

STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION



DATE: April 29, 1999
AT (OFFICE): NHDES-WMD

CONFIDENTIAL

FROM: ³ James W. Berg, WMS III
Solid Waste Compliance Section
Solid Waste Management Bureau

SUBJECT: **NORTH COUNTRY ENVIRONMENTAL SERVICES LANDFILL
STAGE I, PHASE III - LEACHATE**

TO: Michael Sills, Ph.D, P.E.
Waste Management Division

via

~~Richard S. Reed, Administrator
Solid Waste Management Bureau
Waste Management Programs~~

The Solid Waste Compliance Section has received a letter dated March 12, 1999 from North Country Environmental Services, Inc. (NCES) requesting the Department allows NCES to resume disposal of Stage I, Phase III leachate at the Concord Wastewater Treatment Plant. NCES is basing this request on three consecutive leachate samples (November 10, 1998, February 11, 1999 and a third sample yet to be received by the Department) which would not fail the mixture rule. This memo is being sent to seek input from you regarding this proposal, and the future management of leachate from this phase.

Background

Mixture Rule: The combined concentration of the leachate from Stage I, Phase III using the criteria for the mixture rule as presented by NCES is attached. The average combined concentration for 1996, 1997 and 1998 are 36 mg/l, 44 mg/l and 91 mg/l, respectively. The leachate failed the mixture rule July 15, 1998 (113.8 mg/L), October 21, 1998 (117.2 mg/l) and November 4, 1998 (104.8 mg/l). The last two sample rounds 11-10-98 and 2-11-99 had combine concentrations of 90.0 mg/l and 73.4 mg/l, respectively. The Department is waiting for the next round of data which is expected shortly.

Leachate Flow: Leachate flow for Stage I, Phase III from October 1998 through March 1999 averaged 26,251 gallons per month or 865 gallons/day.

Leachate Storage Capacity: Stage I: Primary Tanks - 4 - 15,000 gallons/tank, Secondary Tanks 4 - 10,000 gallons/ tank and Contingency Tank - 20,000 gallons/tank.

Sampling Program: Prior to September 1998 NCES conducted tri-annual sampling of its leachate from each phase of Stage I. On October 10, 1998, the Department requested NCES to collect and

CONFIDENTIAL

Michael Sills, Ph.D, P.E.

**NORTH COUNTRY ENVIRONMENTAL SERVICES LANDFILL
STAGE I, PHASE III - LEACHATE**

NHDES Memo dated April 29, 1999

Page 2

analyze weekly samples from the Phase III leachate for a one month period after which the Department would make a determination of the appropriate sampling program for this phase. NCES collected the four samples on October 21, 1998, October 29, 1998, November 4, 1998 and November 10, 1998. Two of the results, October 21, 1998 and November 4, 1998, failed the mixture rule with levels of 117.2 mg/l and 104.8 mg/l, respectfully. NCES terminated the weekly sampling program after the sample collected November 10, 1998.

Leachate Disposal: NCES received a Temporary Generator ID number in November 1998 which expired on December 18, 1998. NCES has not applied for a Generator ID number to replace the temporary one that they received. NCES has not been manifesting any of the leachate being disposed from Phase III. Leachate from Phase III has been disposed out of state since the Concord WWTP refused to accept it. During January, February and March 1999 the leachate was disposed either at United Industrial in Connecticut or Dupont Environmental in New Jersey.

Issues

At this point in time and with the information NCES has provided, does the Department consider the leachate from Stage I, Phase III a hazardous waste.

NCES did not continue with the weekly monitoring program which would have provided the data to assist the Department in determining a leachate management program for Phase III.

In a letter dated March 18, 1999 the Department provide NCES with options for managing leachate regulated by the mixture rule. What the Department has not done is clarify to NCES the requirements that would allow the facility to again manage the leachate from Stage I, Phase III under the New Hampshire Solid Waste Rules. Also, should NCES be moving forward with implementing one of the options presented in the Department's letter now? If not, what would trigger an obligation by NCES to implement one of the options and what criteria would the Department use to determine that the leachate was no longer a hazardous waste?

The Department needs to consider its position on reconfiguring the Stage I piping configuration from four (4) sources of generation to one (1) source of generation and how this change would impact any sampling obligation the Department may impose on NCES relative to Stage I, Phase III.

Does the Department require NCES to obtain and maintain a generator number at the site as a contingency in case the leachate is characterized as a hazardous waste in the future?

Next Step

The Department needs to respond to the NCES letter dated March 12, 1999. To do so the Solid Waste Management Bureau would appreciate some guidance from you in this response. The SWMB

Michael Sills, Ph.D, P.E.

**NORTH COUNTRY ENVIRONMENTAL SERVICES LANDFILL
STAGE I, PHASE III - LEACHATE**

NHDES Memo dated April 29, 1999

Page 3

CONFIDENTIAL

has the following thoughts for you to consider:

Option 1

Sampling Analysis: NCES has not provided sufficient data for the Department to make a determination that the leachate from Stage I, Phase III could consistently be classified as a non-hazardous waste under the mixture rule. Therefore additional testing of the leachate should be required to demonstrate that it can consistently pass the mixture rule. The SWMB would look for NCES to conduct sampling and analysis on a per load basis for one month. If none of the results fail the mixture rule, then require weekly testing of the leachate for a month. If these results do not fail the mixture rule, allow NCES to test the leachate monthly for four (4) months. Again, if none of the results fail the mixture rule allow the facility to return to the tri-annual sampling program for leachate. If at any time a result fails the mixture rule, NCES would start the sampling program from the beginning. Please provide your thoughts on this proposal and what the combined concentration the Department is comfortable with accepting (i.e. any result which is below the mixture rule or for the data to return to the 1996/1997 levels of below 50 mg/l) before the facility can move to the next step in the sampling program.

Leachate Management: Management of the leachate will become more difficult during this sampling program because of the volume of leachate being generated, and the storage limitations associated with leachate management at the site. The Department would place the responsibility for determining how leachate will be stored until the analytical results have been generated by the laboratory on NCES. This issue will become more difficult as the time frames for sampling are expanded. One option to possibly deal with the storage limitations would be for the Department to make provisions to waive certain transportation requirements provided the leachate is treated out-of-state. The waivers would relinquish NCES from the requirement to use a registered hazardous waste transporter and a hazardous waste manifest. Under either management option it is not clear whether NCES would be required to obtain a generator ID number.

Option 2

Statistical Analysis: Allow NCES to conduct a statistical analysis of historical leachate data to demonstrate that the data falls within the confidence interval for the leachate generated in Phase III.

Leachate Management: Allow NCES to manage the leachate under the existing Rules provided the statistical analysis supports this option.

CONFIDENTIAL

Michael Sills, Ph.D, P.E.

**NORTH COUNTRY ENVIRONMENTAL SERVICES LANDFILL
STAGE I, PHASE III - LEACHATE**

NHDES Memo dated April 29, 1999

Page 4

CONFIDENTIAL

Option 3

This option could be a combination of the 1 and 2 above.

The SWMB would appreciate your thoughts on this issue. If you like, I would be willing to set up a meeting between the HWCS, SWMB and yourself to discuss the sampling obligations and management of the Stage I, Phase III leachate.

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cc: John Duclos, HWCS

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