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Comprate Environmental Programs General Electric Company 100 Woodlawn Ave., Pittsfield, MA 01201

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REGIONAL PLANSING STATES

Transmitted Via Facsimile & Federal Express

February 7, 2000

Dean Tagliaferro On Scene Coordinator Site Evaluation and Response Section (HBR) U.S. Environmental Protection Agency One Congress Street, Suite 1100 Boston, MA 02203-2211 Bryan Olson Project Coordinator Office of Site Remediation and Restoration U.S. Environmental Protection Agency One Congress Street, Suite 1100 Boston, MA 02114-2023

Re: GE-Pittsfield/Housatonic Site Upper ½-Mile Reach Removal Action: DNAPL Investigation Work Plan

Dear Mr. Tagliaferro and Mr. Olson:

Enclosed as Attachment A to this letter is an investigation work plan for further delineation of dense nonaqueous phase liquid (DNAPL), recently encountered during sediment removal activities in Cell C as part of the Upper ½-Mile Reach Removal Action. The work plan describes the soil boring program which the General Electric Company (GE) proposes to implement to further delineate the horizontal and vertical extent of DNAPL in this area. The proposed DNAPL investigation program will be implemented following the United States Environmental Protection Agency (USEPA) approval of this plan.

Very truly yours,

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Andrew T. Silfer, P.E. GE Project Coordinator

SDM/plh

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cc: T. Conway, EPA H. Inglis, EPA R. Goff, USACE K.C. Mitkevicius, USACE R. Bell, Esq., DEP J.L. Cutler, DEP S. Steenstrup, DEP A. Weinberg, DEP Field Surpervisor, USFW T. La Rosa, EOEA J. Milkey, MA AG C. Fredette, CT DEP K. Finkelstein, NOAA R. Nasman, Berkshire Gas Mayor G.S. Doyle

J.R. Bieke, Shea & Gardner M. Carroll, GE A. Thomas, GE S. Gutter, Sidley & Austin Public Information Repositories ECL I-P-IV(A) (1) GE Internal Repositories

ATTACHMENT A

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

UPPER ½-MILE REMOVAL ACTION OF HOUSATONIC RIVER

INVESTIGATION WORK PLAN - OCCURRENCE OF DENSE NON-AQUEOUS PHASE LIQUID (DNAPL)

INTRODUCTION

This investigation work plan has been prepared in response to the observation of dense non-aqueous phase liquid (DNAPL) within the Cell C sediment removal area for the Upper ½-Mile Reach Removal Action within the Housatonic River (Figure 1). This Plan has been developed at the verbal request of the US Environmental Protection Agency (USEPA) and serves to outline General Electric Company's (GE's) plan to further delineate the horizontal and vertical extent of DNAPL present in this area. This plan includes a brief summary of relevant sampling activities and the associated results, and a proposal and schedule for additional activities to be conducted by GE.

SUMMARY OF RELEVANT SAMPLING ACTIVITIES AND RESULTS

During excavation activities in the first ¹/₂-mile stretch of the Housatonic River, a pocket of DNAPL was observed on January 24, 2000 in the vicinity of EPA sampling transect 9 (T09). In accordance with the Upper ¹/₂-Mile Reach Removal Action Work Plan, the contractor proceeded to excavate in this area to a depth of four feet, in an attempt to delineate and remove this material. At the same time, a sample of the DNAPL was collected and analyzed. Analytical testing of this DNAPL has indicated that it is composed of coal tar constituents, with no PCBs. The results of this analysis are attached.

To aid in the DNAPL site investigation, the 1998 Appendix IX+3 sediment sampling results collected in the vicinity of the DNAPL area were first reviewed. In summary, the 1998 samples did not contain elevated levels of the constituents reported in the DNAPL sample. Upon comparison of detected constituent concentrations, the 1998 EPA sample concentrations were generally 4 to 6 orders of magnitude lower than those found in the DNAPL, and within the ranges present in the rest of the upper ½-Mile Reach. In general, the volatile and semi-volatile constituent concentrations reported from sediment samples collected along transects 7-10 were at or below 1 ppm. The chemical constituent in sediment with the highest concentration was napthalene, reported at 5.1 ppm.

Results from earlier surface water sampling conducted both upstream (Newell Street) and downstream (Lyman Street) of the DNAPL area were also reviewed. No statistical difference could be distinguished between constituent concentrations collected from surface water upstream and downstream of the DNAPL area.

On February 2, 2000, a sediment test boring was obtained immediately adjacent to the DNAPL area using an AMS direct push probe sampler. Using a jack-hammer to push the two-inch core sampler, two-four foot core segments were collected and visually characterized for DNAPL. An oily black stained sand and gravel layer was observed in the upper 3.5 feet of the sediment core, with clean sands present in the underlying 4.5 feet.

PROPOSED ACTIVITIES

To further evaluate the horizontal and vertical extent of DNAPL within the excavation, a phased soil boring program is proposed. Soil borings will be advanced in a grid-like pattern at approximately 15-foot spacing using manual AMS probe sampling techniques at the locations identified on Figure 1. During advancement of the core barrel, the recovered soils will be continuously logged. The soil samples will be characterized with regard to the potential presence of DNAPL based on visual descriptions and/or odors. The data from the test

boring, along with the observations made during excavation of sediment from Cell C, indicate the potential presence of DNAPL at elevations estimated between approximately 965 feet above MSL and 961 feet above MSL. As a result, the soil borings will be advanced to an approximate elevation of 960, sample refusal, or until clean materials (based on visual descriptions) are encountered below observed DNAPL (if any). If potential DNAPL is encountered in any of the initial soil borings, additional borings will be installed within Cells C and/or D, continuing in approximately the same grid pattern and spacing established by the initial soil borings until potential coal tar DNAPL is no longer encountered. All soil boring sample locations will be surveyed.

Once the bottom elevation of each boring is reached, the open holes will be tremie grouted with neat cement grout, prior to removing the casing. The DNAPL investigation will be conducted following the procedures set forth in GE's FSP/QAPP (Blasland, Bouck & Lee, Inc., January 2000). Specifically, field procedures will follow the Standard Operating Procedures (SOPs) presented in the Appendices of the FSP/QAPP.

In addition, to potentially alleviate upward hydraulic gradients, GE will initiate groundwater pumping of two wells [RW-3(X) and E2SC-9] located upgradient of the removal area, on an interim basis. Groundwater pumping of these wells will be initiated to the extent that there is available capacity for treatment of the extracted water at the Building 64G Groundwater Treatment Plant (GWTF). The pumping of these wells may potentially reduce upward gradients within the removal areas and reduce the rate of DNAPL movement into the excavation.

SCHEDULE

The proposed DNAPL investigation program outlined above will be implemented following the Agencies' approval of this plan. Installation of pumps and piping to facilitate the extraction of groundwater from RW-3(X) and E2SC-9 will be initiated immediately. Following completion of the DNAPL investigation program, a determination will be made (in consultation with the USEPA) as to potential follow-up activities.



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	LEGEND:
۵	SOURCE CONTROL RELATED BANK SOIL SAMPLE LOCATION
8	SOURCE CONTROL RELATED SEDIMENT SAMPLE LOCATION
	EPA SEDIMENT SAMPLE LOCATION
٠	OTHER SEDIMENT SAMPLE LOCATION
igodoldoldoldoldoldoldoldoldoldoldoldoldol	PROPOSED BORING LOCATION FOR DNAPL INVESTIGATION
	ADDITIONAL EXCAVATION TO OCCUR IN CONJUNCTION WITH EAST STREET AREA 2 SOURCE CONTROL ACTIVITIES
	CONTAINMENT BARRIER LOCATION
and and and a start and and a start and and	SOURCE CONTROL SHEETPILE
	TOP OF BANK
	SEDIMENT REMOVAL AREA
	SEDIMENT REMOVAL AND REPLACEMENT COMPLETED
C	30' 60'
	GRAPHIC SCALE
	GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS
UPPER	REMOVAL ACTION 1/2-MILE REACH OF HOUSATONIC RIVER
	PROPOSED DNAPL NVESTIGATION LOCATIONS
B	BLASLAND, BOUCK & LEE, INC. engineers & scientists

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LABORATORY REPORT

for

Blasland, Bouck & Lee, Inc. Attn: Bruce E. Eulian 100 Woodlawn Avenue Pittsfield, MA 01201

Attention: Bruce E. Eulian

PJ: 201.97.020

Report date: 01/25/00 Number of samples analyzed: AES Project ID: 000124 U Invoice #: 208984

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CC: Fax: Wn.Horne

ELAP ID#: 10709

AIHA ID#: 7866 Page

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CLIENT: Blasland, Bouck & Le CLIENT'S SAMPLE ID: HR-DNAPI	Date Sampled: 01/24/00 Date sample received: 01/24/00					
AES sample #: 000124 U01	Samples taken by: MATRIX: Oil	BBL	BBL Location: DNA grab			
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE	
Density	ASTM D1298-57	1.059	g/ml	MC-B-14	01/25/00	
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAE17	01/24/00	
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAE17	01/24/00	
PCB-1232	EPA-8082	<1	ug/S	KF-PCBAE17	01/24/00	
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAE17	01/24/00	
PCB-1248	EPA-8082	<1	ug/g	KE-PCBAE17	01/24/00	
PCB-1254	EPA-8082	<1	ug/S	KF-PCBAEL7	01/24/00	
203-1260	EPA-8082	<1	ug/g	KF-PCBAE17	01/24/00	
Chloromethane	EPA-3260	<1000	ug/c	MG-BU-32	01/25/00	
Bromomethane	EPA-8260	<1000	ug/S	MG-3U-32	01/25/00	
Vinyl Chloride	EPA-8260	<1000	ug/g	MG-BU-32	01/25/00	
Chloroethane	EPA-8260	<1000	ug/g	MG-BU-32	01/25/00	
Methylene Chloride	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Trichlorofluoromethane	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
1,1-Dichloroethene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
1,1-Dichloroethane	EPA-8260	حە	uç/g	MG-BU-32	01/25/00	
1,2-Dichloroethene Total	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Chloroform	EPA-8260	<500	ug/s	NG-BU-32	01/25/00	
1,2-Dichloroethane	EPA-8260	<500	ug/c	MG-BU-32	01/25/00	
1,1,1-Trichloroethane	EPA-8260	<500	ug/g	MG-5U-32	01/25/00	

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CLIENT: Blasland, Bouck & Lo CLIENT'S SAMPLE TO HD_DNAD	ee, Inc.	I	Date Sample	d: 01	L/24/00	
AES sample #: 000124 U01	Samples taken by: MATRIX: 011	BBT	Date sample received: 01/24/00 Location: DNAPL-Housatoni grab			
continued: <u>PARAMETER</u> <u>PERFORMED</u>	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE	
Carbon Tetrachloride	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Bromo dichloromethane	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
1,2 Dichloropropane	EPA-8260	<500	ug/g	MG-30-32	01/25/00	
trans-1,3-Dichloropropene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Trichloroethene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Benzene	EPA-8260	3400	ug/ç	MG-BU-32	01/25/00	
Dibromochloromethane	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
1,1,2-Trichloroethane	EPA-8260	<500	ug/g	MG-EU-32	01/25/00	
cis-1,3-Dichloropropene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
2-Chloroethylvinylether	EPA-8260	<1000	ug/g	MG-BU-32	01/25/00	
Bromoform	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
1,1,2,2-Tetrachloroethane	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Tetrachloroethene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Toluene	EPA-8260	10,000	ug/g	MG-BU-32	01/25/00	
Chlorobenzene	EPA-8260	<500	ug/g	MG-BU-32	01/25/00	
Ethylbenzene	EPA-8260	10,000	ug/s	MG-BU-32	01/25/00	
Xylenes, Total	EFA-3260	9300	ug/g	MG-BU-32	01/25/00	
Styrene	EPA-8260	1000	ug/s	MG-BU-32	01/25/00	
Acenaphthene	EPA-8270	3100	ug/g	HT-BH-3	01/24/00	
Acenaphthylene	EPA-8270	18,000	ug/g	MT-EK-3	01/24/00	

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CLIENT: Blasland, Bouck & Le	Date Sampled: 01/24/00 Date sample received: 01/24/00					
AES sample #: 000124 U01	Samples taken by: MATRIX: Oil	EBL Location: DNAPL-Housat grab				
continued: PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE	
Anthracene	EPA-8270	6600	ug/s	MT-EW-3	01/24/00	
Benzo(a)anthracene	EPA-8270	3400	ug/g	MT-BW-3	01/24/00	
Benzo(b)fluoranthene	EPA-8270	1900	ug/g	MT-BW-3	01/24/00	
Benzo(k)fluoranthene	EPA-827C	2100	ug/g	MT-BW-3	01/24/00	
Benzo(g,h,i)perylene	EPA-8270	<1000	ug/s	MT-BW-3	01/24/00	
Benzo(a)pyrene	EPA-8270	6400	ug/g	MI-BM-3	01/24/00	
Benzidine	EPA-8270	<\$000	ug/g	MT-BW-3	01/24/00	
Butylbenzylphthalate	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Bis(2-Chloroethoxy)methane	EPA-8270	<1000	ug/ç	MI-BW-3	01/24/00	
Bis(2-Chloroethyl)ether	EPA-8270	<1000	ug/g	MI-BH-3	01/24/00	
Bis(2-Chloroisopropyl)ether	EPA-8270	<1000	ug/5	MT-BW-3	01/24/00	
Bis(2-Ethylhexyl)phthalate	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Bromophenylphenyl ether	EPA-3270	<1000	ug/g	MT-BW-3	01/24/00	
2-Chloronaphthalene	EPA-8270	<1000	ug/g	MT-EW-3	01/24/00	
Chlorophenylphenyl ether	EPA-8270	<.000	ug/g	MT-BW-3	01/24/00	
Chrysene	EPA-8270	6300	ug/g	MT-SW-3	01/24/00	
Dibenzo(a,h)anthracene	EPA-8270	<1000	ug/ g	MT-BH-3	01/24/00	
Di-n-butylphthalate	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
1,2-Dichlorobenzene	EPA-8270	<1000	ug/g	MT-EW-3	01/24/00	
1,3-Dichlorobenzene	5PA-8270	<1000	ug/g	MI-38-3	01/24/00	
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CLIENT: Blasland, Bouck & Le	Date Sampled: 01/24/00 Date sample received: 01/24/00					
AES sample #: 000124 U01	Samples taken by: MATRIX: Oil	SSL	Location: DNAPL-Housaton grab			
continued: PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE	
1,4-Dichlorobenzene	EPA-5270	<1000	ug/g	MT-ISW-3	01/24/00	
3,3'-Dichlorobenzidine	EFA-8270	<2000	ug/ g	MT-BW-3	01/24/00	
Diethylphthalate	EPA-8270	<2000	ug/g	МТ-ви-з	01/24/00	
Dimethylphthalate	EPA-8270	<1000	ug∕g	MI-BM-3	01/24/00	
2,4-Dinitrotoluene	EPA-8270	<1000	ug/c	MT-BW-3	01/24/00	
2,6-Dinitrotoluene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Di-n-octylphthalate	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Fluoranthene	EPA-8270	8600	ug/g	MI-BN-3	01/24/00	
Fluorene	EPA-8270	12,000	ug/g	MT-BW-3	01/24/00	
Hexachlorobenzene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Hexachlorobutadiene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Hexachlorocyclopentadiene	EPA-8270	<1000	ug/g	MI-BM-3	01/24/00	
Hexachloroethane	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Indeno(1,2,3-cd)pyrene	EPA-8270	<1000	ug/ g	MT-BW-3	01/24/00	
Isophorone	EPA-8270	<1000	ug/g	MT-BH-3	01/24/00	
Naphthalene	EPA-8270	67,000	υg/ς	MT-BW-3	01/24/00	
Nitrobenzene	EPA-8270	<1000	ug/g	MT-BK-3	01/24/00	
N-Nitroso-di~n~propylamine	EPA-8270	<1000	ug/g	MT-BH-3	01/24/00	
N-Nitrosodiphenylamine	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
N-Nitrosodimethylamine	EPA-8270	<1000	ug/g	NT-BW-3	01/24/00	

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CLIENT: Blasland, Bouck & Lee, Inc.		Date Sampled: 01/24/00				
AES sample #: 000124 U01	Samples taken by: MATRIX: Oil	Beil.	ation: DNAPI	APL-Housatoni		
continued: PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE	
1,2 Diphenylhydrazine	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
Phenanthrene	EPA-8270	25,000	ug∕g	MT-BW-3	01/24/00	
Pyrene	EPA-8270	25,000	ug/g	MT-BW-3	01/24/00	
1,2,4-Trichlorobenzene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
4-Chloro-3-methylphenol	EPA-8270	<1000	ug/g	MT-BN-3	01/24/00	
2-Chlorophenol	EPA-8270	<1000	ug/g	MI-BN-3	01/24/00	
2,4-Dichlorophenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
2,4-Dimethylphenol	EPA-8270	<1000	ug/g	МТ-ВИ-З	01/24/00	
2,4-Dinitrophenol	EPA-8270	<5000	ug/g	HT-BN-3	01/24/00	
4,6-Dinitro-2-Methylphenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00	
4-Nitrophenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00	
2-Nitrophenol	EPA-8270	<1000	ug/g	MT-EW-3	01/24/00	
Pentachlorophenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00	
Phenol	EPA-8270	<1000	ug/g	MI-BW-3	01/24/00	
2,4,6-Trichlorophenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00	
2-Hethylnaphthalene	EPA-8270	26,000	ug/g	MT-BW-3	01/24/00	

APPROVED BY:

Report date: 01/25/00

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Bit North Pani Stret - Albany, New York 12207 - 800-884-9933 - (512) 434-4566 - Fax (518) 434-45951 CLIENT'S BIASIAND, BOUCH & Lee, Inc. Date Sampled: 01/24/00 AES sample #: 000124 U01 Samples taken by: Date Sample Terceived: 01/24/00 Continued: MATRIX: 011 UNITS NOTENE VERSTOR PARAMETER FORTOMED METNOD SEEUIT UNITS NOTENE VERSTOR Phenanthrene EPA-8270 25,000 ug/g MT-EN-3 01/24/00 Pyrene EPA-8270 25,000 ug/g MT-EN-3 01/24/00 1,2 diphenylhydrazine EPA-8270 25,000 ug/g MT-EN-3 01/24/00 Pyrene EPA-8270 25,000 ug/g MT-EN-3 01/24/00 1,2,4-Trichlorobenzene EPA-8270 21000 ug/g MT-EN-3 01/24/00 2,4-Dintorophenol EPA-8270 41000 ug/g MT-EN-3 01/24/00 2,4-Dinethylphenol EPA-8270 41000 ug/g MT-EN-3 01/24/00 2,4-Dinitrophenol EPA-8270 41000 ug/g MT-EN-3 01/24/00 2,4-Dinitrophenol<	and the second s	Experience is the solution							
CLIENT: Blasland, Bouck & Lee, Inc.Date Sampled: 01/24/00 Date sample received: 01/24/00 Date sample scieved: 01/24/00 Prene<	F	314 North Pearl Street - Albany, New York 12207 - 800-848-4983 - (518) 434-4546 - Fax (518) 434-0891							
Continued: METHON RESULT UNITES NOTESK REF TEST DATE 1,2 Diphenylhydrazine EPA-8270 <1000	CLIENT: Blash CLIENT'S SAMPI AES sample #:	and, Bouck & Lee E ID: HR-DNAPL- 000124 UO1	, Inc. 1 Samples taken by:	I BBL	Date Sampled Date sample n Locat grab	: 01 received: 01 Lion: DNAPL	/24/00 /24/00 -Housatoni		
1.2 Diphenylhydrazine EPA-8270 <1000	continued: PARAMETER PERE	ORMED	METHOD	RESULT	UNITS	NOTESK FEF	TEST DATE		
Phenanthrene EPA 6270 25,000 ug/g MT-EM-3 01/24/00 Pyrene EPA-8270 25,000 ug/g MT-EM-3 01/24/00 1,2,4-Trichlorobenzene EPA-8270 <1000	1,2 Diphenylhy	drazine	EPA-8270	<1000	ug/g	MI-BN-3	01/24/00		
Pyrene EPA-8270 25,000 ug/g MT-EM-3 01/24/00 1,2,4-Trichlorobenzene EPA-8270 <1000	Phenanthrene		EPA-8270	25,000	ug/g	MT-BW-3	01/24/00		
1,2,4-Trichlorobenzene EPA-8270 <1000	Pyrene		EPA-8270	25,000	ug/g	MI-BM-3	01/24/00		
4-Chloro-3-methylphenol EPA-8270 <1000	1,2,4-Trichlor	obenzene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
2-Chlorophenol EPA-8270 <1000	4-Chloro-3-met	hylphenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
2.4-Dichlorophenol EPA-8270 <1000	2-Chlorophenol		EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
2,4-Dimethylphenol EFA-6270 <1000	2,4-Dichloroph	eno1	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
2,4-Dinitropheno! EPA-8270 <5000	2,4-Dimethylph	enol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
4,6-Dinitro-2-Methylphenol EPA-8270 <5000	2,4-Dinitrophe	nol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00		
4-Nitrophenol EPA-8270 <5000 ug/g MT-BW-3 01/24/00 2-Nitrophenol EPA-8270 <1000	4,6-Dinitro-2-	Methylphenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00		
2-Nitrophenol EPA-8270 <1000 ug/g MT-BW-3 01/24/00 Pentachlorophenol EPA-8270 <5000	4-Nitrophenol		EPA-8270	<5000	ug/g	MT-BW-3	01/24/00		
Fentachlorophenol EPA-8270 <5000 ug/g MT-EW-3 O1/24/00 Phenol EPA-8270 <1000	2-Nitrophenol		EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
Phenol EPA-8270 <1000 ug/g MT-BW-3 01/24/00 2,4,6-Trichlorophenol EPA-8270 <1000	Fentachlorophe	nol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00		
2,4,6-Trichlorophenol EPA-8270 <1000 ug/g MT-BW-3 01/24/00 2-Methylnaphthalene EPA-8270 26,000 ug/g MT-EW-3 01/24/00 Viscosity,Kinematic ASTM D445 180 cSt &22C PL-D-4 01/31/00	Phenol		EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
2-Methylnaphthalene EPA-8270 26,000 ug/g MT-EW-3 01/24/00 Viscosity, Kinematic ASTM D445 180 cSt §22C PL-D-4 01/31/00	2,4,6-Trichlor	ophenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00		
Viscosity, Kinematic ASTM D445 180 cSt &22C FL-D-4 01/31/00	2-Methylnaphth	alene	EPA-8270	26,000	ug/g	MI-EW-3	01/24/00		
	Viscosity, Kine	matic	ASTM D445	180	cSt &22C	PL-D-4	01/31/00		

APPROVED BY: Report date: 02/03/00

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Experience is the solution

314 North Pearl Street . Albany, New York 12207 . 800-848-4983 . (518) 434-4546 . Fax (518) 434-0891

CLIENT: Blasland, Bouck & Le CLIENT'S SAMPLE ID: HR-DNAPL	e, Inc. -1	Date Sampled: 01 Date sample received: 01			/24/00 /24/00
AES sample #: 000124 U01	Samples taken by: MATRIX: 011	BEL	-nousacom		
continued: PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEEK REF	TEST DATE
1,2 Diphenylhydrazine	EPA-8270	<1000	ug/ g	MT-BN-3	01/24/00
Fhenanthrene	EPA-8270	25,000	ug/g	MT-BN-3	01/24/00
Pyrene	EPA-8270	25,000	ug/g	MT-BW-3	01/24/00
1,2,4-Trichlorobenzene	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00
4-Chloro-3-methylphenol	EPA-8270	<1000	ug∕ g	MT-BW-3	01/24/00
2-Chlorophenol	EPA-8270	<1000	ug/g	MI-BH-3	01/24/00
2,4-Dichlorophenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00
2,4-Dimethylphenol	EPA-8270	<1000	ug/g	MT-BW-3	01/24/00
2,4-Dinitrophenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00
4,6-Dinitro-2-Methylphenol	EPA-5270	<\$000	ug/g	MT-EN-3	01/24/00
4-Nitrophenol	EFA-8270	<5000	ug/g	MT-BH-3	01/24/00
2-Nitrophenol	EPA-6270	<1000	ug/g	MT-BW-3	01/24/00
Pentachlorophenol	EPA-8270	<5000	ug/g	MT-BW-3	01/24/00
Fhenol	EPA-8270	<1000	ug/g	E-ME-IM	01/24/00
2,4,6-Trichlorophenol	EPA-6270	<1000	ug/g	MT-BW-3	01/24/00
2-Methylnaphthalene	EPA-8270	26,000	ug/g	MT-BW-3	01/24/00
Viscosity, Kinematic	ASTM D445	9.295	cst ecc	PL-D-4	01/28/00

APPROVED BY: Report date: 01/28/00

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CLIENT: General Electric Com CLIENT'S SAMPLE ID: HR-DNAPL AES sample #: 000203 B01	pany ,-COMP-1 Samples taken by: MATRIX: Liquid W	Dat Dat B.K./S.L. Vaste	e Sample e sample Loc com	d: 02/ received: 02/ ation: Housat mosite	02/00 03/00 onic Riv.
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEEK REF	TEST DATE
Arsenic	EPA-6010	4.72	ug/g	KH-I-3B-69	02/03/00
Barium	EPA-6010	0.5	ug/g	KH-I-3B-69	02/03/00
Cadnium	EPA-6010	⊲0.25	ug/g	KH-I-3B-69	02/03/00
Chromium	EPA-6010	<0.25	ug/g	KH-I-3B-69	02/03/00
Jead	ZPA-6010	6.96	ug/g	KH-I-3B-69	02/03/00
Mercury	2PA-7471	0.09	ug/g	MW-250-80	02/03/00
Selenium	EPA-6010	1.09	ug/g	KH-I-3B-69	02/03/00
Silver	2PA-6010	<1	ug/g	<u>KH</u> -I-3B-69	02/03/00

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