

**Golder Associates Inc.**

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Approved
Version
2/5/09



February 4, 2009

Project No.: 013-6054

Emergency and Remedial Response Division
U.S. Environmental Protection Agency
2890 Woodridge Avenue
Edison, New Jersey 08837-3679

Attn.: Mr. David Rosoff

RE: ADDENDUM No. 2 TO THE
SOIL REMOVAL WORK PLAN
LIGHTMAN DRUM COMPANY SITE, WINSLOW TOWNSHIP, NJ

Dear Mr. Rosoff:

On behalf of the Lightman Drum Source Removal Group, this Addendum No. 2 to the Soil Source Removal Work Plan (Addendum No. 2) has been prepared by Golder Associates Inc (Golder) for the Lightman Drum Company Site (Site) located in Winslow Township, New Jersey. This Addendum has been prepared to address additional investigation/remediation of un-naturally colored soil, and investigation of soils impacted with volatile organic compounds (VOC) encountered during implementation of the Un-Naturally Colored Soil Removal in October and November 2008, pursuant to Addendum No. 1 to the Soil Source Removal Work Plan (Addendum No. 1). This Addendum No. 2 incorporates revisions to an earlier version dated January 8, 2008 based on comments provided by USEPA in a conference call on January 22, 2008.

1.0 INTRODUCTION/BACKGROUND

A Soil Source Removal Action was implemented at the Lightman Drum Company Superfund Site (Site) pursuant to an Administrative Settlement Agreement and Order on Consent (AOC), dated September 13, 2007 between USEPA and the Lightman Yard Source Removal Group (Group) for the localized removal of contaminated saturated soils in the vicinity of the former Waste Storage Tank Area. The Soil Source Area Removal was performed at the Site between October 29, 2007 and March 27, 2008, pursuant to the AOC and the USEPA approved Source Area Removal Work Plan dated October 30, 2007.

During the Source Area Removal, discrete areas of un-naturally colored soils; primarily purple, yellow, green, blue and red were observed at the Site. Subsequently, investigations were conducted by Golder to define the nature and extent of the colored soils. The investigations revealed that un-naturally colored surface soils were present generally within 4-inches of ground surface that contained concentrations of lead, and to a lesser frequency and degree other constituents above risk-based levels. These soils were identified in portions of the former drum storage and handling areas of the Site located west of a large concrete slab, which served as the foundation for a former storage warehouse.

Addendum No. 1 to the Source Area Removal Work Plan addressed the removal of un-naturally colored soils was approved by USEPA on October 9, 2008. The objective of Addendum No. 1

was to remove un-naturally colored soils at the Site that would otherwise potentially pose an unacceptable risk to human or ecological receptors.

The Un-Naturally Colored Soil Removal commenced on October 27, 2008 and un-naturally colored soil was excavated from eight discrete areas identified in Addendum No. 1. During Site preparations, additional areas of un-naturally colored soil outside of the identified eight discrete areas were observed at several locations immediately below the site surface. Specifically, during surface preparations for the construction of a soil stockpile area, un-naturally colored soil was observed at locations beyond the limits of the proposed excavation areas defined in Addendum No. 1. Surface scraping evaluations were performed in additional areas (see Figure 1) on October 31, 2008 and November 3, 2008 in accordance with an October 30, 2008 e-mail submittal to USEPA (see Attachment A). The email defined a procedure for investigation and remediation of areas outside of the work areas defined in Addendum No. 1.

Additionally, during the excavation of un-naturally colored (purple) colored soil east of the previous Soil Source Removal Excavation, VOC impacts were identified in the soil. Purple colored soils were removed from the area and managed in accordance with the Addendum No. 1. The vertical limits of the excavation in this area, required to remove purple soil, ranged from approximately 3.5-feet to 8-feet below the surface as shown on Figure 2. Soils removed from this area were placed into a separate stockpile and covered for future characterization. Following completion of the purple soil excavation, headspace screening of soil samples taken from the excavation side walls and base was performed with a photoionization detector (PID) instrument equipped with a 10.6 eV lamp calibrated using 10 ppm isobutylene (see Figure 2 for locations). Additionally, a confirmatory soil sample (H-1) was collected from the base of the excavation at approximately 8 ft bgs at the location shown on Figure 2. The sample was analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, and TAL metals (excluding lead) by CompuChem. No VOCs, SVOCs, or pesticides were detected in the sample with the exception of acetone (7 µg/Kg) and tetrachloroethene (26 µg/Kg), below the New Jersey Non-Residential Soil Cleanup Criteria (NJNRSCC). Detected TCL metals were below the NJNRSCC. Confirmatory soil sample results are provided in Attachment B and a summary of the headspace readings are provided in Table 1.

This Addendum No. 2 has been prepared to:

- Investigate the remaining portions of the former drum storage and handling area that have not been previously evaluated by surface scraping for presence of un-naturally colored soil (Additional Un-Naturally Colored Soil Investigation); and
- Investigate the extent of VOCs proximate to the purple colored soil area (Soil VOC Area Investigation).

2.0 ADDITIONAL UN-NATURALLY COLORED SOIL INVESTIGATION AND REMEDIATION

This Addendum No. 2 addresses the following un-naturally colored soil conditions:

1. Discovery of un-naturally colored soil in the western portion of the former drum storage and handling area beyond the proposed discrete excavation areas defined in Addendum No. 1; and,

2. Discovery of additional un-naturally colored soils in areas to the east of the proposed excavation areas defined in Addendum No. 1.

Note that additional work associated with items 1 and 2 above will be designated as the Western and Eastern Areas, respectively, with Grid Line 11 providing the boundary between these zones (See Figure 1).

The overall objective of the additional soil investigation is to identify the extent of un-naturally colored soil beyond the limits of the discrete excavation areas defined in Addendum No. 1.

2.1 Western Area: Additional Un-naturally Colored Soil Investigation and Remediation

Additional investigations in the Western Area were performed October 31 and November 3, 2008 in the areas shown in Figure 1. The investigation areas extended from Grid Line 1 through Grid Line 11, to the tree line on the north and west sides of the former drum storage and handling area, and to the fence line along the southern property line, with the exception of a gravel roadway used for access and beneath the larger of the two stockpiles containing excavated un-naturally colored soil as shown in Figure 1.

The investigations were performed by scraping surface soils to a depth of approximately 2 to 6 inches in areas ranging from approximately 10 ft. by 20 ft. to 20 ft. by 20 ft. In performing the evaluations, surface soil scraping was undertaken using the bucket of a track excavator and followed by observation of the scraped soil and the exposed soil surface for un-natural color. Based on these observations, the following was conducted:

- If un-naturally colored soil was not observed in scraped soil, or on the exposed subgrade, the scraped soil was spread back on the surface from which it was scraped, and no further action was taken in that area.
- If un-naturally colored soil was observed in the scraped soil, or on the exposed subgrade, the scraped soil and any additional un-naturally colored soil observed on the exposed surface from the evaluation area was excavated and added to the soil stockpile for offsite disposal. Areas of additional un-naturally colored soil were demarcated and post excavation surface soils were sampled and tested in accordance with Addendum No. 1.

The work described above was completed by November 3, 2008, and the Remedial Contractor temporarily demobilized from the Site on November 4, 2008.

Upon Remedial Contractor remobilization, a similar scraping evaluation will be performed of the area used for gravel roadway access located west of Grid Line 11 as shown in Figure 1, in approximately 10 ft by 20 ft areas. Un-naturally colored soil located beneath the soil stockpile areas will also be investigated similarly in approximate 20 ft by 20 ft areas. Un-naturally colored soil observed during these evaluations will be added to the existing stockpile for off-site disposal. In areas of any additional un-naturally colored soil removal, post excavation confirmatory soil samples will be collected for analysis in accordance with Addendum No. 1.

Prior to, or following, the load out of the existing stockpiles of un-naturally colored soil, the Remedial Contractor will backfill the areas west of Grid Line 11 with suitable granular soil from an approved source. Following backfill of the areas west of Grid Line 11, the property owner will move equipment and trailers from the area east of Grid Line 11 to west of Grid Line 11.

2.2 Eastern Area: Additional Un-naturally Colored Soil Investigation

On November 3, 2008, in consultation with USEPA, an additional surface soil scraping investigation was initiated in the Eastern Area. Two transect scraping evaluations were performed in the area east of Grid Line 11. Un-naturally colored soil was observed from each transect scraping at depths of 2 to 4 inches.

Based on these initial observations in this Eastern Area and discussions with USEPA, the transect scraping evaluation was discontinued, pending preparation of this Addendum No. 2 to address the procedure to be implemented to further investigate the Eastern Area (see Figure 1).

The area east of Grid Line 11 currently contains equipment and approximately 30 box trailers for storage of materials by the current property owner. Prior to performing a scraping evaluation of the soil surface in the eastern area of the site, equipment and trailers will be relocated to the portions of the site west of Grid Line 11 where un-naturally colored soil has previously been removed and backfilled.

The scraping evaluation will be performed on the Eastern Area of the site in approximately 20 ft. by 20 ft. areas as presented below and consistent with the previous procedure.

- If un-naturally colored soil is not observed in scraped soil, or on the exposed subgrade of the 20 ft by 20 ft area, the scraped soil will be spread back on the surface from which it was scraped, and no further action was taken in that area.
- If un-naturally colored soil is observed in the scraped soil, or on the exposed subgrade of a given 20 ft by 20 ft area, the scraped soil and any additional un-naturally colored soil observed on the exposed surface from the 20 ft by 20 ft evaluation area will be excavated and added to a newly created stockpile. Areas of additional un-naturally colored soil removal will be demarcated and post excavation surface soil sampling and testing will be conducted in accordance with Addendum No. 1.

Additional un-naturally colored soil excavated during the Eastern Area scraping evaluation will be stockpiled, managed, and characterized as necessary in accordance Addendum No. 1. The excavation areas, east of Grid Line 11, will be backfilled as necessary with suitable granular soil from the approved source, and the stockpile of any additional un-naturally colored soil will be loaded out for transportation and off-site disposal.

It is assumed that the site owner will move the trailers and equipment back to the eastern portion of the site upon completion of activities in this area of the site.

3.0 VOC AREA INVESTIGATION

The overall objective of the additional soil investigation is to identify the nature and extent of vadose zone VOCs and potential phreatic zone impacts in the area shown on Figure 2.

3.1 Sample Collection Procedures

The work will be carried out using procedures for soil borings as approved by USEPA in the Remedial Investigation/Feasibility Study (RI/FS) Work Plan (including amendments) and the

associated Health and Safety Plan. Soil borings will be advanced at the locations shown on Figure 2 with a Geoprobe® unit capable of driving sampling tools through the overburden soil so as to obtain continuous core samples for visual description and sampling purposes. Continuous 4-foot samples will be collected using a Macro-Core sampler commencing at ground surface. Initially, four of the nine soil borings at the locations shown in Figure 2 will be advanced through the vadose zone and below the water table to assess vadose zone impacts and potential impacts to soil below the water table. The borings will be extended to define the vertical extent of soil contamination based on field screening (PID and olfactory observations) and a minimum of 16 ft bgs (i.e. approximately 4 feet below the water table). The remaining five boreholes will be advanced to the vertical extent of contamination in the vadose zone as indicated above.

Each 4-foot Macro-Core sample will be segregated into two, 2-foot intervals. A portion of each two foot interval will be placed into a re-sealable plastic bag (i.e. Ziploc®). The representative temperature of soil sample in the Ziploc® bag will be allowed to stabilize. Should sampling occur during extreme temperature conditions, the samples will be equilibrated in a temperature controlled environment to obtain representative and consistent headspace VOC measurements. Following stabilization of the temperature of the sample, headspace measurements will be recorded using a field MiniRAE 3000 PID with a range of 0 to 15,000 parts per million (ppm). Upon completion of the boring, the soil not retained for laboratory analyses will be placed in the existing stockpile of excavated soil and the borehole will be backfilled with bentonite.

In those borings that exhibit impacts based on PID readings, a portion of the sample from the vadose zone and the sample from the saturated zone (where applicable) with the highest headspace reading from that boring will be sent to a fixed laboratory for analytical testing. Additional samples may be added based on field observations and consultation with USEPA personnel. Samples for laboratory analysis will be collected using EnCore® samplers, as described in Section A.2.7.2.1 of the RI/FS SAP. If there are no indications of contamination, then a sample will be collected from a representative interval based on field observations in accordance with the RI/FS SAP.

The locations of the initial borings shown in Figure 2 were selected based on the results from previous headspace analyses during excavation of the area. However, additional vadose zone borings may be necessary to delineate the area of concern. Additional vadose zone borings will be advanced by "stepping out" or "stepping in" approximately 5 to 10 feet. A field headspace threshold measurement of 10 ppm, along with visual and olfactory observations will be used to determine whether to advance additional borings.

Additional borings may be extended into the water table based on the results of the initial soil borings and in consultation with EPA.

3.2 Soil Sample Analysis

Each soil sample sent to the fixed laboratory will be analyzed for Target Compound List (TCL) VOCs. Sample collection requirements, holding times, quality assurance/quality control samples, sample shipping, and other analysis requirements will be as specified in the approved SAP for the Site (Golder, 2006). The samples will be sent to the approved fixed laboratory (CompuChem of Cary, NC) for analysis with standard turnaround time (21 days). The laboratory will produce Contract Laboratory Program (CLP) type data packages that will contain all information needed for formal validation of the data.

Quality control samples will be collected as follows:

- Trip Blanks – one per day
- Field Duplicates – one per 20 primary samples
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples – one per 20 primary samples

4.0 SCHEDULE

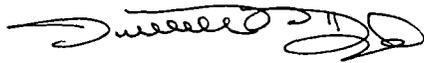
Field work for the scraping evaluation for un-naturally colored soil will commence promptly following USEPA approval of this Addendum No. 2 subject to remedial contractor availability and relocation of the trailers. It is anticipated that field work will take 2-3 days to complete; laboratory analytical results, as necessary, will be available 3 weeks from the completion of field activities. Load out of additional un-naturally colored soil will be completed upon receipt of USEPA and disposal facility approvals.

Field work for the VOC area investigation will commence promptly following USEPA approval of this Addendum No. 2 subject to driller availability. It is anticipated that field work will take 2-3 days to complete; laboratory analytical results will be available 3 weeks from the completion of field activities. A letter report summarizing the results will be issued to USEPA within four weeks following receipt of the laboratory data.

If you have any questions, please contact us on (856) 793-2005 at your earliest convenience.

Very truly yours,

GOLDER ASSOCIATES INC.



Jonathan Rizzo
Senior Project Geol.ogist



Robert J. Illes, P.G.
Principal

JPR/RJI/cg

g:\projects\2001 projects\013-6054.001\work plan\addendum no. 2\final 2-4-09\addendum #2 (2-4-09).docx

cc: Renee Gelblat, USEPA
Lightman Yard Group

Attachments: Table 1 – Headspace Measurements from Excavation Area “H”
Figure 1 – Un-Naturally Colored Soil Removal
Figure 2 - Purple Soil Excavation Area and Proposed Soil Borings
Attachment A – October 30, 2008 USEPA and Golder email correspondence
(Work Plan Amendment For Supplemental Excavation)
Attachment B – Confirmatory Soil Sample Analytical Results for Sample H-1

Table 1
Headspace Measurements
Excavation Area H
Lightman Drum Superfund Site
Winslow Township, New Jersey

Sample Designation	Depth (ft bgs)	Max Reading (ppm)	Sample Location
HPA-1	7.5	15.3	Floor
HPA-2	3.0	10.4	Sidewall
HPA-3	3.0	132	Sidewall
HPA-4	3.5	>199	Sidewall
HPA-5	3.0	>199	Sidewall
HPA-5A	2.5	>199	Sidewall
HPA-6	2.0	31.6	Sidewall
HPA-7	2.5	30.1	Sidewall
HPA-8	4.5	127	Floor
HPA-9	3.5	>199	Floor
HPA-10	4.5	52.8	Floor
HPA-11	4.0	>199	Floor
HPA-12	3.0	8.3	Sidewall

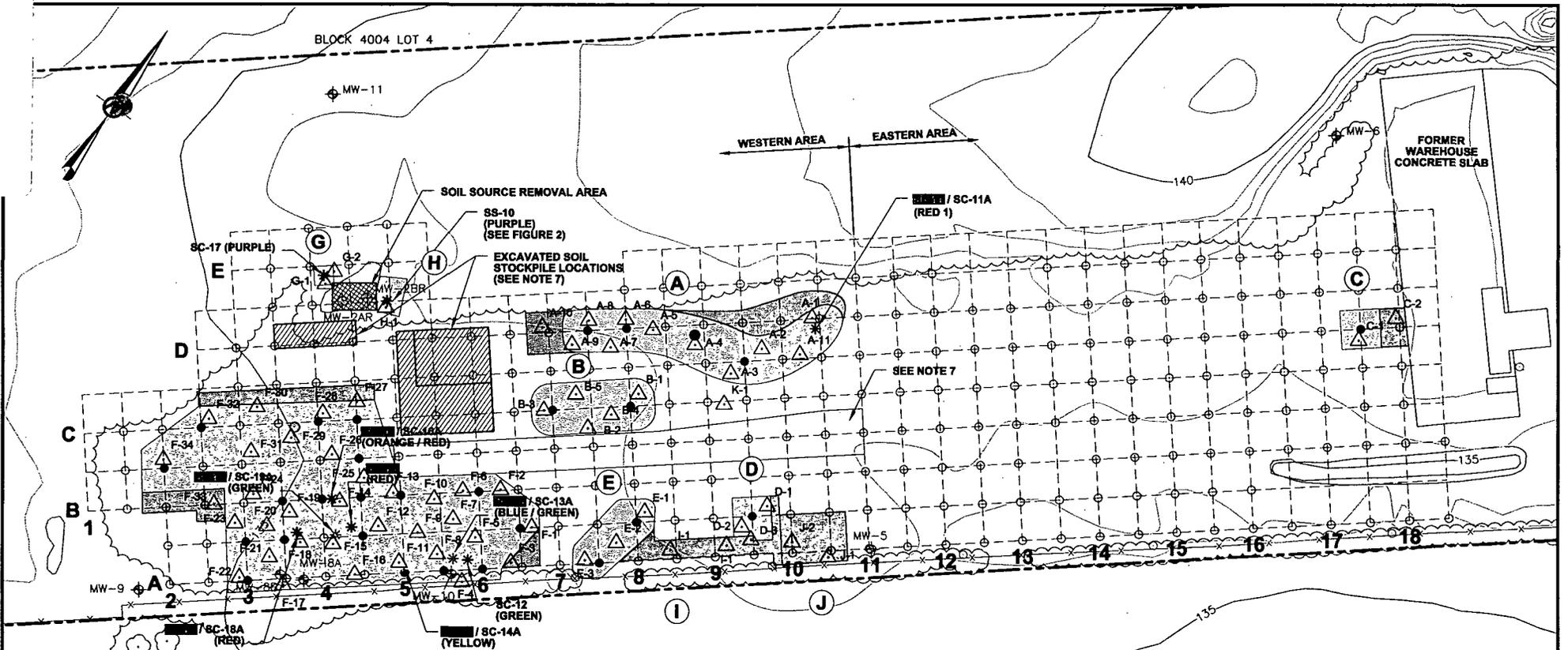
Notes:

Headspace analysis of bag samples using a ppbRAE PID equipped with a 10.6eV lamp calibrated with 10 ppm of isobutylene.

ppm = parts per million

PID maximum reading 199 ppm

ft bgs = feet below ground surface



LEGEND

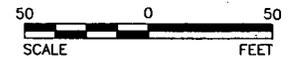
- MONITORING WELL
- UN-NATURALLY COLORED SOIL SAMPLE LOCATION (SEE NOTE 5)
- UN-NATURALLY COLORED SOIL DELINEATION LOCATION
- UN-NATURALLY COLORED SOIL FOUND AT DELINEATION LOCATION
- UN-NATURALLY COLORED SOIL FOUND BETWEEN DELINEATION LOCATIONS
- INITIAL EXTENT OF UN-NATURALLY COLORED SOIL REMOVAL (SEE NOTE 6)
- APPROXIMATE AREAS OF ADDITIONAL UN-NATURALLY COLORED SOIL REMOVAL (SEE NOTE 6)
- SOIL SAMPLE LOCATION FOR XRF SCREENING
- UN-NATURALLY COLORED SOIL REMOVAL AREA DESIGNATION

NOTES

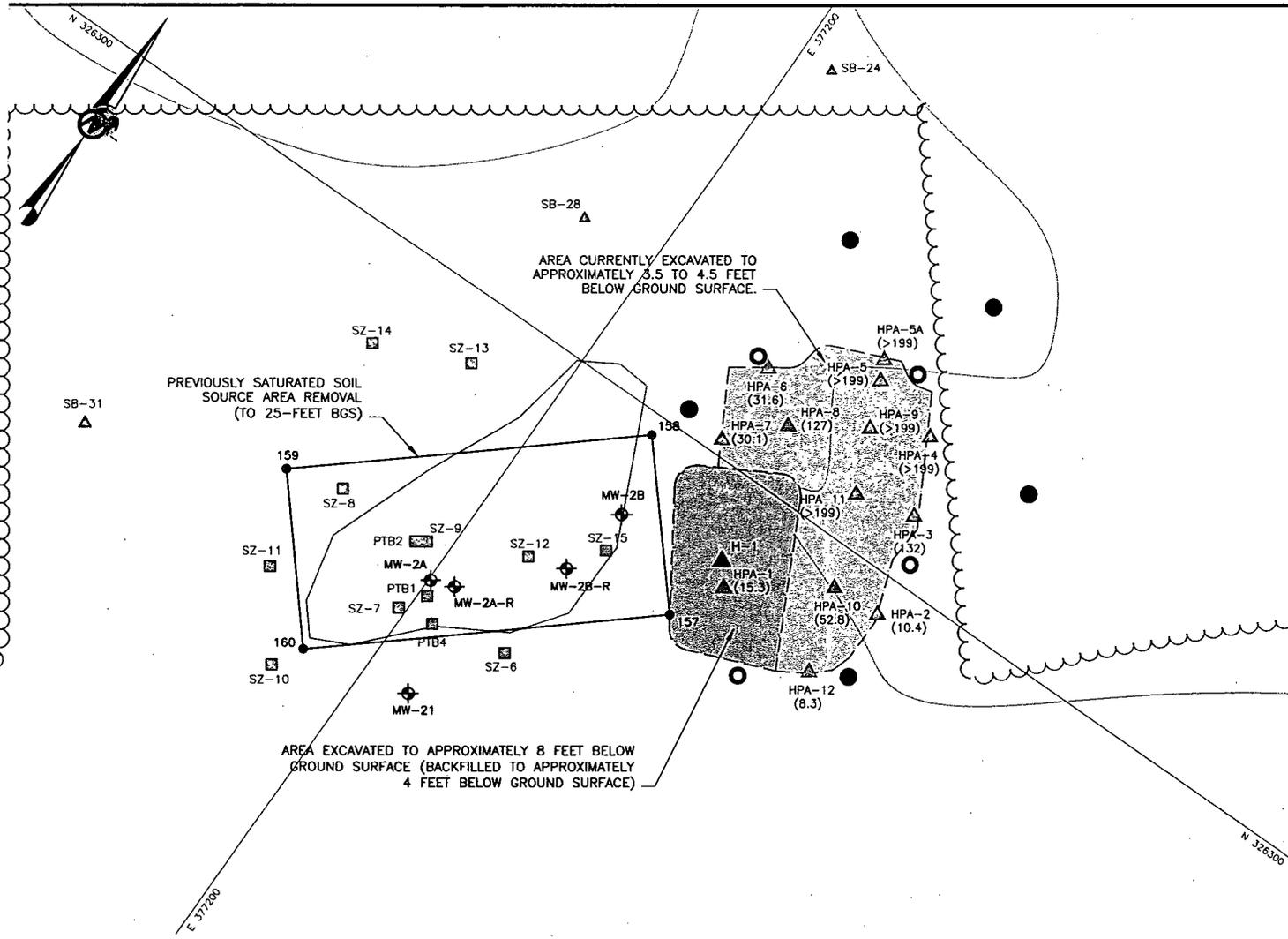
- 1.) SOIL SAMPLES SC-11 THROUGH SC-19 COLLECTED JANUARY 17, 2008 AND SOIL SAMPLES SC-11A, SC-13A, SC-14A, SC-16A, SC-18A, AND SC-19A COLLECTED MARCH 26, 2008.
- 2.) UN-NATURALLY COLORED SOIL DELINEATION PERFORMED MARCH 26, 2008 THROUGH MARCH 28, 2008.
- 3.) COLORED SOIL SAMPLE LOCATIONS SC-11, SC-13, SC-14, SC-16, SC-18, SC-19, AND SELECT DELINEATION LOCATIONS WITH UN-NATURALLY COLORED SOIL WERE SURVEYED APRIL 10, 2008 BY JAMES M. STEWART, INC. SURVEY DATA PROVIDED IN APPENDIX C OF ADDENDUM TO THE REMEDIAL INVESTIGATION REPORT, DATED JUNE 6, 2008.
- 4.) NON-SURVEYED LOCATIONS ARE APPROXIMATE.
- 5.) SOIL SAMPLE LOCATIONS WHERE ANALYTES WERE DETECTED ABOVE NEW JERSEY NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA AND/OR IMPACT TO GROUNDWATER SOIL CLEANUP CRITERIA (NJSCC) ARE SHADED GRAY.
- 6.) THE INITIAL HORIZONTAL EXTENT OF UN-NATURALLY COLORED SOIL SHOWN ON THE FIGURE IS THE INTERPRETED EXTENT OF SOIL WITH DETECTIONS ABOVE NJSCC AS SHOWN IN THE ADDENDUM No. 1 TO THE SOURCE AREA REMOVAL WORK PLAN. ADDITIONAL AREAS OF UN-NATURALLY COLORED SOIL REMOVAL BASED ON ACTIVITIES CONDUCTED IN NOVEMBER 2008.
- 7.) SCRAPPING EVALUATION PERFORMED WEST OF GRID LINE 11 WITH EXCEPTION OF HIGHLIGHTED AREA AND UNDER THE LARGER OF THE TWO STOCKPILES.

REFERENCE

1.) BASE MAP TAKEN FROM FILE 2702-01.DWG, TITLED "PLAN OF SURVEY", PROVIDED BY JAMES M. STEWART, INC.



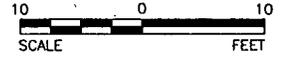
	SCALE	AS SHOWN	TITLE
	DATE	02/04/09	<p align="center">UN-NATURALLY COLORED SOIL REMOVAL</p>
DESIGN	JPR		
CADD	RG		
CHECK	JPR		
FILE No.	0138054U001	REVIEW	RJI
PROJECT No.	013-6054	REV.	1
LIGHTMAN DRUM SITE			FIGURE 1



- ### LEGEND
- ▲ SOIL BORING LOCATION (UNSATURATED SOIL)
 - 159 SOURCE REMOVAL EXCAVATION SURVEY LOCATION
 - SATURATED SOIL BORING LOCATIONS (APRIL AND MAY 2006)
 - ⊕ MONITORING WELL
 - ▲ SIDEWALL SOIL SAMPLE LOCATION FOR HEADSPACE SCREENING (OCTOBER 31, 2008)
 - ▲ BASE SOIL SAMPLE LOCATION FOR HEADSPACE SCREENING (OCTOBER 31, 2008)
 - ▲ BASE SOIL SAMPLE LOCATION FOR CONFIRMATORY LABORATORY ANALYSES
 - PROPOSED VADOSE ZONE DELINEATION SOIL BORING (SEE NOTE 7)
 - PROPOSED VADOSE ZONE AND SATURATED SOIL DELINEATION SOIL BORING (SEE NOTE 7)
 - (45.5) HEADSPACE SCREENING RESULT IN PARTS PER MILLION (PPM)
 - (>199) HEADSPACE SCREENING RESULT GREATER THAN 199 PPM

- ### NOTES
- 1.) SATURATED SOIL BORING LOCATIONS BASED ON MEASUREMENTS RELATIVE TO SURVEYED MONITORING WELLS.
 - 2.) MONITORING WELLS MW-2A-R AND MW-2B-R REPLACED MONITORING WELLS MW-2A AND MW-2B SUBSEQUENT TO SOIL SOURCE REMOVAL ACTIVITIES IN FEBRUARY 2008.
 - 3.) SOURCE AREA REMOVAL LIMITS BASED ON SURVEY BY B+B HI-TECH SOLUTIONS, LLC.
 - 4.) EXCAVATION AREA "H" LIMITS BASED ON FIELD MEASUREMENTS BY GOLDER ASSOCIATES INC. ON NOVEMBER 4, 2008.
 - 5.) HEADSPACE SCREENING OF SOIL SAMPLES PERFORMED USING A PPB-RAE PID.
 - 6.) SAMPLE HPA-5 COLLECTED FROM SIDEWALL OF EXCAVATION PRIOR TO EXPANDING EXCAVATION.
 - 7.) THE LOCATION AND NUMBER OF ADDITIONAL DELINEATION BORINGS MAY VARY BASED ON FIELD SCREENING RESULTS OF THE PROPOSED BORINGS DESCRIBED IN THE WORK PLAN.

- ### REFERENCES
- 1.) BASE MAP TAKEN FROM FILE 2702-01.DWG, TITLED "PLAN OF SURVEY", PROVIDED BY JAMES M. STEWART, INC.
 - 2.) UNSATURATED SOIL BORING AND SOIL SAMPLE LOCATIONS SURVEYED BY JAMES M. STEWART, INC., NOVEMBER 2002.
 - 3.) MONITORING WELLS SHOWN WERE BASED ON SURVEY INFORMATION SUPPLIED BY JAMES M. STEWART, INC.



	SCALE	AS SHOWN	TITLE
	DATE	02/04/09	
Golder Associates Philadelphia USA	DESIGN	JPR	PURPLE SOIL EXCAVATION AREA AND PROPOSED SOIL BORINGS
	CADD	RG	
FILE No.	0136054U002	CHECK	JPR
PROJECT No.	013-6054	REV.	RJI
			FIGURE
			2

LIGHTMAN DRUM SITE

ATTACHMENT A

**OCTOBER 30, 2008 USEPA AND GOLDER EMAIL
CORRESPONDENCE
(WORK PLAN AMENDMENT FOR SUPPLEMENTAL
EXCAVATION)**

Rizzo, Jonathan

From: Illes, Robert
Sent: Thursday, October 30, 2008 1:47 PM
To: Rosoff.David@epamail.epa.gov
Cc: Walsh, David; Rizzo, Jonathan
Subject: work plan amendment



Supplemental
Excavation Work P..

Dave,

Dave Walsh is unexpectedly out today and ask that I transmit the attached amendment to the to work plan to conduct additional investigations of the un-naturally colored soils. Please let us know if ou have any questions.

Regards,

bob

Work Plan Amendment

Supplemental Excavation of Un-Naturally Colored Soil

Lightman Drum Site, Winslow Township, New Jersey

On October 27, 2008, during preparations for excavations to be performed in accordance with the Revised Addendum No. 1 to the Work Plan for Soil Source Removal (October 2008), additional areas of un-naturally colored soil were observed at discrete locations immediately below the site surface. Specifically, un-naturally colored soil was observed at locations beyond the limits of the proposed eight discrete excavation areas defined in the above referenced Work Plan.

The USEPA has requested that the Work Plan be amended to define additional procedures required to investigate and identify potential un-naturally colored soil outside of the eight currently proposed excavation areas. The recommended procedures are presented below, with reference being made to grid lines presented on Work Plan, Figure 1, Un-Naturally Colored Soil Removal.

The additional investigation will be performed in areas beyond the limits of the proposed eight excavation areas shown on Figure 1, extending from the Grid Line 1 through Grid Line 11, to the tree line on the north and west sides of the former drum storage and handling area, and to the fence line along the southern property line.

The evaluation will be performed by scraping surface soils to a depth of approximately 2 inches in approximate 20 ft. x 20 ft. areas using the bucket of a track excavator and observing the scraped soil and the exposed soil surface for un-naturally colored soil. The evaluation and action scenarios are presented below.

- If un-naturally colored soil is not observed in an scraped soil, or on the exposed subgrade, the scraped soil will be replaced and spread back on the surface from which it was scraped, and no further action will be taken in that area.
- If un-naturally colored soil is observed in the scraped soil, or on the exposed subgrade, the scraped soil and any additional un-naturally colored soil observed on the exposed surface will be excavated and added to the soil stockpile generated from areas of Work Plan defined excavation for offsite disposal. The area of additional un-naturally colored soil will be demarcated and the post excavation surface soil will be sampled and tested in accordance with the Revised Addendum No. 1 to the Work Plan.

The additional investigation will be completed either during, or upon completion of, excavation of the Work Plan defined excavation areas, depending upon the proximity and configuration of the proposed additional investigation areas to the Work Plan defined excavation areas.

Rizzo, Jonathan

From: Rosoff.David@epamail.epa.gov
Sent: Thursday, October 30, 2008 4:40 PM
To: Illes, Robert
Cc: Rigby.Shawna@epamail.epa.gov; Gelblat.Renee@epamail.epa.gov; Wilson.EricJ@epamail.epa.gov; Walsh, David; Rizzo, Jonathan
Subject: RE: work plan amendment

Bob - Based on our call just now go ahead and move forward with your plan to scrape the areas outside of the delineated areas. The scraping should be 4-6 inches deep - not 2 inches and 20x20 is fine to start. If you find color then that 20x20 soil grid should go to the stockpile. If not it can be spread back out in the grid. We will also do several transects of scraping east of the grid 11 line to confirm that area is free of unnaturally colored soil. We will discuss the new organic contaminated area tomorrow on the phone or Monday in the field.

thanks

Dave

"Illes, Robert"
<robert_illes@go
lder.com>

10/30/2008 03:48
PM

David Rosoff/R2/USEPA/US@EPA

To

cc

Subject

RE: work plan amendment

Dave,

I am available this afternoon and can discuss. I do not believe that david walsh is able to participate in a call till tomorrow morning. I am also available then. Let us know which you prefer. If we go tomorrow morning, I would like to try to have it early to try to keep the field activities moving.

Thanks,

Bob

-----Original Message-----

From: Rosoff.David@epamail.epa.gov [mailto:Rosoff.David@epamail.epa.gov]

Sent: Thursday, October 30, 2008 2:28 PM
To: Illes, Robert

To: Walsh, David; Rizzo, Jonathan; Rigby.Shawna@epamail.epa.gov; Gelblat.Renee@epamail.epa.gov; Wilson.EricJ@epamail.epa.gov
Subject: Re: work plan amendment

Hi Bob - thanks for the plan. I'm a bit confused with the approach. Also I understand a new PCE area may have been found out at the Site. Perhaps we should all get together on a call before we move forward. When can we have this call? In the meantime (short term) I recommend not moving forward with excavation outside of the workplan.

thanks
Dave

"Illes, Robert"
<robert_illes@golder.com>

10/30/2008 01:47
PM

To
David Rosoff/R2/USEPA/US@EPA
cc
"Walsh, David"
<david_walsh@golder.com>, "Rizzo, Jonathan"
<jonathan_rizzo@golder.com>
Subject
work plan amendment

<<Supplemental Excavation Work Plan.pdf>>

Dave,

Dave Walsh is unexpectedly out today and ask that I transmit the attached amendment to the to work plan to conduct additional investigations of the un-naturally colored soils. Please let us know if you have any questions.

Regards,

bob(See attached file: Supplemental Excavation Work Plan.pdf)

ATTACHMENT B
CONFIRMATORY SOIL SAMPLE ANALYTICAL RESULTS
FOR SAMPLE H-1

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H-1

Lab Name: COMPUCHEM

Contract: OLM04.3

Lab Code: LIBRTY

Case No.:

SAS No.:

SDG No.: 0811034

Matrix: (soil/water) SOIL

Lab Sample ID: 0811034-01

Sample wt/vol: 4.14 (g/mL) G

Lab File ID: 0811034-0191

Level: (low/med) LOW

Date Received: 11/05/08

% Moisture: not dec. 2

Date Analyzed: 11/06/08

GC Column: SPB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (ul)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	26	
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U

FORM I VOA-2

OLM04.2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H-1

Lab Name: COMPUCHEM	Contract: OLM04.3	
Lab Code: LIBRTY	Case No.:	SAS No.:
Matrix: (soil/water) SOIL		SDG No.: 0811034
Sample wt/vol: 30.0(g/mL) G		Lab Sample ID: 0811034-01
Level: (low/med) LOW		Lab File ID: 0811034-01A70
% Moisture: 2	decanted: (Y/N) N	Date Received: 11/05/08
Concentrated Extract Volume: 500(uL)		Date Extracted: 11/10/08
Injection Volume: 2.0(uL)		Date Analyzed: 11/21/08
GPC Cleanup: (Y/N) Y	pH: 5.5	Dilution Factor: 1.0
		Extraction: (Type) SONC

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl) ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy) methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

FORM I SV-1

OLM04.2

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H-1

Lab Name: COMPUCHEM

Contract: OLM04.3

Lab Code: LIBRTY

Case No.:

SAS No.:

SDG No.: 0811034

Matrix: (soil/water) SOIL

Lab Sample ID: 0811034-01

Sample wt/vol: 30.0(g/mL) G

Lab File ID: 0811034-01A70

Level: (low/med) LOW

Date Received: 11/05/08

% Moisture: 2 decanted: (Y/N) N

Date Extracted: 11/10/08

Concentrated Extract Volume: 500(uL)

Date Analyzed: 11/21/08

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5

Extraction: (Type) SONC

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
1912-24-9	Atrazine	340	U
87-86-5	Pentachlorophenol	850	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM04.2

1E
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H-1

Lab Name: COMPUCHEM

Contract: OLM04.3

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: 0811034

Matrix: (soil/water) SOIL

Lab Sample ID: 0811034-01

Sample wt/vol: 30.0(g/mL) G

Lab File ID: _____

% Moisture: 2 Decanted: (Y/N) N

Date Received: 11/05/08

Extraction: (Type) SONC

Date Extracted: 11/10/08

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 11/29/08

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO. COMPOUND

CAS NO.	COMPOUND	UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	3.4	U
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	3.4	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U

FORM I PEST

OLM04.2

US EPA - CLP

IA-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

H-1

Lab Name: COMPUCHEM Contract: _____
 Lab Code: LIBRTY Case No.: _____ NRAS No.: _____ SDG NO.: 0811034
 Matrix (soil/water): SOIL Lab Sample ID: 0811034-01
 Level (low/med): LOW Date Received: 11/05/2008
 % Solids: 97.9
 Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	229			P
7440-36-0	Antimony	0.55	J	N	P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	0.70	J		P
7440-41-7	Beryllium	0.50	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	10.8	J	E	P
7440-47-3	Chromium	1.4			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	2.5	U		P
7439-89-6	Iron	324			P
7439-95-4	Magnesium	6.5	J		P
7439-96-5	Manganese	0.73	J		P
7439-97-6	Mercury	0.046	J		CV
7440-02-0	Nickel	4.0	U		P
7440-09-7	Potassium	10.8	J	E	P
7782-49-2	Selenium	3.5	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	67.6	J		P
7440-28-0	Thallium	2.5	U		P
7440-62-2	Vanadium	1.3	J		P
7440-66-6	Zinc	1.2	J		P

Color Before: GREY Clarity Before: _____ Texture: FINE
 Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

