## Perimeter Baseline Air Monitoring Results Aerovox Excavation 2008 New Bedford, MA May 29 - June 2 2008

Action Levels			
Air Contaminant	8-hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H <sub>2</sub> S)	10 ppmv	1 ppmv	2 ppmv
PCBs	0.5 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Particulates	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>

TLV - threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists)

Perimeter Assessment Value - 1/10th of TLV for VOCs; TLV for particulates

Perimeter Action Limit - 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.

ID Aerovox Site Location	Date	Time	$H_2S ppmv^{(1)}$	VOC ppmv <sup>(2)</sup>	Draeger Tubeppmv <sup>(3)</sup>	Particulates mg/m <sup>3 (4)</sup>	Lab Sample Results ppbv (5)
6472 SE Corner of trailer Deck	5/29/2008	1600	NA	NA	NA	NA	all NDs
at Area C							
2601 Aerovox South gate	5/29/2008	1620	NA	NA	NA	NA	all NDs
4503 Aerovox perimeter fence							
at SE Building corner	5/29/2008	1625	NA	NA	NA	NA	all NDs
1287 Duplicate with Aerovox	5/29/2008	1625	NA	NA	NA	NA	all NDs
perimeter fence at							
SE Building corner							
1212 Aerovox perimeter fence	5/29/2008	1630	ND	NA	NA	NA	all NDs
at combined sewer outfall							
Southern Fenceline	6/2/2008	1400	ND	0.6	NA	NA	PCE=0.216
Southwest Fencelne	6/2/2008	1420	ND	0.6	NA	NA	PCE=0.254

Notes:

(1) H<sub>2</sub>S - hydrogen sulfide

(2) PID - photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in parts per million by volume (ppmv).

(3) Draeger Tube - real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.

(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.

(5) The first five listed Laboratory samples were collected in Summa Cannisters over 4 hour collection time. The analytical method used was TO-14 for 37 compounds.

The last 2 listed samples were collected in tedlar bags using a pump. These were analyzed for 9 compounds. Only detected VOCs are listed.

PCE - perchloroethene (also called tetrachloroethene)

TCE - trichloroethene

VC - vinyl chloride

1,2-DCA - 1,2-dichloroethane

1,2-DCE = cis-1,2-dichloroethene

ND = nondetect

NA = not analyzed

NR = not recorded; readings were made during excavation operations; exact times were not recorded.

TWA = time weighted average; readiings collected continuously over an 8-hour period to measure exposure for one day.

mg/m<sup>3</sup> - milligrams of respirable dust per cubic meter of air

### Perimeter Air Monitoring Results Aerovox Excavation 2008 New Bedford MA June 2-6 2008

	Action Levels								
	Air Contaminant	8-hour TLV	Perime	ter Assessment	Value	Perimeter /	Action Limit		
	Vinyl Chloride (VC)	1 ppmv		0.1 ppmv		0.2 p	vmag		
	Perchloroethene (PCE)	25 ppmv		2.5 ppmv		5 p	•		
	· · · ·								
	Trichloroethene (TCE)	10 ppmv		1 ppmv		2 pj			
	1,2-Dichloroethene (1,2-DCE)	200 ppmv		20 ppmv		40 p	•		
	Hydrogen Sulfide (H2S)	10 ppmv		1 ppmv			omv		
	Particulates	0.3 mg/m <sup>3</sup>		0.3 mg/m <sup>3</sup>		0.3 m	ng/m <sup>3</sup>		
	PCBs	0.5 mg/m <sup>3</sup>		0.25 mg/m <sup>3</sup>		0.25 r	ng/m <sup>3</sup>		
	TLV - threshold limit value, exposure level for 8-h	our occupational exposure	per ACGIH (American 0	Conference of Govern	nmental Industrial Hyg	ienists)			
	Perimeter Assessment Value - 1/10th of TLV for	VOCs; TLV for particulates							
	Perimeter Action Limit - 2/10th of TLV for 15 minu	utes; TLV for particulates.	Exceedance will prompt	corrective action.					
	Aerovox Site Location	Date	Time	H <sub>2</sub> S <sup>(1)</sup>	VOCs <sup>(2)</sup>	Draeger Tube (3)	Particulates (4)	Lab Sample Results (5)	Total PCBs
				ppmv	ppmv	ppmv	mg/m <sup>3</sup>	ppbv	mg/m <sup>3</sup>
encSou	Southern Fenceline	6/3/2008	1010	ND	1.4-3.2	VC< 0.5	0.012	ND	
						PCE < 2			
		6/4/2008	1655	ND	ND	NA	NA	NA	
		6/5/2008	1011	ND	ND	NA	0.034	ND	
		6/6/2008	1310	ND	ND	NA	NA	NA	
encSou1	Southwest Fence	6/3/2008	1120	ND	1.1	NA	NA	ND	
	by Aerovox gate	6/4/2008	1458	ND	ND	NA	NA	NA	
		6/5/2008	1127	ND	1.3	NA	NA	ND	
		6/6/2008	1319	ND	ND	NA	NA	NA	
		6/2/2008	1522	NA	NA	NA	NA	ND	
llSt	Belleville Avenue	6/3/2008	1522	ND	ND	NA	NA	ND	
		6/4/2008	1720	ND	1.1	NA	NA	NA	
		6/5/2008	1325	ND	ND	NA	NA	ND	NA
		6/6/2008	1340	ND	ND	NA	NA	NA	NA
ecix	Northern Fenceline	6/2/2008	1600	NA	NA	NA	NA	PCE = 0.241	
	adjacent to Precix	6/3/2008	1600	ND	ND	NA	NA	cis-1,2-DCE=0.664	
								TCE=0.68	
								VC=0.232	
		6/4/2008	1645	ND	ND	NA	NA	NA	NA
		6/5/2008	1400	ND	1.3	NA	0.024	ND	NA
		6/6/2008	1400	ND	ND	NA	NA	NA	NA
	Sawyer Street Location	Date	Time	H <sub>2</sub> S <sup>(1)</sup>	VOCs (2)	Draeger Tube (3)	Particulates (4)	Lab Sample Results (5)	Total PCBs
CRope	Ropeworks Building			ppmv	ppmv	ppmv	mg/m <sup>3</sup>	ppbv	mg/m <sup>3</sup>
Contopo	Southeast corner of building	6/4/2008	1020	0	0	NA	NA	ND	NA
RCLiteP	Southeast corner of building	6/6/2008	940	0	0	NA	NA	NB	NA
COLICI	North Perimeter Fence	0/0/2000	949	0	0	NA	NA		NA
	North of Cell #1 at perimeter fence	6/4/2008	1120	ND	ND	NA	NA	cis-1,2-DCE=3.45	11/2
	North of Cell #1 at perimeter fence	0/4/2000	1120	ND	ND	NA	NO.	TCE=2.52	
								VC=1.13	
			1127	ND	ND	NA	NA	VC=1.13 NA	
		6/6/2008	1027	ND	ND	NA		cis-1,2-DCE=14.2	
		0/0/2008	1027	ND	ND	INA	NA	PCE=0.262	
								TCE=9.38	
			4000	ND	ND	<b>N</b> 1.4		VC=5.02	
			1030	ND	ND	NA	NA		NA
	East Fence	6/4/2008	1140	ND	ND	NA	NA	NA	NA
cgate	East gate to office trailers	6/6/2008	1008	ND	ND	NA	NA	TCE=0.210	NA
			1018	ND	ND	NA	NA		NA
_	South Perimeter Fence	6/4/2008	1210	ND	ND	NA	NA	ND	NA
cFens									
rcFens	Between Cell #1 and Sawyer Street	6/6/2008	955 1000	ND ND	ND ND	NA NA	NA NA	PCE=0.206	NA NA

#### Notes:

(1) H<sub>2</sub>S - hydrogen sulfide

(2) PID - photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in parts per million by volume (ppmv).

(3) Draeger Tube - real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.

(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.

(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.

(6) Draeger tubes readinngs taken in Contaminant Reduction Zone and Exclusion Zone were ND for all contaminants

PCE - perchloroethene (also called tetrachloroethene)

TCE - trichloroethene

VC - vinyl chloride

1,2-DCA - 1,2-dichloroethane

cis-1,2-DCE - cis-1,2-dichloroethene

ND = nondetect

NA = not analyzed

NR = not recorded; readings were made during excavation operations; exact times were not recorded.

TWA = time weighted average; readiings collected continuously over a 10 to 12-hour period to measure exposure for one day.

mg/m<sup>3</sup>=milligrams of respirable dust per cubic meter of air

ppmv=parts per million by volume

ppbv=parts per billion by volume

# Perimeter Air Monitoring Results Aerovox Excavation 2008 New Bedford, MA June 9-13 2008

Action Levels			
Air Contaminant	8-hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
PCBs	0.5 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>

TLV - threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists)

Perimeter Assessment Value - 1/10th of TLV for VOCs; TLV for particulates

Perimeter Action Limit - 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.

ID	Aerovox Site Location	Date	Time	$H_2S^{(1)}$ (ppmv)	VOC (2) (ppmv)	Draeger Tube <sup>(3)</sup> (ppmv)	Particulates (mg/m <sup>3</sup> ) (4)	Lab Sample Results (ppbv) (5)
FencSou	Southern Fenceline	6/9/2008	1125	ND	2.5	VC < 0.5	NA	PCE = 0.454
	Hadley Street,					TCE < 2		
	adjacent NE corner of Titleist	6/10/2008	1030	ND	1.0	NA	0.087	PCE = 0.564
								TCE = 0.684
								VC = 0.309
		6/11/2008	1540	ND	ND	NA	NA	PCE = 0.219
		6/12/2008	1430	ND	ND	NA		NA
		6/13/2008	1100	ND	ND	NA	NA	NA
FencSou1	Southwest Fence	6/9/2008	1140	ND	3.5	VC < 0.5	NA	PCE = 0.573
	by Aerovox gate					TCE < 2		
						PCE < 2		
		6/10/2008	1046	ND	1.0	NA	NA	PCE = 0.302
								TCE = 0.228
								VC = 0.210
		6/11/2008	1527	ND	ND	NA	0.017	PCE = 0.220
		6/12/2008	1530	ND	ND	NA		NA
		6/13/2008	1120	ND	ND	NA	NA	NA
BellSt	Belleville Avenue	6/9/2008	1100	ND	1.9	VC < 0.5	NA	PCE = 0.729
	corner of Hadley and Belleville	6/10/2008	1105	ND	1.0	NA	NA	1,2-DCA = 0.252
								PCE = 0.324
								t-1,2-DCE = 0.202
		6/11/2008	1510	ND	ND	NA	NA	PCE = 0.225
		6/12/2008	1630	ND	ND	NA		NA
		6/13/2008	1145	ND	ND	NA	NA	NA
		6/14/2008	900	ND	ND	NA	NA	cis-1,2-DCE=0.268
								PCE=0.333
								TCE=2.30

Precix	Northern Fenceline	6/9/2008	1110	ND	1.6	VC < 0.5	NA	PCE = 0.535
	adjacent to Precix	6/10/2008	1425	ND	2.3	VC < 0.5	NA	PCE = 0.264
						TCE < 2		
		6/11/2008	1450	ND	1.1	NA	NA	PCE = 0.361
								TCE = 0.366
		6/12/2008	1730	ND	ND	NA		NA
		6/13/2008	1230	ND	ND	NA	NA	NA
		6/14/2008	800	ND	ND	NA	0.017	cis-1,2-DCE=0.643
								PCE=0.455
								TCE=5.94
			1130	ND	ND	NA		cis-1,2-DCE=1.11
								PCE=0.366
								TCE=5.88
			1400	ND	ND	NA		cis-1,2-DCE=1.60
								PCE=0.254
								TCE=6.94
								VC=1.40
	Sawyer Street Location	Date	Time	$H_2S^{(1)}$ ppmv	VOC <sup>(2)</sup> ppmv	Draeger Tube <sup>(3)</sup> ppmv	Particulates (4) mg/m <sup>3</sup>	Lab Sample Results <sup>(5)</sup> ppbv
ARCRope	Ropeworks Building	6/12/2008	1640	ND	ND	NA	NA	NA
	Southeast corner of building							
ARCLiteP	North Perimeter Fence	6/12/2008	1650	ND	ND	NA	NA	NA
	North of Cell #1 at perimeter							
	fence							
ARCFencS	South Perimeter Fence	6/12/2008	1640	ND	ND	NA	NA	NA
	between Cell #1 and Sawyer							
	Street		TWA	ND	ND			
		6/13/2008	TWA	0.1	ND			
		6/14/2008	TWA	ND	ND			

### Notes:

(1) H<sub>2</sub>S - hydrogen sulfide

(2) PID - photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in parts per million by volume (ppmv).

(3) Draeger Tube - real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.

(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.

(5) Laboratory samples are collected in Tedlar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here. Units are ppbv.

PCE=perchloroethene (also called tetrachloroethene)

TCE=trichloroethene

VC=vinyl chloride

1,2-DCA = 1,2-dichloroethane

t-1,2-DCE = trans-1,2-dichloroethene

ND = nondetect

NA = not analyzed

NR = not recorded; readings were made during excavation operations; exact times were not recorded.

TWA = time weighted average; readiings collected continuously over an 10 to 12-hour period to measure exposure for one day.

mg/m<sup>3</sup> - milligrams of respirable dust per cubic meter of air

# Perimeter Air Monitoring Results Aerovox Excavation 2008 New Bedford, MA June 14-20 2008

Action Levels			
Air Contaminant	8-hour TLV	Perimeter Assessment Value	Perimeter Action Limit
Vinyl Chloride (VC)	1 ppmv	0.1 ppmv	0.2 ppmv
Perchloroethene (PCE)	25 ppmv	2.5 ppmv	5 ppmv
Trichloroethene (TCE)	10 ppmv	1 ppmv	2 ppmv
1,2-Dichloroethene (1,2-DCE)	200 ppmv	20 ppmv	40 ppmv
Hydrogen Sulfide (H2S)	10 ppmv	1 ppmv	2 ppmv
Particulates	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>
PCBs	0.5 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>

TLV - threshold limit value, exposure level for 8-hour occupational exposure per ACGIH (American Conference of Governmental Industrial Hygienists)

Perimeter Assessment Value - 1/10th of TLV for VOCs; TLV for particulates

Perimeter Action Limit - 2/10th of TLV for 15 minutes; TLV for particulates. Exceedance will prompt correctiveaction.

ID	Aerovox Site Location	Date	Time	H <sub>2</sub> S <sup>(1)</sup>	VOCs (2)	Draeger Tube (3)	Particulates (4)	Lab Sample Results <sup>(5)</sup>	Total PCBs
				ppmv	ppmv	ppmv	mg/m <sup>3</sup>	ppbv	mg/m <sup>3</sup>
encSou	Southern Fenceline	6/14/2008	Not Sampled						
		6/16/2008	1349	ND	ND	NA	0.039	NA	
			1438	ND	1.00	NA	NA	NA	
		6/17/2008	1420	ND	1.00	NA	NA	1,2-DCA=0.205	
								cis-1,2-DCE=0.641	
								TCE=0.674	
								VC=0.416	
		6/18/2008	1455	ND	1.5	NA	NA	NA	
			1502	ND	1.8	VC<0.5	NA	NA	
						PCE<2			
		6/19/2008	1445	ND	ND	NA	NA	NA	
			1700	ND	ND	NA	NA	NA	
		6/20/2008	1000	ND	ND	NA	NA	NA	
			1645	ND	ND	NA	NA	NA	
encSou1	Southwest Fence	6/14/2008	Not Sampled						
	by Aerovox gate	6/16/2008	1357	ND	ND	NA	NA	NA	
			1458	ND	3.2 (6)	NA	NA	NA	
		6/17/2008	1400	ND	1.6	VC<0.5	NA	cis-1,2-DCE=0.247	
						PCE<2		TCE=0.361	
								VC=0.210	
		6/18/2008	1445	ND	1.1	NA	NA	NA	
			1450	ND	1.4	NA	NA		
		6/19/2008	1415	ND	ND	NA	NA	NA	
			1650	ND	ND	NA	NA	NA	
		6/20/2008	1045	ND	ND	NA	NA	NA	0.00003442
			1700	ND	ND	NA	NA	NA	
ellSt	Belleville Avenue	6/14/2008	900	ND	ND	NA	NA	PCE = 0.333	
								cis-1,2-DCE=0.268	
								TCE=2.30	
		6/16/2008	1405	ND	ND	NA	NA	NA	
			1552	ND	ND	NA		NA	
		6/17/2008	1344	ND	4.1	VC<0.5 PCE<2	NA	TCE=0.233	NA
			1354	ND	4.8	NA	NA		NA
		6/18/2008	1435	ND	ND	NA	NA	NA	NA
			1440	ND	ND	NA	NA	NA	NA
		6/19/2008	1400	ND	ND	NA	NA	NA	NA
			1630	ND	ND	NA	NA	NA	
			1145	ND	ND	NA	NA	NA	NA
		6/20/2008	1100	ND	ND	NA	NA	NA	0.00002586
			1715	ND	ND	NA	NA	Na	

Precix	Northern Fenceline	6/14/2008	800	ND	ND	NA	0.017	PCE = 0.455					
	adjacent to Precix							cis-1,2-DCE=0.643					
								TCE=5.94					
			1130	ND	ND	NA	NA	cis-1,2-DCE=1.11					
								PCE=0.366					
								TCE=5.88					
								VC=2.12					
			1400	ND	ND	NA	NA	cis-1,2-DCE=1.60					
			1400	ND	ND	NA .	NA						
								PCE=0.254					
								TCE=6.94					
								VC=1.40					
		6/16/2008	1415	ND	ND	NA	NA	NA					
			1559	ND	ND	NA	NA	NA					
		6/17/2008	1300	ND	ND	NA	0.05	cis-1,2 DCE=1.02					
								TCE=1.42					
								VC=0.765					
		6/18/2008	1415	ND	ND	NA	0.018	NA					
		0/10/2000	1415	ND	1.1	NA	0.018 NA	NA					
		6/19/2008	1510	ND	ND	NA	NA	NA					
			1715	ND	ND	NA							
		6/20/2008	1110	ND	ND	NA	NA	NA					
			1730	ND	ND	NA	NA						
	Sawyer Street Location	Date	Time	H <sub>2</sub> S <sup>(1)</sup>	VOCs <sup>(2)</sup>	Draeger Tube (3)	Particulates (4)	Lab Sample Results <sup>(5)</sup>	Total PCBs				
ARCRope	Ropeworks Building			ppmv	ppmv	ppmv	mg/m <sup>3</sup>	ppbv	mg/m <sup>3</sup>				
/ interrept	Southeast corner of building					onitoring at this location during		pp					
ARCLiteP	North Perimeter Fence				I Camping of M								
ANGENEI	North of Cell #1 at perimeter fence	6/18/2008	1518	ND	1.4	NA	NA	NA					
	North of Cell #1 at perimeter fence	0/10/2000			1.4	NA	NA	NA					
	Ocurth Desires for Fores		1520	ND	1.2	INA	NA	INA					
ARCFERCS	South Perimeter Fence												
	Between Cell #1 and Sawyer Street			N	o Sampling or M	onitoring at this location during	subject time period.						
	Notes:												
	(1) H <sub>2</sub> S - hydrogen sulfide												
	(2) PID - photoionization detector, real-time screening instrument for total volatile organic compounds (VOCs) in parts per million by volume (ppmv).												
	(3) Draeger Tube - real-time screening device that is used to identify and measure concentrations of individual compounds in ppmv.												
	(4) Particulates measured as total respirable dust in air at Aerovox only (for Portland cement); not measured if raining.												
	(5) Laboratory samples are collected in Tediar bags using a pump, and analyzed for nine individual VOCs. Only detected VOCs are reported here.												
	(c) Laboratory complete are concerted in result and go doing a painty, and analyzed on more indexed resolution reported in res. (c) Draget rubes readingings take in a Contaminant Reduction Zone and Exclusion Zone and exclu												
	PCE - perchloroethene (also called tetrachloroet	hene)											
	PCE - perchloroethene (also called tetrachloroethene) TCE - trichloroethene												
	VC - vinyl chloride												
	1,2-DCA=1,2-dichloroethane												
	1,2-DCE=cis-1,2-dichloroethene												
	ND = nondetect												
	NA = not analyzed												
	TWA = time weighted average; readiings collected continuously over a 10 to 12-hour period to measure exposure for one day.												
	mg/m <sup>3</sup> - milligrams of respirable dust per cubic meter of air												
	ppmv=parts per million by volume												
	ppbv=parts per billion by volume												