## Perimeter Air Monitoring Results Aerovox Excavation 2008 New Bedford, MA July 14-18 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.

Aerovox Site Location	Date	Time	H <sub>2</sub> S <sup>(1)</sup>	VOCs (2)	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>
Southern Fenceline	7/14/2008	1104	ND	ND	NA	NA	NA	
	7/15/2008	1140	ND	ND	NA	NA	NA	Pending results
	7/16/2008	1500	ND	ND	NA	NA	NA	
	7/17/2008	1630	ND	ND	NA	NA	NA	
Southwest Fence	7/14/2008	1101	ND	ND	NA	NA	NA	
	7/15/2008	1128	ND	ND	NA	NA	1,2-DCA=0.45 cis-1,2-DCE=0.549 PCE=0.504 TCE=322	
	7/16/2008	1510	ND	2.3	TCE < 50 VC < 0.5	NA	NA	
	7/17/2008	1605	ND	ND	NA	NA	1,2-DCA=0.375 PCE=0.459 TCE=1.46	
Belleville Avenue	7/14/2008	1115	ND	ND	NA	NA	NA	
	7/15/2008	1113	ND	ND	NA	NA	1,2-DCA=0.444 cis-1,2-DCE=0.589 PCE=0.711 TCE=6.03	Pending results
	7/16/2008	1600	ND	ND	NA	NA	NA	Pending results
	7/17/2008	1530	ND	ND	NA	NA	1,2-DCA=0.678 cis-1,2-DCE=0.380 PCE=0.908 TCE=5.89	
Northern Fenceline	7/14/2008	1120	ND	ND	NA	0.011	NA	
adjacent to Precix	7/15/2008	1056	ND	ND	NA	0.019	1,2-DCA=0.42 cis-1,2-DCE=2.34 PCE=0.783	

							TCE=8.29	
	7/16/2008	1605	ND	ND	NA	NA	NA	
	7/17/2008	1445	ND	ND	NA	0.034	1,2-DCA=0.445 cis-1,2-DCE=1.44 PCE=0.937 TCE=9.16	
Sawyer Street 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
Ropeworks Building			ppmv	ppmv	ppmv	mg/m <sup>3</sup>	ppbv	mg/m <sup>3</sup>
Southeast corner of building	No	measurements tak	en					
North Perimeter Fence North of Cell #1 at perimeter fence	7/14/2008	1150	ND	ND	NA	NA	NA	
South Perimeter Fence Between Cell #1 and Sawyer Street	7/14/2008	1145	ND	ND	NA	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

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

ND = nondetect

NA = not analyzed

NR = 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