P.G., of NHDES' Groundwater Section, also received phone calls reporting the incident.

I followed up with an email to Mr. Gay at approximately 9:55 AM, and arranged to speak with him that afternoon.

I had a phone call with Andrew Madison, NHDES-SRCIS, at approximately 10:55 AM. Andrew was on-site at that time. See SRCIS' report (attached) for additional details.

At approximately 1:30 pm, I had a teleconference call with NCES representatives Joe Gay, Kevin Roy and Bruce Grover, and Sanborn Head representative Tim White. NCES reported the following:

- When operations began on Monday, May 3, a leachate tanker operator reported "something off" to Bruce Grover
- NCES' initial assessment of the cause was that there was no communication between the Stage 4, Phase II primary leachate pump and the facility's leachate storage tanks' cutoff alarm
- NCES explained that
 - o UST A and UST B are each approximately 30,000 gallons
 - UST A pumps to UST B, until UST B is full; then UST B pumps to the AST (approx. 150,0000 gal)
 - When the AST, UST B, and UST A are full, a signal is sent to all facility pumps to stop pumping
- NCES thinks that sometime over the weekend, all the tanks filled and Stage 4, Phase II continued

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to pump to the tanks

- Stage 4, Phase II pump communication is via a wireless radio signal, while the other pumps at the facility are hardwired
- NCES stated that it has been having difficulty with the wireless radio signal, and had been troubleshooting it for several weeks (NCES estimated 4 to 6 weeks), and that an electrician had been in the prior week (week of April 26) to replace a part; NCES stated that it was not aware that the issue had not been fixed by the work
- NCES removed 3-4 tanker loads of leachate from UST B, put a pump in the pond where it was visually impacted, and pumped liquids into UST B
- Sanborn Head was now on-site and prepared to collect samples, as needed, for leachate indicator parameters; I stated that Tim White should call Jamie O'Rouke to clarify for which leachate indicator parameters to sample and test
- NCES stated its belief that leachate was contained to the forebay of the stormwater pond (Stormwater Pond No. 4); Tim should coordinate with Jamie O. on confirmatory sampling
- NCES also stated that it was removing sediment from the forebay, and separately stockpiling it in Stage VI, Phase I; I reminded NCES that runoff from the stockpile should be directed into the landfill and not the stormwater system; NCES stated that this is what they are doing
- NCES noted that there are 4 stormwater pipes that discharge to the impacted pond, and that it
 would evaluate diversion options (rain predicted for Wednesday, 5/5/2021) to bypass the
 visually impacted area
- NCES estimated that 500-600 gallons of leachate were released, but wasn't sure; generally estimated less than 1,000 gallons released
- NCES observed that it appeared the leachate rose in the tanks, overflowed into manways, and ultimately discharged into the storwmater pond through old infrastructure that is no longer used by NCES but that is still in place

NHDES requested that NCES include in the incident report a figure showing the subject area, all infrastructure (both current and old), and how it thinks the leachate generally traveled. NHDES also requested estimates of the volume of leachate released as well as the quantity of sediment removed.

NCES stated that it was contracting Sanborn Head to prepare the incident report.

Thursday, May 6, 2021

On May 6, 2021, I called Joe Gay at about 10:15 AM to schedule a site visit for Monday, May 10, 2021. I also requested that the incident report include the total capacity of the leachate system (e.g., storage tanks) and an explanation or discussion of why the tanks may have been near full before the weekend.

Friday, May 7, 2021

At approximately 4:36 pm on May 7, 2021, NHDES received NCES' incident report (ref. Env-Sw 1005.09).

encl. Site Investigation Summary Report, dated May 3, 2021

JMC/SYK:jmc

Date: 05/03/2021	Town: Bethlehem	
	Site # 198704033	
SITE INVESTIGATION		
	SUMMARY REPORT	
Site Name: North Country Environmental Services		
Location: 581 Trudeau Rd.		
NHDES Investigator(s): A. Madison		
Personnel Present / Affiliations:		
1. Kevin Roy, Foreman		

Monday, May 3rd, 2021. 0955.

I arrived on-scene at the North Country Environmental Services in response to a report of a release of leachate from an overfilled UST at the NCES Landfill in Bethlehem. I reported to the facility office and introduced myself to the Forman, Kevin Roy. Mr Roy and I then drove to the site of the release, which was located at the back of the property. When we arrived at the location of the UST in question, Mr. Roy explained what happened over the weekend. He explained that during the weekend, an alarm that would normally stop the leachate pump when the UST was full had failed, and allowed leachate to flow into the UST. This caused the UST to overfill, which allowed leachate to flow out of an access cover, over the ground and over a dirt road, and then into a storm water retention pond.

The retention pond had a substantial amount of sediment, which appeared to have been transported via the same route as the leachate. Mr. Roy informed me that they were in the process of constructing an earthen ramp down into the retention pond in order to access and remove the sediment in the retention pond, some of which may have been transported during heavy rainfall over the weekend. Mr. Roy informed me that the UST is being pumped out and trucked off site for treatment and disposal, and that a consultant was en route to sample water within the pond, and in a stream nearby, however he had no reason to believe that leachate had left the storm water system. I asked Mr. Roy how much leachate was released, he said he wasn't sure, it could be as little as 500 gallons, or as much as a thousand. I was also informed that the pumping system was shut down until the necessary repairs could be made. I then advised Mr. Roy to consult with the Solid Waste Management Bureau for further instruction and to coordinate further activities. I then discussed my observations from the site with Jaime Colby of the SWMB over the phone, and then departed the scene.



Sediment and leachate in retention basin, note the construction of the ramp to the right of the photo.



Overland route leachate followed to the retention pond. Contaminated soil was scraped and removed. Drainage ditch leading into the pond is behind the loader in the photo. Manhole where the release originated is behind and to the left of the viewer.