Dermody Consulting

Geologists and Environmental Scientists

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October 21, 2021

Mr. Jared Donaldson
New York State Department
of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Re: **Supplemental Sampling Work Plan (Revised)**
Former Elka Chemical Corporation Property
340 West Hoffman Ave.
Lindenhurst, Suffolk County, New York
NYSDEC Project No. 152239

Dear Mr. Donaldson:

The New York State Department of Environmental Conservation (NYSDEC) has requesting this revised letter work plan for the purpose of performing supplemental sampling at the above-referenced site. The purpose of the sampling is to determine if there is evidence of the presence of organochlorine pesticides or PCBs in the soil or groundwater at the site.

To achieve this, Eastern Environmental Services, Inc./Dermody Consulting proposes to obtain soil and groundwater samples at the site. The proposed sample locations are shown in attached Figure 1 and include five soil samples to a depth of five feet below grade (PP-1 through PP-5) that also include three surficial soil samples at the locations of PP-1, PP-2, and PP-3. In addition, four shallow groundwater samples will be obtained from existing groundwater monitoring wells (GP-7, GP-10, GP-12, and GP-15) that are screened from 3 to 10 feet below grade and the water table occurs at a depth of five feet below grade. Therefore, the groundwater samples will be obtained from the interval from the water table to five feet below the water table (5 to 10 feet below grade).

Groundwater Sampling Procedures

All soil and groundwater monitoring well sampling activities will be recorded in a weatherproof field book.

The groundwater monitoring wells will be purged of at least three casing volumes utilizing a Geotech peristaltic pump (or similar) with a low-flow controller and dedicated polyethylene tubing. All wells will be purged at a flow rate of 0.5 liters per minute. Prior to collecting the groundwater samples, the flow rate will be decreased to 0.1 liters per minute. Stability parameters including pH, specific conductivity, temperature, and dissolved oxygen will be measured and recorded following the purging of each casing volume. A groundwater sample will

be collected from each well when the set of the final two stability parameter readings are within ten percent of each other. The stability parameter readings and water level measurements and depth of well measurements for each monitoring well will be recorded in the field book.

Groundwater samples will be collected and transferred to laboratory-supplied glassware, properly preserved, and placed in an ice-filled cooler for delivery to the laboratory. All sample analyses will be performed with NYSDEC ASP Category B deliverables. A chain of custody form will also be completed to document sample possession.

Soil Sampling Procedures

Soil samples will be obtained from Geoprobe cores within dedicated acetate liners from a depth of 0 to 5 feet below grade. The liners will be split laterally and the samples will be visually inspected for indications of staining or other discoloration, and a PID will be used to determine the zone within the core that contains the highest PID readings. A sample will generally be obtained from the zone indicating the highest PID readings or, possibly, where soil staining is visually observed. If no indications of contamination are found, samples will be obtained from a depth of 2 to 3 feet below grade. In addition, the three surficial soil samples will be obtained at a depth of 0 to 3 inches below grade. The samples will be obtained with dedicated plastic sampling spoons.

Samples will be transferred to laboratory-supplied glassware, properly preserved, and placed in an ice-filled cooler for delivery to a NYSDOH ELAP-approved laboratory. A chain of custody form will also be completed to document sample possession.

Samples will be assigned a unique identification such as PP-4 (0-5 feet) for a soil sample obtained from a boring from a depth interval from grade to five feet below grade. All samples will be labeled and will contain the Site name, the sample identification and sample depth interval, the date the sample was obtained, and the requested laboratory analysis. A chain-of-custody form will be completed and will accompany the samples at all times.

Quality Assurance/Quality Control (QA/QC) Sampling

One laboratory duplicate sample (marked with an identification that does not reveal that the sample is a duplicate) will be collected for both the soil samples and groundwater samples. One matrix spike and matrix spike duplicate will be obtained for the both the soil and groundwater samples. In addition, one equipment rinsate blank will be obtained each day for both the soil and groundwater samples (an acetate sleeve and polyethylene tubing); laboratory-supplied analyte-free water will be poured over the media and collected in the laboratory glassware. The sampling is expected to be completed in one day.

Sample Analysis

All soil and groundwater samples will be analyzed for organochlorine pesticides and PCBs by Methods 8081/8082.

All soil, groundwater, and QA/QC samples will be analyzed with NYSDEC ASP Category B deliverables by York Analytical Laboratories, Inc., a New York State Department of Health ELAP-approved laboratory. All laboratory data will be submitted to NYSDEC as Electronic Data Deliverables (EDD) following NYSDEC procedures.

Data Validation and Data Usability Summary Report

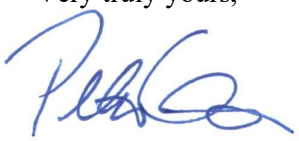
Laboratory data reports will conform to NYSDEC Category B deliverable requirements. The laboratory data will be validated by an independent third party. Data validation will be performed in accordance with the guidelines established in Appendix 2B of Final DER-10 Guidance for Site Investigation and Remediation. Validation reports will consist of text results of the review and marked up copies of Form I (results with qualifiers applied by the validator). Validation will consist of target and non-target compounds with corresponding method blank data, spike and surrogate recoveries, sample data, and a final note of validation decision or qualification, along with any pertinent footnote references. Qualifiers applied to the data will be documented in the report text.

A data usability summary reports (DUSR) will be prepared in accordance with DER-10 procedures and requirements. The DUSR will provide both a quantitative and qualitative analysis of the data. The quantitative aspect is a summary of the data quality as expressed by qualifiers applied to the data; the percent rejected, qualified (i.e., estimated), missing, and fully acceptable data are reported. The qualitative element of the data usability summary is the translation and summary of the validation reports into a discussion useful to data users. The qualitative aspect will discuss the significance of the qualifications applied to the data, especially in terms of those most relevant to the intended use of the data.

Upon your approval, the work will be scheduled. It is expected that the final report can be completed within 75 days.

Should you have any questions, please feel free to contact me.

Very truly yours,



Peter Dermody, C.P.G.
Principal Hydrogeologist

enclosure

cc: James Mulvey
Michael Flynn
Barry Cohen, Esq.
Robert Corcoran
Renata Ockerby, NYSDOH
Charlotte Bethoney, NYSDOH

LEGEND

PP-1 PROPOSED PESTICIDE / PCB SOIL SAMPLE LOCATIONS

GP-7S. PROPOSED PESTICIDE / PCB GROUNDWATER SAMPLE LOCATIONS

SCALE: 1" = 40'

DERMODY CONSULTING
CENTER MORICHES, NEW YORK

FIGURE 1
PROPOSED ON-SITE PESTICIDE / PCB SOIL AND GROUNDWATER SAMPLING LOCATIONS
340 WEST HOFFMAN AVENUE
LINDENHURST, NEW YORK