



Sanborn, Head & Associates

Consulting Engineers & Scientists



July 28, 1997
File No. 1232.1

Mr. Richard S. Reed, Supervisor
Waste Management Compliance Bureau
New Hampshire Dept. of Environmental Services
6 Hazen Drive, PO Box 95
Concord, NH 03302

Re: Construction Summary - Period Ending July 25, 1997
Stage I Closure Construction
North Country Environmental Services
Bethlehem, New Hampshire

Dear Mr. Reed:

This letter has been prepared pursuant to Env-Wm 310.07 (b)(5) to provide a status report of construction activities at the North Country Environmental Services (NCES) facility in Bethlehem, New Hampshire for the period ending July 25, 1997.

I. Cap Construction Activities

The contractor, Casella Construction Company (Casella) continued construction on the north slope, which involved grading the subgrade and placing 8 inches of gas transmission layer fill and the 4 inches of screened till. The intermediate drainage swales were extended to the northwest corner of the landfill.

Casella also graded and placed gas transmission layer fill and screened till soil on the west slope. The intermediate swale was constructed and all but the southern quarter of the liner in the anchor trench was exposed.

Terrafix Environmental, Inc. (Terrafix), the capping subcontractor, installed approximately 700 to 800 feet (as measured along the anchor trench) of 40-mil LLDPE membrane along the north slope, around the northwest corner, and on the west slope as indicated on the field sketch. Terrafix accepted the subgrade prior to the placement of the LLDPE membrane. Mr. Wayne Moore of Atlantic Testing Company, Ltd. (Atlantic) was on site to provide construction quality assurance (CQA) services during the installation of geosynthetic materials.

Heavy rains occurred at the site on Tuesday July 15, 1997. Water got beneath the geomembrane in the center intermediate swale and eroded the subgrade. In addition, subgrade was eroded in the base of the gabion-lined swale from the center intermediate swale to the base of the slope. Terrafix will remove the geomembrane and the subgrade will be repaired now that the cap extends across the north slope and the potential for water to get beneath the membrane from upgradient portions of prepared, but not yet capped swale is eliminated.

*Paul M. Sanborn ■ Charles L. Head ■ R. Scott Shillaber
Charles A. Crocetti ■ Mathew A. DiPilato ■ Daniel B. Carr ■ Duncan W. Wood*

Sanborn, Head & Associates, Inc.
6 Garvins Falls Road ■ Concord, New Hampshire 03301
Fax (603) 229-1919 ■ Phone (603) 229-1900

II. Drainage Construction Activities

With the exception of the construction of intermediate drainage swales, no additional site drainage work was performed.

III. Gas Management System

No additional work was performed during the two-week period.

IV. Leachate Collection System Improvements

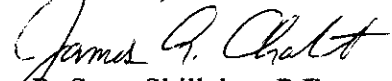
The Contractor installed four sheets of 3/4-inch marine plywood over the corrugated metal pipe surrounding the Phase IV leachate sump riser. Five foot diameter reinforced concrete manhole ring sections were added to raise the Phase II, III, and IV leachate sump risers. Joints between ring sections were caulked. An offset 30-inch manhole top section was installed on the top of each sump riser.

V. Construction Schedule

The schedule provided on July 11, 1997 by the Contractor is still applicable. It is anticipated that in the next two weeks the geomembrane will be installed on the southwest corner and on a portion of the south slope, and the Contractor will grade and place gas transmission fill and screened till on a portion of the slope and install culverts.

Terraflux is expected to be off-site for one to two weeks on another project while additional cap area is prepared.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.


for R. Scott Shillaber, P.E.
Principal

DRP/RSS:pmm/las

Enclosure: Field Sketch

cc: Larry Lackey, NCES
Matt Poirier, NCES
Bob Watts, NCES
Dennis Porter, SHA