



Consumat Sanco Inc.

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October 7, 1993

Dr. Philip J. O'Brien
Waste Management Division
Department of Environmental Services
6 Hazen Drive
Concord, New Hampshire 03302



Re: Consumat Sanco Relocation Project

Dear Dr. O'Brien:

We are pleased to report that the solid waste excavation phase of the relocation project is completed. As a result, we are preparing for the soil assessment phase of the project to be completed in the coming weeks. We are looking to complete the assessment phase in accordance with the Consent Agreement and the following work plan.

Condition #4 and #5 of the Consent Agreement between Consumat Sanco, Inc. (Sanco) and the New Hampshire Department of Environmental Services (DES) requires that:

4. Within 45 days of the execution of this agreement Sanco will submit to DES, in quadruplicate, a proposed plan and schedule for:
 - a. determining the extent to which subgrade materials in the area from which the solid waste/cover materials have been taken (hereinafter "the remediation area") must be excavated and removed to render the area clean of all materials which have the potential to degrade groundwater and/or surface water quality and/or which have the potential to cause noxious odors;
 - b. removing all materials identified pursuant to (a) of this section;
 - c. restoring the remediation area by regrading and revegetating to control erosion, in accordance with RA 485-A:17 and Env-Wm 415; and
 - d. monitoring groundwater quality upgradient and downgradient of the remediation area so as to identify conditions that may warrant further remediation or termination of continued monitoring of the site.
5. Following approval of the plan and schedule by DES, Sanco shall implement the plan in accordance with the approved schedule.

A subsidiary of Consumat Systems, Inc. • P.O. Box 9379 • Richmond, VA 23227 • (804) 746-4120

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Please consider this letter to be the required submittal of the plan and schedule for accomplishing final remediation of the relocation area site in accordance with the Consent Agreement terms and conditions.

Previously, a scope of work for the above assessment had been submitted been submitted to DES in accordance with Condition #14 of Consumat Sanco's groundwater permit GWP-870433-B-001. Comments were received from DES in a letter dated September 1, 1993. These comments have been incorporated into this submittal of the procedures and schedule that is to be followed in completing the assessment.

Sanborn Head & Associates (SHA) of Concord will perform all sampling, analysis and reporting as required as a result of this work plan. The objectives of the work plan are to:

- 1) Conduct subsurface explorations to obtain soil samples for field screening and analytical testing to evaluate the extent of soil contamination which may exist in the area of the unlined landfill and extension area; and, on the basis of those conditions,
- 2) Develop recommendations to stabilize the site.

To meet these objectives, the work tasks described below are proposed.

TASK 1 - TOPOGRAPHIC SURVEY AND ASSESSMENT GRID LAYOUT

The initial task undertaken in the post excavation period is a topographic survey of the entire excavation area so as to determine the extent of the excavated area and the relative elevations of the excavation area floor. Cartographics, Inc. (Cartographics) of Littleton, New Hampshire will perform the survey based on existing vertical and horizontal control data. A topographical plan will be developed from the survey information to serve as the basis for the design of the grading plan to be submitted in conjunction with the assessment analysis report.

At the time that the topographical survey is completed, Cartographics will also establish the 100 X 100 foot grid pattern through which sampling locations are to be determined. Grade stakes will be established at the intersection points of each 100 X 100 grid line.

TASK 2 - SUBSURFACE EXPLORATIONS

After location of the assessment 100 foot grid locations by our surveyors, SHA will observe and log test pits excavated in the area where the landfilled materials had been located. The test pits will permit direct observation of soil conditions for evidence of contamination such as staining, and will permit sampling of soils for field screening and

laboratory analysis. The test pits will be excavated with a track mounted excavator to depths of 12 to 15 feet. About 20 test pits will be excavated within the 100 foot grid. It is expected that two days will be required to complete the field screening and sampling work. In addition to the above explorations, a background test pit will be dug upgradient of the remediation area. Logging, analysis and screening will be accomplished in the same manner as the subsurface explorations undertaken in the remediation area.

The test pits will be logged by an SHA representative. In addition to logging soil types encountered in the test pits, staining or other evidence of contamination will be noted on the logs. Soil samples obtained from the test pits will be screened in the field for the presence of volatile organic compounds with an organic vapor meter using headspace techniques. In addition, selected soil samples will be obtained for laboratory analysis.

TASK 3 - SOIL SAMPLING AND LABORATORY TESTING

Soil samples will be obtained from each test pit at depths corresponding to 2 and 6 feet below the ground surface remaining after removal of any visually stained soils. Samples from similar depths from groups of test pits will be composited to provide a minimum of 6 composite samples, 3 each from 2' and 6' depths below visually clean surface.

In addition to the composite samples, SHA will take five additional, discrete samples for laboratory analysis. These samples will be selected on the basis of field observations or screening results. They will be collected randomly from each row of 4 - 100 X 100 foot grid intersections. The discrete samples will only be taken from areas identified as "clean base grade".

Soil samples obtained from the test pits will be submitted for analysis for volatile organic compounds (EPA Method 8240). We anticipate that 11 samples will be submitted for analysis for the parameters identified above, consisting of 6 composite and 5 discrete samples.

TASK 4 - DATA EVALUATION AND REPORT

SHA will evaluate soil conditions beneath the old unlined landfill and lined extension area, based on their field observations and the laboratory analytical data derived from the above tasks. SHA will prepare recommendations for stabilizing the site, including remedial measures such as excavation of soils for use as daily cover in the lined landfill, if necessary, and regrading and seeding to limit erosion and control runoff, in a manner consistent with the analysis of soil conditions.

SHA will prepare a report for Consumat-Sanco presenting their recommendations for grading, stabilizing and excavating (if required) the unlined landfill, extension area and any

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other areas disturbed as a result of the project. The report will describe the field exploration program, observations and the results of field screening and analytical testing. Test pit logs and analytical data will be included as appendices. The report will also include a site grading plan developed on the basis of SHA's analysis of the results of the assessment. This report will be submitted to NHDES immediately upon receipt from SHA.

SCHEDULE OF TASK COMPLETION

The schedule for completing all of the tasks described above is shown on the following page. This schedule has been verified with the primary participants and the topographical survey will commence next week. The schedule for any final grading or excavation work is a function of the time required for DES to perform their comprehensive review of the report and recommendations to be provided by Sanborn Head & Associates. The submittal of the report will include an assessment of the time required to accomplish the excavation, regrading and/ or stabilization as recommended by SHA. Groundwater monitoring will continue for the project area as required by Sanco's groundwater permit

If you have any questions on the above information or on the attached schedule, please give me a call.

Respectfully,



Leo R. Larochelle P.E.

LRL/hs
Attachment

cc: Bob Massey
Jim Bohlig
Paul Sanborn, SHA

Relocation Project Assessment Schedule

ID	Name	October 10							October 17							October 24							October 31							November 7							November 14									
		M	T	W	T	F	S	S	S	M	T	W	T	F	S	S	S	M	T	W	T	F	S	S	S	M	T	W	T	F	S	S	S	M	T	W	T	F	S	S	S	M	T	W	T	F
1	Task 1 Topographic Survey and Grid Layout																																													
2	Topographic Survey																																													
3	Assessment Grid Layout																																													
4	Drafting of Topographic Plan																																													
6	Task 2 Subsurface Explorations																																													
6	Test Pit Excavation and Screening																																													
7	Task 3 Soil Sampling and Laboratory Testing																																													
8	Composite and Discrete Soil Sampling																																													
9	Laboratory Testing and Reporting																																													
10	Task 4 Data Evaluation and Report																																													
11	Data Evaluation																																													
12	Report and Grading Plan Preparation																																													
13	Report Submittal to NHDES																																													

Relocation Project Remediation

Date: 93.10.8

Critical



Progress



Summary



Noncritical



Milestone



Rolled Up

