GE Energy

Andrew Graham
EHS Project Manager
Transactions/Remediation

1 River Road
Building 43, 2*16
Schenectady, New York 12345

T 518.385.3423
F 518.385.4074
andrew.graham@ge.com

December 20, 2010

Ms. Jennifer Reno
Hazardous Waste Permits Section
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

Re: **RCRA Closure Work Plan Amendment No. 1 – Contingency Sampling Results**
GE Energy, Specialty Transformer
Former RCRA Container Storage Unit
1701 College Street, Bldg 26-2
Fort Wayne, Indiana
EPA J.D. No. IND 004557815

Dear Ms. Reno:

In August 2010, GE completed the contingency sampling associated with the *RCRA Closure Work Plan Amendment No.1* for the above referenced project. This contingency sampling was performed in accordance with requests made by IDEM during an onsite meeting on June 24, 2010. The objective of the sampling was to further characterize volatile organic compounds (VOCs) in soil and groundwater. The following areas were identified by IDEM for further characterization:

Groundwater

- The eastern extent of VOCs in groundwater beneath Building 26
- The south-western extent of VOCs in groundwater (southwest of the intersection of Wall St. and College St.)

Soil

- The northern extent of VOCs in soil (north of sampling location SP-24)
- The north-western extent of VOCs in soil (northwest of sampling location SP-21)

The following paragraphs discuss groundwater and soil results that were obtained from the contingency sampling event conducted in August 2010. These results are also summarized in ***Table 1*** and ***Table 2,*** and are depicted in ***Figure 1***. The contingency sampling results indicate that additional sampling will be necessary to complete the site characterization. The proposed additional sampling is presented below, with proposed sampling locations shown on ***Figure 2***

Groundwater Sampling

To further evaluate the presence of VOCs in groundwater beneath Building 26, a groundwater sample (VAS-06) was collected from beneath the basement floor this building. This location was approximately 100 feet east of the previous sampling location (SP-28). The results from VAS-6 indicate the presence of vinyl chloride (380 µg/L), cis-1,2-dichloroethene (690 µg/L), trans-1,2-dichloroethene (210 µg/L), and trichloroethene (900 µg/L) in groundwater. These results along with historical results are presented in

Figue 1. Because the vinyl chloride and trichloroethene concentrations at VAS-6 exceeded IDEM default closure levels (residential and industrial), additional groundwater sampling will be performed east of this location and beneath Building 26. In addition, to further evaluate possible VOC-exposures associated with building occupancy, soil-gas sampling will be performed near Building 26. ***Figure 2*** depicts the proposed groundwater sampling location (VAS-7) and soil-gas sampling locations (SG-01 and SG-02). Groundwater sampling will be performed consistent with the procedures outlined in the *RCRA Closure Work Plan Amendment No.1*. Soil-gas samples will be collected in accordance with IDEM's guidance for soil-gas sampling (April 2006).

During our onsite meeting in June 2010, IDEM requested that GE collect a groundwater sample southwest of the intersection of Wall St. and College St. IDEM made this request based the presence of VOCs in groundwater samples collected on GE's property north and east of this intersection (see ***Figure 1***, MW-2, MW-6, and VAS-5). The southwest corner of this intersection is a right-of-way owned by the City of Fort Wayne. At GE's request, the public utilities were located and marked within this area. An underground electrical power line, a natural gas line, and a water line are present within this area. Based on safety considerations and to prevent damage to public utilities, GE did not install a groundwater sampling point in this area.

In lieu of collecting a groundwater sample within the right-of-way, and in recognition of IDEM's request to evaluate possible offsite exposures to VOCs in this area, GE is planning to collect soil-gas samples alongGE's property boundary where VOCs have been observed in groundwater. These samples will be collected from the three locations shown in ***Figure 2*** (SG-03 through SG-05). The sampling will be performed in accordance with IDEM guidance.

Soil Sampling

At SP-24, VOCs were previously found in groundwater (see ***Figure 1***), and also in soil at depths of 16 and 17 feet. To further characterize the extent of VOCs in soil north of the previous sampling location SP-24, GE attempted to collect soil samples within the narrow alley between the loading ramp and railroad right-of-way. Because the area directly north of the loading ramp is paved with concrete, a soil sample couldnot be collected in this area. Due to sediment and debris, the concrete pavement was not readily visible during the onsite meeting in June 2010. However, one shallow soil sample (SP-32, 1 foot) was obtained near the northwest corner of Building 26 (see ***Figure 1***). Refusal was encountered at 1 foot below the ground surface at several offset locations near SP-32. The analytical results from SP-32 indicate that trichloroethene (5,100 µg/kg) is present at a concentration greater than IDEM's industrial default closure level (350 µg/kg) but less than the industrial direct contact closure level (24,000 µg/kg). Other compounds were also detected in this sample but at concentrations less than the industrial default closure levels. To further characterize the soil within this area that is not covered with concrete, additional soil sampling will be performed along alley using a hand-auger (SP-33 through SP-35, as shown on ***Figure 2***). Samples will be collected from deepest interval that can be practically achieved.

In addition to soil sampling within the narrow alley south of the railroad tracks, GE also performed a soil boring (SP-31) within GE's parking lot north of the railroad tracks. Samples were collected from two depths within the vadose zone (11 feet and 15 feet). VOCs were not observed during headspace screening of the vadose zone soil. The VOC results obtained from these two samples were less than IDEM's default closure levels. Therefore, no additional soil sampling will be performed north of the railroad tracks.

To further characterize the extent of VOCs in soil northwest of the previous sampling location SP-21, GE performed a soil boring (SP-30) at the northwest corner of the Building 26 parcel (see ***Figure 1***). This soil boring (SP-30) was placed adjacent to the College St. underpass and GE's loading ramp. Soil samples were collected at the two depth intervals for which elevated VOCs were observed during headspace screening (14 feet and 16 feet). Trichloroethene and tetrachloroethene were present in these samples

at concentrations greater than IDEM's industrial default closure levels. However, due to the physical restriction present in this area, no further step-out sampling can be performed in this area.

* * * * *

The scheduled completion date for this project (as approved by IDEM) is January 12, 2011; however, because additional contingency sampling is necessary, GE is requesting that the completion date be extended by 180 days from the date of this letter (i.e., June 18, 2011). To avoid project delays, please contact me immediately if IDEM does not agree with the approach for the contingency sampling outlined in this letter.

Following the completion of this work, GE will complete the activities outlined in the *RCRA Closure Work Plan Amendment No. 1*, which include installing five groundwater monitoring wells, sampling 11 monitoring wells, and preparing a summary report that will include the results from the original investigation and each of the contingency sampling event.

GE is committed to completing its environmental obligations associated with this property and will continue to work with IDEM to obtain closure. Feel free contact me at 518.385.3423 or andrew.graham@ge.com if you have any questions.

Sincerely,

Andrew Graham
GE Energy
EHS Project Manager – Remediation and Transactions

cc: B. Toth, MWH

Enclosure:

Table 1 – Groundwater Sample Results - VOCs, August 2010
Table 2 – Soil Sample Results - VOCs, August 2010
Figure 1 – Groundwater Sample Results Collected from 2007 through 2010
Figure 2 – Proposed Sampling Locations

Tables

MWH

Tables

Table 1 - Groundwater Sample Results - VOCs
GE Energy Building 26-2
Fort Wayne , Indiana
August 2010

Compound	IDEM Industrial Closure Levels MCL	Health Protective	Default Closure Level	VAS-6 (9-19')
1,1,1-Trichloroethane	200	29,000	29,000	10 U
1,1,2,2-Tetrachloroethane	-	14	14	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	10 U
1,1,2-Trichloroethane	5	50	50	10 U
1,1-Dichloroethane	0	10,000	10,000	**3.6 J**
1,1-Dichloroethene	7	5,100	5,100	**24**
1,2,4-Trichlorobenzene	70	1,000	1,000	10 U
1,2-Dibromo-3-chloropropane	-	-	-	10 U
1,2-Dibromoethane	0.05	1	1	10 U
1,2-Dichlorobenzene	600	9,200	9,200	10 U
1,2-Dichloroethane	5	31	31	10 U
1,2-Dichloropropane	5	42	42	10 U
1,3-Dichlorobenzene	-	310	310	10 U
1,4-Dichlorobenzene	75	120	120	10 U
2-Butanone (MEK)	-	61,000	61,000	50 U
2-Hexanone	-	-	-	50 U
4-Methyl-2-pentanone (MIBK)	-	8,200	8,200	50 U
Acetone	-	92,000	92,000	50 U
Benzene	5	52	52	10 U
Bromodichloromethane	80	46	80	10 U
Bromoform	80	360	360	10 U
Bromomethane	-	140	140	10 U
Carbon Disulfide	-	10,000	10,000	**8.3 J**
Carbon Tetrachloride	5	22	22	10 U
Chlorobenzene	100	2,000	2,000	10 U
Chloroethane	-	990	990	10 U
Chloroform	80	1,000	1,000	10 U
Chloromethane	-	-	-	10 U
cis-1,2-Dichloroethene	70	1,000	1,000	**690**
cis-1,3-Dichloropropene	-	-	-	10 U
Cyclohexane	-	-	-	50 U
Dibromochloromethane	-	-	-	10 U
Dichlorodifluoromethane	-	-	-	10 U
Ethylbenzene	700	10,000	10,000	10 U
Isopropylbenzene	-	10,000	10,000	10 U
Methyl Acetate	-	-	-	50 U
Methyl tert-Butyl Ether	40	720	720	10 U
Methylcyclohexane	-	-	-	50 U
Methylene Chloride	5	380	380	10 U
Styrene	100	20,000	20,000	10 U
Tetrachloroethene	5	55	55	10 U
Toluene	1,000	8,200	8,200	10 U
trans-1,2-Dichloroethene	100	2,000	2,000	**210**
trans-1,3-Dichloropropene	-	-	-	10 U
Trichloroethene	5	31	31	**900**
Trichlorofluoromethane	-	-	-	10 U
Vinyl Chloride	2	4	4	**360**
Xylene (Total)	10,000	20,000	20,000	30 U

Concentration are reported in micrograms per kilogram (ug/kg).
U - The compound was not detected above the indicated reporting limit.
J - Estimated. One or more quality control criteria were not met.
Detected results are bolded.
Results that exceed one or more closure level are boxed and shaded.

Table 2 - Soil Sample Results - VOCs
GE Energy Building 26-2
Fort Wayne , Indiana
August 2010

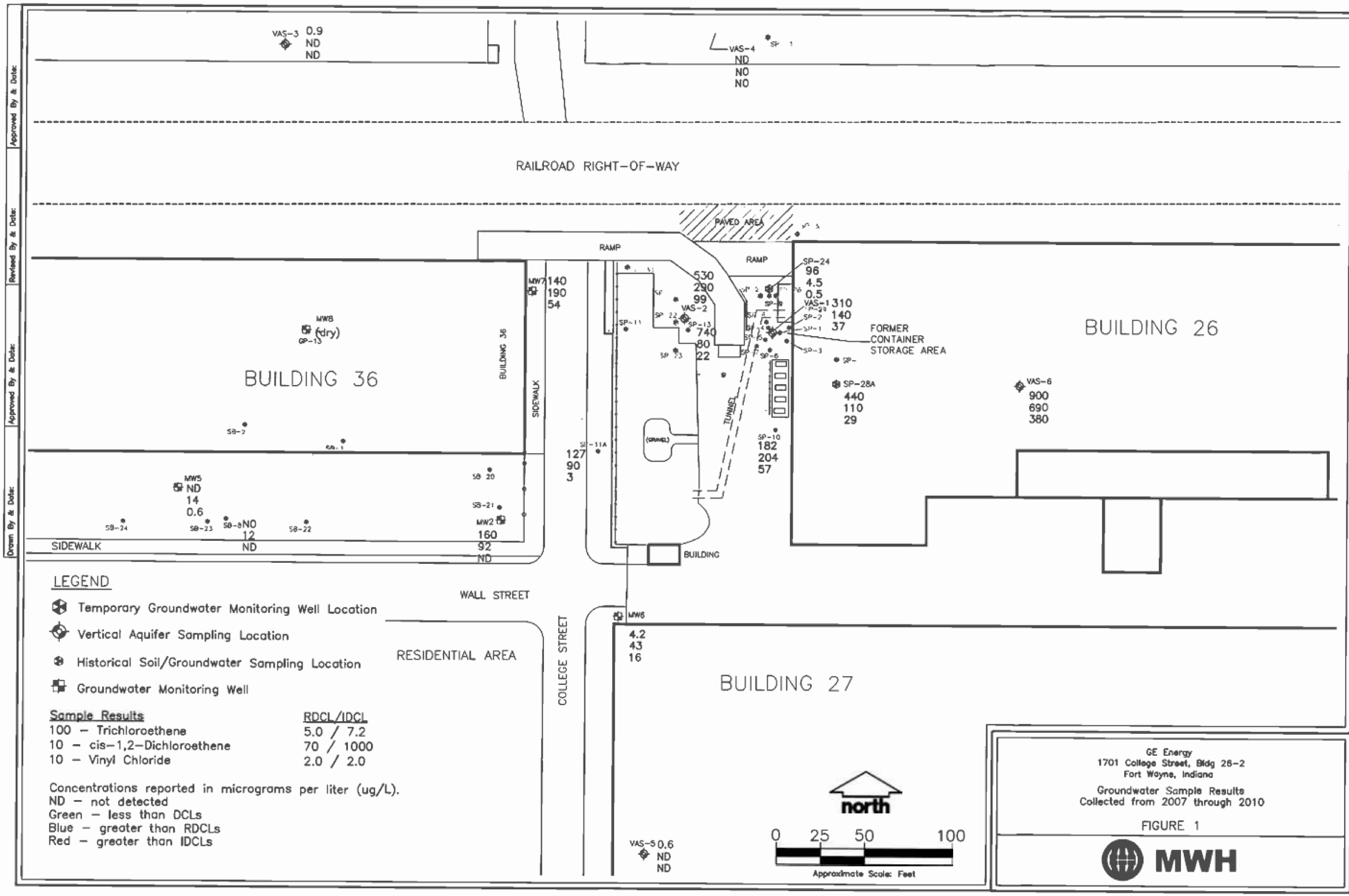
Compound	IDEM Industrial Closure Levels			SP-30 (14')	SP-30 (16')	SP-31 (11')	SP-31 (15')	SP-32 (1')
	Soil Direct	Migration to GW	Default Closure Level					
1,1,1-Trichloroethane	6,700,000	280,000	280,000	**2.5 J**	**14 J**	9 U	46 U	**74 J**
1,1,2,2-Tetrachloroethane	8,700	110	110	49 U	55 U	9 U	46 U	120 U
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	49 U	55 U	9 U	46 U	120 U
1,1,2-Trichloroethane	15,000	300	300	49 U	55 U	9 U	46 U	120 U
1,1-Dichloroethane	1,700,000	58,000	58,000	49 U	55 U	9 U	46 U	120 U
1,1-Dichloroethene	410,000	42,000	42,000	49 U	55 U	9 U	46 U	120 U
1,2,4-Trichlorobenzene	4,900,000	77,000	77,000	49 U	55 U	9 U	46 U	120 U
1,2-Dibromo-3-chloropropane	-	-	-	240 U	280 U	9 U	230 U	600 U
1,2-Dibromoethane	490	10	10	49 U	55 U	9 U	46 U	120 U
1,2-Dichlorobenzene	3,900,000	270,000	220,000	49 U	55 U	9 U	46 U	120 U
1,2-Dichloroethane	5,800	150	150	49 U	55 U	9 U	46 U	120 U
1,2-Dichloropropane	7,200	250	250	49 U	55 U	9 U	46 U	120 U
1,3-Dichlorobenzene	890,000	8,900	8,900	49 U	55 U	9 U	46 U	120 U
1,4-Dichlorobenzene	73,000	3,400	3,400	49 U	55 U	9 U	46 U	120 U
2-Butanone (MEK)	70,000,000	250,000	250,000	**0.75 J**	**130 J**	**1.6 J**	**100 J**	**190 J**
2-Hexanone	-	-	-	2,400 U	2,800 U	45 U	2,300 U	6,000 U
4-Methyl-2-pentanone (MIBK)	29,000,000	75,000	75,000	2,400 U	2,800 U	90 U	2,300 U	6,000 U
Acetone	51,000,000	370,000	370,000	40 U	**10 J**	**3.7 J**	**23 J**	1,800 U
Benzene	14,000	350	350	**0.1 J**	55 U	**0.19 J**	**0.43 J**	**160**
Bromodichloromethane	17,000	510	510	49 U	55 U	9 U	46 U	120 U
Bromoform	580,000	2,700	2,700	49 U	55 U	9 U	46 U	120 U
Bromomethane	13,000	700	700	49 U	55 U	9 U	46 U	120 U
Carbon Disulfide	1,200,000	82,000	82,000	240 U	280 U	1.3 J	0.8 J	600 U
Carbon Tetrachloride	5,200	290	290	49 U	55 U	9 U	46 U	120 U
Chlorobenzene	510,000	27,000	27,000	49 U	55 U	9 U	46 U	120 U
Chloroethane	120,000	10,000	10,000	49 U	55 U	9 U	46 U	120 U
Chloroform	4,700	6,000	4,700	**0.44 J**	**0.63 J**	9 U	46 U	120 U
Chloromethane	-	-	-	49 U	55 U	9 U	46 U	120 U
cis-1,2-Dichloroethene	140,000	5,800	5,800	**1.6 J**	55 U	9 U	46 U	120 U
cis-1,3-Dichloropropene	-	-	-	49 U	55 U	9 U	46 U	120 U
Cyclohexane	-	-	-	**0.18 J**	280 U	**0.97 J**	**0.93 J**	**480 J**
Dibromochloromethane	-	-	-	49 U	55 U	9 U	46 U	120 U
Dichlorodifluoromethane	-	-	-	49 U	55 U	9 U	46 U	120 U
Ethylbenzene	6,800,000	200,000	160,000	49 U	55 U	9 U	46 U	**160**
Isopropylbenzene	1,900,000	140,000	42,000	49 U	55 U	9 U	46 U	**130**
Methyl Acetate	-	-	-	240 U	280 U	45 U	230 U	**150 J**
Methyl tert-Butyl Ether	650,000	3,200	3,200	49 U	55 U	9 U	46 U	120 U
Methylcyclohexane	-	-	-	**0.23 J**	280 U	**1.8 J**	**1.4 J**	**1,700**
Methylene Chloride	200,000	1,800	1,800	240 U	280 U	9 U	230 U	600 U
Styrene	16,000,000	720,000	550,000	49 U	55 U	9 U	46 U	120 U
Tetrachloroethene	16,000	640	640	**51**	**1,100**	9 U	**2 J**	**240**
Toluene	16,000,000	96,000	96,000	**0.31 J**	**0.54 J**	**0.46 J**	**0.96 J**	**1,400**
trans-1,2-Dichloroethene	230,000	14,000	14,000	49 U	55 U	9 U	46 U	120 U
trans-1,3-Dichloropropene	-	-	-	49 U	55 U	9 U	46 U	120 U
Trichloroethene	24,000	350	350	**1,300**	**2,000**	9 U	**1.3 J**	**5,100**
Trichlorofluoromethane	-	-	-	49 U	55 U	9 U	46 U	120 U
Vinyl Chloride	6,400	27	27	49 U	55 U	9 U	46 U	120 U
Xylene (Total)	890,000	430,000	170,000	150 U	170 U	27 U	140 U	**2,200**

Concentration are reported in micrograms per kilogram (ug/kg).
U - The compound was not detected above the indicated reporting limit.
J - Estimated. One or more quality control criteria were not met.
Detected results are bolded.
Results that exceed one or more closure level are boxed and shaded.

Figures

MWH

FIGURES



Approved By & Date:
Revised By & Date:
Approved By & Date:
Drawn By & Date:
VAS-3 0.9 ND ND
VAS-4 ND ND ND
RAILROAD RIGHT-OF-WAY
PAVED AREA
RAMP
RAMP
MW7 140 190 54
MW8 (dry)
GP-13
BUILDING 36
BUILDING 36
SIDEWALK
SB-2
SB-20
SB-21
MW2 160 92 ND
MW5 ND 14 0.6
SB-24
SB-23
SB-8 ND 12 ND
SB-22
SIDEWALK
530 290 99
VAS-2
SP-13 740 80 22
SP-11
SP-11A 127 90 3
SP-24 96 4.5 0.5
VAS-1 310 140 37
SP-2
SP-1
SP-3
SP-6
FORMER CONTAINER STORAGE AREA
SP-28A 440 110 29
VAS-6 900 690 380
SP-10 182 204 57
TUNNEL
(GRAVEL)
BUILDING 26
BUILDING
WALL STREET
COLLEGE STREET
RESIDENTIAL AREA
MW6 4.2 43 16
BUILDING 27
VAS-5 0.6 ND ND
north
0 25 50 100
Approximate Scale: Feet
LEGEND
Temporary Groundwater Monitoring Well Location
Vertical Aquifer Sampling Location
Historical Soil/Groundwater Sampling Location
Groundwater Monitoring Well
Sample Results
100 – Trichloroethene
10 – cis-1,2-Dichloroethene
10 – Vinyl Chloride
RDCL/IDCL
5.0 / 7.2
70 / 1000
2.0 / 2.0
Concentrations reported in micrograms per liter (ug/L).
ND – not detected
Green – less than DCLs
Blue – greater than RDCLs
Red – greater than IDCLs
GE Energy
1701 College Street, Bldg 26-2
Fort Wayne, Indiana
Groundwater Sample Results
Collected from 2007 through 2010
FIGURE 1
MWH

RAILROAD RIGHT-OF-WAY

VAS-3

VAS-4

PAVED AREA

SP-33

SP-34

SP-35

RAMP

RAMP

SP-24

VAS-1

VAS-2

SP-2

SP-1

SP-3

SG-01

FORMER CONTAINER STORAGE AREA

BUILDING 26

SP-28A

VAS-6

VAS-7

MW7

MW8

GP-13

BUILDING 36

BUILDING 36

SIDEWALK

SP-11

SP-13

SP-11A

SP-10

TUNNEL

(GRAVEL)

MW5

SB-20

SB-21

SB-24

SB-23

SB-8

SB-22

SG-05

MW2

SIDEWALK

SG-03

BUILDING

SG-02

WALL STREET

COLLEGE STREET

MW6

SG-04

RESIDENTIAL AREA

BUILDING 27

VAS-5

LEGEND

- Proposed Groundwater Sampling Locations
- Proposed Soil Sample (shallow)
- Proposed Soil-Gas Sample
- Temporary Groundwater Monitoring Well Location
- Vertical Aquifer Sampling Location
- Historical Soil/Groundwater Sampling Location
- Groundwater Monitoring Well

Sampling locations are subject to change based on field conditions and possible underground utilities/obstructions.

north

0 25 50 100

Approximate Scale: Feet

GE Energy
1701 College Street, Bldg 26-2
Fort Wayne, Indiana

Proposed Sampling Locations

FIGURE 2

MWH

Drawn By & Date:

Approved By & Date:

Revised By & Date:

Approved By & Date:

Approved By & Date: