

September 19, 2002

0068(B09)

Ms. Cheryl Marks  
Solid Waste Section  
Division of Solid Waste Management  
North Carolina Department of Environment and Natural Resources  
Mail Service Center 1646  
Raleigh, NC 27699-1646

**RE: PROPOSED ACTION PLAN  
ASSESSMENT OF CURRENT GROUNDWATER CONTAMINATION CONDITIONS  
DUNN-ERWIN MUNICIPAL SOLID WASTE LANDFILL, PERMIT 43-02  
HARNETT COUNTY, NORTH CAROLINA**

Dear MS. Marks:

On behalf of Harnett County and C.T. Clayton, Sr., PE, ENSOL, Inc. (ENSOL) is pleased to advise you on the proposed action plan in advance of our meeting scheduled for 9:00 AM on Tuesday, September 24, 2002 at your office.

This concise letter describes our proposed action plan based on the assessment update of April 22, 2002, the semi-annual groundwater assessment report for the April 2002 sampling event, and other related correspondence submitted to the North Carolina Department of Environment and Natural Resources, Solid Waste Section (SWS).

Our proposed action plan includes updating groundwater contamination plume location and organic contaminants concentrations in groundwater and soil within the saturated zone of the uppermost aquifer. We are planning on a field investigation that will extend for two to three days to be scheduled at the same time or near the upcoming scheduled semi-annual sampling event in October 2002, as follows:

**1. Deployment**

The proposed field investigation will include the following:

- 1.1 Deployment of a Geoprobe<sup>®</sup> Model 5400 unit mounted on an all terrain truck, operated by Regional Probing Services, Inc. (RPS) of Raleigh, North Carolina, for groundwater sampling and continuous soil sampling to be observed by an engineer from our team.
- 1.2 Deployment of a mobile analytical laboratory to perform Appendix I volatile scan for the groundwater and soil samples using the EPA Method 8260B. The mobile laboratory is owned and operated by Analytical Mobile Services, Inc. (AMS) of Hilton Head, South Carolina, and is certified by NCDENR, Division of Water Quality, Certificate No. 538, to perform the EPA Method 8260B (and other tests).

2. **Work Plan**

*depths of probes?*

- 2.1 Using the estimated plume delineation shown in Figure 1 of the April 22, 2002 updated assessment report, we will begin probing about 75 feet downgradient from the assumed plume boundaries that were based on the October 2001 sampling and will work our way into the plume.
- 2.2 The AMS laboratory is self-contained and operated on site within a large "motor-home" shell. Sample preparation for groundwater is done using EPA SW-846 Method 5030B, "Purge-and-Trap for Aqueous Samples." Sample preparation for soil is done using EPA SW-846 Method 5035, "Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples." Test results are generally available about 45 minutes after samples are received at the on-site laboratory.
- 2.3 Geoprobe<sup>®</sup> test locations will be based and adjusted according to the EPA Method 8260B organic scan test results. It is expected that the number of these test locations will be in the range of 15 to 24.
- 2.4 In selected Geoprobe<sup>®</sup> locations, within and in the downgradient fringes of the contaminant plume we are planning to use the RPS's Geoprobe<sup>®</sup> to also install one (1) inch diameter observation wells made of standard slotted PVC pipes screened in the uppermost aquifer. Each of these observation wells will be completed as a permanent installation with a bentonite seals, a pedestal, and a cased wellhead with a lock. These observation wells could be used in subsequent assessment work, or in evaluating corrective action measures, as appropriate.
- 2.5 The groundwater assessment report will be completed in conjunction with the completion of the semi-annual sampling report for the October 2002 sampling event that we are planning to coordinate simultaneously, or close to the time of the field assessment work as described in this work plan.

We believe that this assessment report may provide adequate information to plan the first phase corrective action evaluation for the site and we are looking forward to your prompt approval of this work plan.

Should you have any questions or comments, please contact me at telephone (919) 696-1909 or by e-mail at [cporan@ensol.us](mailto:cporan@ensol.us).

Sincerely,

ENSOL, Inc.

*CJPoran*

Chaim J. Poran, PhD, PE

cc. Jerry Blanchard - Harnett County  
C.T. Clayton, PE