

Perimeter Air Monitoring Results
Aerovox Excavation 2008
New Bedford, MA
July 7-11 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 ³ | 0.3 mg/m ³ | | | 0.3 mg/m ³ | | | | |
| PCBs | 0.5 mg/m ³ | 0.05 mg/m ³ | | | 0.1 mg/m ³ | | | | |
| 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 corrective action. | | | | | | | | | |
| ID | Aerovox Site Location | Date | Time | H ₂ S ⁽¹⁾ ppmv | VOCs ⁽²⁾ ppmv | Draeger Tube ⁽³⁾ ppmv | Particulates ⁽⁴⁾ mg/m ³ | Lab Sample Results ⁽⁵⁾ ppbv | Total PCBs mg/m ³ |
| FencSou | Southern Fenceline | 7/7/2008 | 915 | ND | ND | NA | NA | NA | Pending results |
| | | | 1600 | ND | ND | NA | NA | NA | |
| | | 7/8/2008 | 1200 | ND | ND | NA | NA | 1,2-DCA=0.436 PCE=0.473 | |
| | | | 1400 | ND | ND | NA | NA | NA | |
| | | 7/10/2008 | 1045 | ND | ND | NA | NA | 1,2-DCA=0.288 PCE=0.753 | |
| | | | 1111 | ND | ND | NA | NA | NA | |
| 7/11/2008 | 945 | ND | ND | NA | NA | NA | | | |
| FencSou1 | Southwest Fence by Aerovox gate | 7/7/2008 | 900 | ND | ND | NA | NA | NA | |
| | | | 1515 | ND | ND | NA | NA | NA | |
| | | 7/8/2008 | 1115 | ND | ND | NA | NA | PCE=0.504 1,2-DCA=0.422 | |
| | | | 1230 | ND | ND | NA | NA | NA | |
| | | 7/10/2008 | 1000 | ND | ND | NA | NA | 1,2-DCA=0.363 PCE=0.708 TCE=0.205 | |
| | | | 1038 | ND | ND | NA | NA | NA | |
| 7/11/2008 | 1000 | ND | ND | NA | NA | NA | | | |
| BellSt | Belleville Avenue | 7/7/2008 | 826 | ND | ND | NA | NA | NA | |
| | | | 1500 | ND | ND | NA | NA | Na | |
| | | 7/8/2008 | 1030 | ND | 0.5 | NA | NA | 1,2-DCA=0.687 PCE=0.667 | |
| | | | 1030 | ND | ND | NA | NA | NA | |
| | | 7/10/2008 | 1415 | ND | ND | NA | NA | 1,2-DCA=0.254 PCE=0.378 | |
| | | | 1425 | ND | ND | NA | NA | NA | |
| 7/11/2008 | NR | ND | ND | NA | NA | NA | | | |

| | | | | | | | | | |
|---|---|-------------|-----------------------|-------------------------------------|---------------------------|-----------------------------------|-----------------------------------|---|-------------------|
| Precix | Northern Fenceline adjacent to Precix | 7/7/2008 | 800 1445 | ND ND | ND ND | NA NA | 0.026 | NA | |
| | | 7/8/2008 | 1243 | ND | ND | NA | 0.048 | 1,2-DCA=0.300 PCE=0.278 | |
| | | 7/9/2008 | 830 | ND | ND | NA | NA | NA | |
| | | 7/10/2008 | 1130 1151 | ND ND | 2.5 3.5 | PCE < 2 VC < 0.5 | NA | 1,2-DCA=0.391 PCE=0.579 | |
| | | 7/11/2008 | NR | ND | ND | NA | 0.000 | NA | |
| | Sawyer Street Location | Date | Time | H₂S⁽¹⁾ | VOCs⁽²⁾ | Draeger Tube⁽³⁾ | Particulates⁽⁴⁾ | Lab Sample Results⁽⁵⁾ | Total PCBs |
| ARCRope | Ropeworks Building | | | ppmv | ppmv | ppmv | mg/m ³ | ppbv | mg/m ³ |
| ARCLiteP | Southwest corner of building North Perimeter Fence | | No measurements taken | | | | | | |
| | North of Cell #1 at perimeter fence | | No measurements taken | | | | | | |
| ARCFencS | South Perimeter Fence Between Cell #1 and Sawyer Street | | No measurements taken | | | | | | |
| Notes: | | | | | | | | | |
| (1) H ₂ 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 readings 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; readings collected continuously over a 10 to 12-hour period to measure exposure for one day. | | | | | | | | | |
| mg/m ³ - milligrams of respirable dust per cubic meter of air | | | | | | | | | |
| ppmv=parts per million by volume | | | | | | | | | |
| ppbv=parts per billion by volume | | | | | | | | | |