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Shaw® The Shaw Group Inc.®

November 29, 2004

Mr. Jeff Dyber, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway
Albany, New York 12233

RE: National Heatset Printing
Operation & Maintenance Report, September 2004
1 Adams Boulevard
Farmingdale, New York
NYSDEC Site 1-52-140

Dear Mr. Dyber:

This letter provides an overview of the ongoing operation of the soil vapor extraction (SVE) system for the National Heatset Printing Site in Farmingdale, New York (**Figure 1**) for the reporting period including September 2004. A site visit was performed by Shaw Environmental and Infrastructure Engineering of New York, P.C. (Shaw) personnel on September 29, 2004 in accordance with our contract with the New York State Department of Environmental Conservation (NYSDEC).

System Operation

Operation of SVE system began on September 17, 2002. The system was not operational from the beginning of the reporting period to September 16, 2004, when the SVE blower was re-installed at the site after the completion of off-site maintenance. Due to the off-site maintenance activities, the SVE system has been operational for approximately 38% of the reporting period. The system operational data is summarized in **Table 1** and is presented as **Appendix A**.

The SVE blower operated at a vacuum of 76 inches of water column and an air flow of 140 cubic feet per minute (cfm) as observed during the site visit. A flow of 139 cfm and a vacuum of 60 inches of water column were observed at the extraction well. The extraction well and dilution

valves were 75% and 50% open, respectively, at the beginning of the site visit. Volatile organic compound (VOC) and tetrachloroethene (PCE) concentrations from the extraction well were not measured due to equipment malfunction. The positioning of the well extraction and dilution air valves will be modified based on continued monitoring of VOC concentrations. No water was collected from the knockout vessel during this reporting period.

VOC concentrations of 27.7 ppm were observed at the vapor-phase granular activated carbon (VGAC) influent port during the site visit. Detectable VOC concentrations were not observed at the VGAC mid or effluent ports during the site visit. A draeger pump was not available to monitor PCE concentrations during this site visit. Monitoring of PCE concentrations will resume during the next site visit.

Monitoring Probes

A vacuum of 2.7 inches of water column was observed at vapor monitoring point VP-1, 0.5 inches of water column was observed at VP-2, and 0.6 inches of water column was observed at VP-3 during the site visit. Monitoring of the vapor points will continue during future site visits.

PCE Removal

A PCE removal estimate could not be calculated for this reporting period because monitoring equipment was not available. PCE monitoring will resume during the next site visit. The SVE system has removed approximately 2,479 pounds of PCE to date. A summary of the estimated PCE mass removal over time is presented in **Table 2**.

Air Discharge Monitoring

Shaw personnel collected a sample of the system effluent air for laboratory analyses during the site visit. The laboratory analysis revealed non-detectable VOC and PCE concentrations in the system effluent sample. Analytical results are summarized in **Table 3** and the laboratory report of analyses is presented as **Appendix B**.

Field monitoring of the system discharge conducted during the site visit indicated a non-detectable VOC concentration. A summary of the field monitoring and laboratory air discharge monitoring results is presented as **Table 4**.

Conclusions and Recommendations

Based on the data collected from the SVE system during this reporting period, Shaw recommends continued operation of the SVE system at 1 Adams Boulevard. As site conditions change, adjustments will be made to optimize the system operation.

Please do not hesitate to contact me at 518-783-1996 with any questions you might have regarding this report.

Sincerely,
Shaw E&I Engineering of New York, P.C.

John A. Skaarup
Project Engineer

Cc: File

Attachments: Tables
Figures
Appendix A – Site Visit Documentation
Appendix B – Laboratory Report of Analyses

TABLES

TABLE 1
SUMMARY OF SOL VAPOR EXTRACTION SYSTEM READINGS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

												Influent SVE					Mid GAC				Effluent GAC			
Date	Run Time Meter Reading (hours)	Run Time Since Last Visit (hours) Available		Actual	Operation Time Since Last Visit (%)	Dilution Valve Position (% Open)	Extraction Well MW-F Valve Position (% Open)	Air Flow at Well (scfm)	Vacuum at Well (inches H2O)	Pre-Dilution PID (ppm)	Pre-Dilution PCE (ppm)	Blower Flow (cfm)	Vacuum (inches H2O)	Temp. (°F)	PID (ppm)	PCE (ppm)	Flow (cfm)	Temp. (°F)	PID (ppm)	PCE (ppm)	Flow (cfm)	Temp. (°F)	PID (ppm)	PCE (ppm)
9/18/2002	--	--		--	SVE PILOT TEST STARTUP																			
9/30/2002	304	294	/	294	100%	100	50	34.5	5	2,000	500	256	25	107.2	1,015	--	317	102.3	0	--	290	89.5	0	--
10/14/2002	642	343	/	338	99%	100	50	38	7	1,011	400	258	27	--	75.3	50	--	--	0	--	--	--	0	--
11/19/2002	1508	882	/	866	98%	100	50	49	12	0	0	120	28	106	0	0	209	92	0	--	290	80.3	0	--
12/4/2002	--	368	/	--	--	--	--	--	--	77	200	--	--	--	14.3	10	--	--	15.5	10	--	--	0	0
12/16/2002	2153	294	/	645	98%	100	50	36.5	10	560	200	253	28	92	46.4	50	302	60	3.4	--	340	53.9	0	--
1/21/2003	3016	882	/	863	98%	100	50	--	--	--	--	70	52	98	0	0	220	--	0	--	220	--	0	--
2/10/2003	3496	490	/	480	98%	100	50	38	--	639	400	262	27	102	72	50	266	90	26	10	258	83	3.2	10
3/18/2003	4360	882	/	864	98%	100	50	92	12	125	100	266	25	123	15	10	278	124	0	0	282	117	0	0
4/29/2003	5359	1029	/	999	97%	75	50	75	50	152	50	132	16	118.5	48.2	25	302	96	18.6	10	287	86	0.6	0
5/13/2003	5700	343	/	341	99%	75	50	78	--	127	50	239	48	130	41.8	50	246	108	46	25	245	97	0.6	0
6/30/2003	6850	1176	/	1150	98%	50	50	115	32	82.4	50	140	66	173	36.8	50	198	157	25.1	25	240	150	29.8	100
7/10/2003	6851	245	/	1	0%	50	50	99.5	25	406	400	151	68	156	221	215	260	76	0	0	222	81.9	0	0
7/22/2003	7144	294	/	294	100%	50	50	--	--	127	--	--	--	168	65	--	--	107	0	--	--	106	0	--
8/26/2003	7957	858	/	813	95%	50	50	79	13.5	137	10	186	65	170	51.4	5	291	--	55.4	10	232	--	35.6	10
9/23/2003	8274	686	/	317	46%	50	50	218	33	141	15	194	64	160	55	30	254	124	0	0	210	110	0	0
10/21/2003	8945	686	/	671	98%	50	50	166	45	--	20	158	68	166	37.5	25	214	130	30.7	15	225	112	0	0
11/24/2003	9749	833	/	805	97%	50	50	130	46	141	125	178	72	138	261	200	225	52	0	0	205	51.4	0	0
1/6/2004	9750	1054	/	1	0%	50	50	98.5	74	118	100	164	12	140	247	250	224	48.6	0	0	200	48.4	0	0
2/9/2004	10336	833	/	586	70%	50	50	121	44	23.1	10	172	70	155.8	29.8	25	233	137	41.4	25	235	117	0	0
3/30/2004	11289	1225	/	953	78%	50	50	103	>50	34	<10	198	70	160	22	<10	240	128	22	<10	160	115	24	<5
4/8/2004	11441	221	/	152	69%	50	75	127	--	23.7	<10	--	--	--	--	--	180	83	30	--	206	83	0.9	--
4/29/2004	11768	515	/	327	64%	50	75	131	>60	2.4	0	--	76	170	2.2	0	209	128	0	0	255	116	0	0
5/24/2004	12264	613	/	496	81%	50	75	144	75	43.8	50	172	75	178	33.1	<50	250	121	4.4	0	198	111	0	0
6/22/2004	12817	711	/	553	78%	50	75	127	74	57	10	140	76	180	52	30	181	123	25.8	15	210	113	0	0
7/28/2004	13630	882	/	813	92%	50	75	142	76.5	53.2	7	161	76.5	159	41.1	25	216	137	35.3	20	181	109	3.1	0
8/31/2004	13989	833	/	359	43%	25	90	157	58	48	0	104	74	137	202	200	180	98	2.2	0	187	91	0.1	0
9/29/2004	14256	711	/	267	38%	50	75	139	60	--	--	140	76	153	27.7	--	194	126	0	--	205	102.1	0	--

Notes:
PID = Total VOC concentration measured with photoionization detector
ppm = parts per million (volume/volume basis)
PCE = Tetrachloroethene (PCE) concentration measured with Drager tube of 10-500 ppm range
scfm = standard cubic feet per minute
cfm = cubic feet per minute
Influent SVE = Readings collected between the SVE Blower and the Carbon Units
Mid GAC = Readings collected between the lead and lag carbon units
Effluent GAC = Readings collected after the lag carbon unit
GAC = granular activated carbon unit
-- = measurement not recorded

TABLE 2
PCE
REMOVAL ESTIMATE
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	VOC Influent Concentration * (ppmv)	PCE Influent Concentration * (ppmv)	% PCE of Total VOCs	Extraction Well Flow Rate (cfm)	Elapsed Time Since Last Visit (day)	PCE Removal Since Last Visit (lb)	Cumulative PCE Removal (lb)
9/18/2002	SVE PILOT TEST STARTUP						
9/30/2002	2,000	500	25.0	34.5	12	126	126
10/14/2002	1,011	400	39.6	38	14	129	255
11/19/2002	0	0	--	49	36	116	371
12/16/2002	560	200	35.7	36.5	27	70	441
1/13/2003	485	400	82.5	28.5	28	157	597
1/21/2003	0	0	--	0	8	63	660
2/10/2003	639	400	62.6	38	20	65	725
3/5/2003	263	200	76.0	24.4	23	132	856
3/18/2003	125	100	80.0	92	13	77	934
4/29/2003	152	50	32.9	75	42	109	1,042
5/13/2003	127	50	39.4	78	14	65	1,107
6/30/2003	82.4	50	60.7	115	48	91	1,198
7/22/2003	406	400	98.5	99.5	12	416	1,615
8/26/2003	137	10	7.3	79	35	291	1,906
9/23/2003	141	15	10.6	218	14	30	1,936
10/21/2003	37.5	20	53.3	166	28	42	1,978
11/24/2003	141	125	88.7	130	34	179	2,157
1/6/2004	118	100	84.7	98.5	43	--	2,157
2/9/2004	23.1	10	43.3	121	34	126	2,283
3/30/2004	22	10	45.5	103	50	28	2,311
4/29/2004	2.4	0	0.0	131	30	12	2,323
5/24/2004	43.8	50	114.2	144	25	59	2,382
6/22/2004	57	10	17.5	127	29	68	2,449
7/28/2004	53.2	7	13.2	142	36	22	2,471
8/12/2004	48	0	0	157	15	7	2,479
9/29/2004	27.7	--	--	139	48	--	--

Notes:
* = VOC concentrations of 2,000 ppm and PCE concentrations of 500 ppm are greater than the limit of their respective monitoring device and are to be taken as estimations.

Removal Rate = [(flow(cfm)*influent conc.(ppmv)*MW*12.187)/(273.15+C)]*1 cu. m./35.31 cu. ft*1g/1000 mg*1 lb/453.6 g *60 min/1 hr*24 hr/1 day*days of operation

Where:
MW = molecular weight
Molecular weight (MW) of PCE is 165.85
C = degrees centigrade, assumed to be 25
lb = pounds
cfm = cubic feet per minute
ppmv = parts per million (volume/volume basis)
-- = information not available

TABLE 3
AIR SAMPLE ANALYTICAL RESULTS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

SVE Influent Concentration (mg/m3)			
Date	**cis-1,2-Dichloroethene**	**Tetrachloroethene (PCE)**	**Trichloroethene**
9/18/2002	5	600E	31
9/30/2002	ND (5)	360E	23
10/14/2002	--	--	--
11/19/2002	--	--	--

VGAC Effluent Concentration (mg/m3)			
Date	**cis-1,2-Dichloroethene**	**Tetrachloroethene (PCE)**	**Trichloroethene**
9/18/2002	--	--	--
9/30/2002	--	--	--
10/14/2002	--	--	--
11/19/2002	--	--	--
12/16/2002	ND (5)	ND (5)	ND (5)
1/21/2003	--	--	--
2/10/2003	ND (5)	8	6
3/18/2003	--	--	--
4/29/2003	--	--	--
5/13/2003	ND (1)	5	ND (1)
6/30/2003	--	--	--
7/22/2003	ND (1)	ND (1)	ND (1)
8/26/2003	ND (5)	29	3.6
9/23/2003	ND (5)	ND (5)	ND (5)
10/21/2003	ND (5)	ND (5)	ND (5)
11/24/2003	--	--	--
1/6/2004	--	--	--
2/9/2004	10	ND (5)	ND (5)
3/30/2004	2J	77	1J
4/29/2004	ND (5)	10	ND (5)
5/24/2004	ND (1)	ND (1)	ND (1)
6/22/2004	ND (1)	ND (1)	ND (1)
7/28/2004	ND (5)	ND (5)	ND (5)
8/12/2004	--	--	--
9/29/2004	ND(1)	ND(1)	ND(1)

Notes:
Only compounds that were detected above the method reporting limit were presented above
ND(5) = Not detected above method reporting limit in parenthesis
E = Concentation exceeded calibration range
SVE = Soil vapor extraction
VGAC = vapor-phase granular activated carbon unit
mg/m3 = milligrams per cubic meter
-- = sample not collected
J = Estimated Value

TABLE 4
AIR DISCHARGE MONITORING
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

		Field Monitoring			Laboratory Results			Discharge based on Field Monitoring		Discharge based on Laboratory Results					
Date	System Effluent Flow Rate (cfm)	PCE System Effluent Concentration (ppmv)	System Effluent VOC Concentration (ppmv)	Elapsed Time (day)	PCE (mg/cu m.)	TCE (mg/cu m.)	cis-1,2-DCE (mg/cu m.)	PCE Discharge Since Last Visit (lb/hr)	PCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit: lb/hr	PCE Discharge Since Last Visit (lb)	TCE Discharge Since Last Visit (lb/hr)	TCE Discharge Since Last Visit (lb)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb)
9/18/2002	SVE PILOT TEST STARTUP														
9/30/2002	290	--	0	12	--	--	--	--	--	--	--	--	--	--	--
10/14/2002	--	--	0	14	--	--	--	--	--	--	--	--	--	--	--
11/19/2002	290	--	0	36	--	--	--	--	--	--	--	--	--	--	--
12/16/2002	340	--	0	27	ND (5)	ND (5)	ND (5)	--	--	0.00	0.00	0.00	0.00	0.00	0.00
1/13/2003	45	0	--	28	--	--	--	0.0000	0.00	--	--	--	--	--	--
1/21/2003	220	--	0	8	--	--	--	--	--	--	--	--	--	--	--
2/10/2003	258	10	3.2	20	8.0	6.0	ND (5)	0.0654	31.40	0.008	3.71	0.006	2.78	0.00	0.00
3/5/2003	305	--	0	23	--	--	--	--	--	--	--	--	--	--	--
3/18/2003	282	0	0	13	--	--	--	0.0000	0.00	--	--	--	--	--	--
4/29/2003	287	0	0.6	42	--	--	--	0.0000	0.00	--	--	--	--	--	--
5/13/2003	245	0	0.6	14	5.0	ND (1)	ND (1)	0.0000	0.00	0.005	1.54	0.00	0.00	0.00	0.00
6/30/2003	240	100	29.8	48	--	--	--	0.3043	350.56	--	--	--	--	--	--
7/22/2003	222	--	0	12	ND (1)	ND (1)	ND (1)	--	--	0.00	0.00	0.00	0.00	0.00	0.00
8/26/2003	232	10	35.6	35	29.0	3.6	ND (5)	0.0588	49.42	0.025	21.17	0.003	2.63	0.00	0.00
9/23/2003	210	0	0	28	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.00	0.00
10/21/2003	225	0	0	28	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.00	0.00
11/24/2003	205	0	0	34	--	--	--	0.0000	0.00	--	--	--	--	--	--
2003 Totals:									**431.38**		**26.424**		**5.412**		**0.000**
1/6/2004	200	0	0	43	--	--	--	0.0000	0.00	--	--	--	--	--	--
2/9/2004	235	0	0	34	ND (5)	ND (5)	10	0.0000	0.00	0.000	0.00	0.000	0.00	0.009	7.18
3/30/2004	160	5	24	50	77	1J	2J	0.0203	24.34	0.046	55.38	0.001	0.72	0.001	1.44
4/29/2004	255	0	0	30	10	ND (5)	ND (5)	0.0000	0.00	0.010	6.88	0.001	0.69	0.002	1.38
5/24/2004	198	0	0	25	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
6/22/2004	210	0	0	29	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
7/28/2004	181	0	3.1	36	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
8/12/2004	187	0	0.1	15	--	--	--	0.0000	0.00	--	--	--	--	--	--
9/29/2004	205	--	0	48	ND (1)	ND (1)	ND (1)	--	--	0.000	0.00	0.000	0.00	0.000	0.00
2004 Totals:									**24.34**		**62.26**		**1.41**		**10.00**

Notes:
-- = Measurement not recorded
Discharge Rate (Field Monitoring, lb/hr) = [(flow(cfm)*influent conc.(ppmv)*MW*12.187)/(273.15+C)]*1 cu. m./35.31 cu. ft*1g/1000 mg*1 lb/453.6 g*60 min/1 hr
Discharge (Field Monitoring, lb) = Discharge Rate (lb/hr) * # of days*24hours/day*60 minutes/hr

Discharge Rate (Lab Results, lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr
Discharge (Lab Results, lb) = Discharge Rate (lb/hr) * # of days*24hours/day

Where:
MW = molecular weight
Molecular weight (MW) of PCE is 165.85, Molecular weight (MW) of TCE is 131.4, Molecular weight of cis-1,2-DCE is 96.94
C = degrees centigrade, assumed to be 25
cfm = cubic feet per minute
mg/cu. m = milligrams per cubic meter
ppmv = parts per million (volume/volume basis)
lb = pounds
hr = hours
J = Estimated Value

Permit Limit		
	lb/hr	lb/yr
PCE	0.031	270
TCE	0.014	120
cis-1,2-DCE	0.63	5,510

FIGURES

IMAGE	X-REF	OFFICE	DRAWING NUMBER
---	---	*ALBANY, NY*	802901B35

MW-8
MW-7
MW-6
A
B
ELECTRICAL
MW-1
PILOT TEST ENCLOSURE
NO ACCESS
VP-2
C
E
APPROXIMATE LOCATION OF INTERIOR WALL AND BAY DOOR
VAPOR EXTRACTION POINT
F
G
VP-1
DIRECTION OF GROUNDWATER FLOW
FORMER VP-3
VP-3
VENT
RAMP
RAMP
FORMER VP-4
FORMER VP-5
FORMER VP-6
MW-9
MW-4A
VENT
MW-5
FLAMMABLE STORAGE AREA
VENT
VENT
VENT
RAMP
RAMP
MW-3A
MW-10
MW-2A
ADAMS BLVD.
H
FILL PIPES (3)

SCALE
0 50 100 FEET

LEGEND:

- TRAIN TRACK
- VAPOR MONITORING POINT
- DEEP MONITORING WELL (>30')
- SHALLOW MONITORING WELL (<30')
- MANHOLE OR ACCESS POINT
- FENCE LINE
- ES ELECTRIC LINE
- G GAS LINE
- S SANITARY SEWER
- PROPERTY LINE
- INTERIOR BUILDING WALL (DIVIDES WAREHOUSE)

FIGURE 1

REV	DATE	BY	CHK'D	APR'VD	DESCRIPTION/ISSUE
6	6/29/04	SSH			INTERIOR WALL UPDATES
5	2/17/04	SSH			RELABLE VP's
4	6/9/03	SSH			UPDATE DRAWING
3	4/17/03	SSH			UPDATE DRAWING
2	1/16/03	SSH			ADD FORMER VP-3 TO DRAWING
1	12/3/02	SSH			UPDATE DRAWING

Shaw Environmental, Inc.

NATIONAL HEATSET PRINTING
FARMINGDALE, NEW YORK

SOIL VAPOR EXTRACTION
PILOT TEST LOCATION MAP

DESIGNED BY	J. SKAARUP	10/23/02	CHECKED BY		
DRAWN BY	CA/HMD/SSH	10/23/02	APPROVED BY		

SCALE:	DRAWING NO.	SHEET NO.	REVISION NO.
AS SHOWN	802901B35		6

L:\project\802901\802901B35.dwg
Plot Date/Time: 07/27/04 02:31pm
Format Revised: 12/15/99
Image: .
Xref: .

APPENDIX A

SITE VISIT DOCUMENTATION

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

Shaw Environmental, Inc. Job/Task Number 802901/06010000

Personnel: R. HYDE
Weather: Cloudy windy cool

Time: 1030
Date: 9/29/04

System Status:

Arrival: Operating
Departure: " "
Run Timer Reading: 14256.29
Electric Meter Reading: 0165

System Data:

Extraction Well F Gate Valve: 75 % Open
Dilution Valve: 50 % Open

Pre-Bleed Air (Extraction Well):

Flow: 139 CFM
Vacuum: 60 "H2O
~~PID Reading:~~ — PPM Too much vacuum for instrument.
~~Draeger Tube:~~ PPM
Temperature: 66.5 °F

Post-Bleed Air (SVE Influent):

Flow: 140 CFM
Vacuum: 74 "H2O
~~PID Reading:~~ 22.7 PPM
~~Draeger Tube:~~ — PPM
Temperature: 153° °F

Carbon Monitoring:

Mid:	0.0 PPM	194 CFM	126 Temp. (°F)		~~PPM (Drager)~~
Effluent:	0.0 PPM	205 CFM	102.1 Temp. (°F)		~~PPM (Drager)~~

Carbon effluent sample collected & shipped to lab? Yes.

Knockout Tank Drained? NO
Gallons: 0
Purge water drums on-site: 0

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-C	MW-E	MW-F	MW-G	VP-1	VP-2	VP-3	VP-4	VP-5	VP-6
DTW (ft):	16.32	16.31	--	16.48	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	--	2.7	.5	.6	--	--	--

Comments:

~~Draeger~~ pump not available

APPENDIX B

LABORATORY REPORT OF ANALYSES

MITKEM CORPORATION

"Environmental Testing For The New Millennium"

RECEIVED
NOV 12 2004

November 9, 2004

Shaw Environmental & Infrastructure, Inc.
13 British American Boulevard
Latham, NY 12110
Attn: Mr. John Skaarup

RE: Client Project: National Heatset, 802901
Lab Project #: C1241

Dear Mr. Skaarup:

Enclosed please find the data report of the required analysis for the sample associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Agnes R. Ng
CLP Project Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499 • www.mitkem.com

MITKEM CORPORATION

Report of Laboratory Analyses for Shaw Environmental & Infrastructure, Inc.

Client Project: National Heatset

SDG# C1241

Mitkem Work Order ID: C1241

November 9, 2004

Prepared For:

Shaw Environmental & Infrastructure, Inc.
13 British American Boulevard
Latham, NY 12110
Attn: Mr. John Skaarup

Prepared By:

Mitkem Corporation
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400

MITKEM CORPORATION

Client: Shaw Environmental & Infrastructure, Inc.

Client Project: National Heatset, 802901

Lab Project: C1241

Date samples received: 09/30/04

Project Narrative

This data report includes the analysis results for one (1) air sample in a Tedlar bag that was received from Shaw Environmental & Infrastructure, Inc on September 30, 2004. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Work Order form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications, as modified by Mitkem. No other unusual occurrences were noted during sample analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Agnes Ng
CLP Project Manager

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CARBONEFFLUENT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: C1241

Matrix: (soil/water) AIR Lab Sample ID: C1241-01A

Sample wt/vol: 25 (g/mL) ML Lab File ID: V6D3637

Level: (low/med) LOW Date Received: 09/30/04

% Moisture: not dec. _____ Date Analyzed: 10/06/04

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/M3	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	1	U
74-88-4	Iodomethane	1	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl tert-butyl ether	1	U
75-34-3	1,1-Dichloroethane	1	U
108-05-4	Vinyl acetate	1	U
78-93-3	2-Butanone	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
590-20-7	2,2-Dichloropropane	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
56-23-5	Carbon Tetrachloride	1	U
107-06-2	1,2-Dichloroethane	1	U
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U

1A

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Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/M3	Q
142-28-9	1,3-Dichloropropane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	1	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethylbenzene	1	U
----------	m,p-Xylene	1	U
95-47-6	o-Xylene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-86-1	Bromobenzene	1	U
96-18-4	1,2,3-Trichloropropane	1	U
103-65-1	n-Propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U
95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	4-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

Mitkem Corporation

04/Oct/04 18:08

WorkOrder: C1241

Client ID:	SHAW_LATHAM	**Case:**		**Report Level:**	LEVEL 2
Project:	NYSDEC	**SDG:**		**EDD:**	XL
Location:		**PO:**	205503	**HC Due:**	10/14/04
Comments:	N/A			**Fax Due:**	

Sample ID	Client Sample ID	Collection Date	Date Received	Matrix	Test Code	Lab Test Comments	Iold	MS	SEL	Storage
C1241-01A	CARBONEFFLUENT	09/29/04 10:45	09/30/04	Air	TO14		☐	☐	☐	VOA

Client Rep: Benjamin F Dodge

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@mitkem.com

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY: Shaw Environmental	PHONE: 518-783-1596	COMPANY: Shaw	PHONE:	LAB PROJECT #: C1241
NAME: John Skarupa	FAX: 518-783-8397	NAME:	FAX:	
ADDRESS: 13 British American Blvd		ADDRESS:		TURNAROUND TIME:
CITY/ST/ZIP: Latham NY 12110		CITY/ST/ZIP:		

CLIENT PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
National Grid	802901	205503

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	REQUESTED ANALYSES: X TO-14 modified	COMMENTS
Caribou Effluent	9/24/04 1045		X			6		1	X	
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
	Steven M Doyle	9/24/04 1200	J. Daeid	9301 0900		Ambient
		/		/		
		/		/		

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: JDAVIS | Reviewed By: CSchifino | Date: 9/30/04 | MITKEM Project #: C1241

Client Project: NAT. HEATSET | Client: Shaw

Condition:		Lab Sample ID	Preservation (pH) HNO_3	Preservation (pH) H_2SO_4	Preservation (pH) HCl	Preservation (pH) NaOH	VOA Matrix	Comments/Remarks/ Corrective Action*
		C1241-01						
1) Custody Seal(s)	Present (Absent)							
	Coolers / Bottles							
	Intact / Broken							
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	(Present) / Absent							
4) Cooler Temperature	Ambient							
Coolant Condition								
5) Airbill(s)	8483							
Airbill Number(s)	3511							
	9960							
6) Sample Bottles	(Intact)							
	Broken							
	Leaking							
7) Date Received	9·30·04							
8) Time Received	0900							

VOA Matrix Key:

US = Unpreserved Soil — **M** = MeOH

UA = Unpreserved Aqueous — **E** = Encore

B = Both MeOH & $NaHSO_4$ — **H** = HCl

Na = $NaHSO_4$

* See Sample Notification Form yes (no)

Radiation Check (Yes) No

Last Page of Data Report