

# Air Monitoring Summary Report

## Remedial Action for Installation Restoration Sites 07 and 18 at Parcel B; Soil Hotspot Locations at Parcels B, D-1, and G; and Soil Stockpiles at Parcels D-1 and G

### Hunters Point Naval Shipyard, San Francisco, California

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Engineering/Remediation Resources Group, Inc. (ERRG) performed air monitoring at Hunters Point Naval Shipyard (HPNS) in accordance with the Final Dust Control Plan (DCP), included in “Final Remedial Action Work Plan for Remedial Action for Installation Restoration Sites 07 and 18 at Parcel B; Soil Hotspot Locations at Parcels B, D-1, and G; and Soil Stockpiles at Parcels D-1 and G, Hunters Point Shipyard, San Francisco, California” ([ERRG, 2010](#)). The Final DCP describes procedures that minimize dust during work activities, and requires air monitoring to ensure these procedures are effective. The Final DCP helps prevent exposure of residents and construction crews to potential airborne chemicals of concern, and dust from the work area.

This document summarizes all the air monitoring data collected and analyzed for this project. This summary report describes the following:

- Where and how air monitoring samples were collected
- What test methods were used to analyze air monitoring samples
- How air monitoring data were evaluated

This summary report also presents the air monitoring test results and compares the results with the established threshold criteria included in the Final DCP.

## MONITORING SITE LOCATIONS

Air monitoring stations were installed to collect air samples upwind and downwind of work areas for the duration of the project. The predominant wind direction at HPNS is from the west. Locations of air monitoring stations and wind direction and magnitude data are shown on [Figures 1 and 2](#). Air monitoring was performed to help ensure effective dust control. The locations of the air monitoring stations were determined based on the prevailing wind direction and were modified as needed. A windsock was used to show wind direction and a weather station was used to measure wind velocity, wind direction, and atmospheric parameters. Monitoring stations were not moved while samples were being collected. Each monitoring station included separate monitoring systems for: 1) total suspended particulates (TSP) and for arsenic, chromium, lead, and manganese; 2) particulate matter larger than 10 microns in size (PM<sub>10</sub>); 3) polychlorinated biphenyls (PCBs) (where present in soil); 4) polycyclic aromatic hydrocarbons (PAHs) (where present in soil); and 5) asbestos.

## TEST DESCRIPTIONS

**TSP, Arsenic, Chromium, Lead, and Manganese.** Samples of TSP were collected with a high-volume (39 to 60 cubic feet per minute) air sampler in accordance with U.S. Environmental Protection Agency's (EPA's) reference sampling method for TSP, described in Title 40 Code of Federal Regulations (CFR), Part 50, Subpart B. Each sample was collected on a filter over an approximately 24-hour period; the filter was then weighed to determine the amount of TSP collected. Once the amount of TSP was determined, the sample was analyzed for arsenic, chromium, lead, and manganese. Arsenic, chromium, and manganese were analyzed in accordance with one of the IO-3 methods identified in EPA's "Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air" ([EPA, 1999c](#)). Lead was analyzed using a modified EPA Method 12 ([EPA, 2007](#)). The equipment specifications and sampling procedures used, including the sampling apparatus, filters, equipment accuracy, equipment calibration, and quality assurance checks, all conformed to those specified in the analytical method.

**PM<sub>10</sub>.** Air samples were collected and analyzed for PM<sub>10</sub> in accordance with EPA's reference sampling method for PM<sub>10</sub>, described in 40 CFR 50, Subpart J. Each sample was collected on a filter over an approximately 24-hour period; the filter was then weighed to evaluate the concentrations of PM<sub>10</sub> in ambient air.

**PCBs.** Air samples were collected and analyzed for PCBs in accordance with EPA Method TO-10A ([EPA, 1999a](#)). Each sample was collected over an approximately 24-hour period. The samples were collected using a low-volume polyurethane (PUF) sampling apparatus, followed by gas chromatographic/multi-detector detection to evaluate PCB concentrations in ambient air.

**PAHs.** Air samples were collected and analyzed for PAHs in accordance with EPA Method TO-13A ([EPA, 1999b](#)). Each sample was collected over an approximately 24-hour period. Samples were collected using a low-volume PUF sampling apparatus, followed by gas chromatography/mass spectrometry to evaluate PAH concentrations in ambient air.

**Asbestos.** Air samples were collected and analyzed for asbestos in accordance with the National Institute for Occupational Safety and Health (NIOSH) Method 7400, in the *NIOSH Manual of Analytical Methods* ([NIOSH, 1994](#)). Method 7400 requires that samples be collected on three-piece cellulose ester filters, which are fitted with conductive cowlings, at a sampling rate of between 0.5 liter per minute (L/min) and 16 L/min. Each sample was collected over an approximately 24-hour period.

## ANALYSIS OF AIR MONITORING DATA

Analytical results from air monitoring samples collected during the construction period were compared with the threshold criteria listed in [Table 1](#). Exceedances of the threshold criteria, which never occurred throughout the construction period, would have resulted in the implementation of additional dust control measures.

**Table 1. Threshold Criteria for Analysis of Air Monitoring Data**

Test Parameters	Threshold Criteria	Threshold Criteria References
TSP	0.5 mg/m <sup>3</sup>	Calculated action level for general dust and particulates
Arsenic	10 µg/m <sup>3</sup>	Cal/OSHA PEL
Chromium	500 µg/m <sup>3</sup>	Cal/OSHA PEL
Lead	50 µg/m <sup>3</sup>	Cal/OSHA PEL
Manganese	200 µg/m <sup>3</sup>	Cal/OSHA PEL
PM <sub>10</sub>	5,000 µg/m <sup>3</sup>	Cal/OSHA PEL <sup>1</sup>
PCBs	500 µg/m <sup>3</sup>	Cal/OSHA PEL <sup>2</sup>
PAHs	200 µg/m <sup>3</sup>	Cal/OSHA PEL
Asbestos	0.1 fibers/cm <sup>3</sup>	Cal/OSHA PEL

## Notes:

1. Cal/OSHA PEL for particulates not otherwise regulated (respiratory) used for PM<sub>10</sub>

2. Cal/OSHA PEL for chlorodiphenyl (54% chlorine) used for PCBs

Cal/OSHA = California Department of Industrial Relations, Division of Occupational Safety and Health

cm<sup>3</sup> = cubic centimetermg/m<sup>3</sup> = milligrams per cubic meter

PEL = permissible exposure limit

µg/m<sup>3</sup> = micrograms per cubic meter**AIR MONITORING RESULTS**

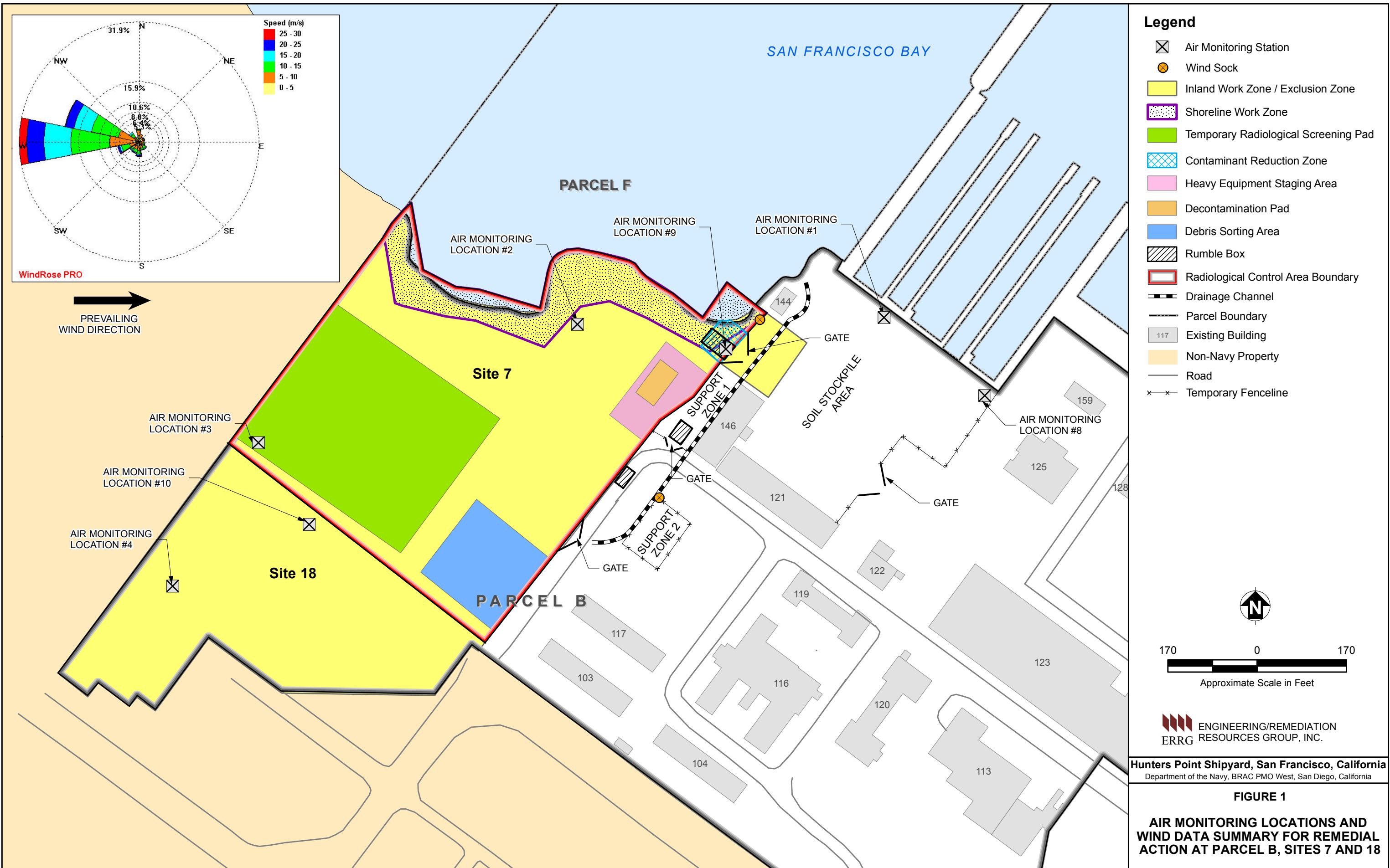
Weather information (including ambient pressure and temperature data) and air monitoring results are presented in the tables included as Attachment 1.

## REFERENCES

- Engineering/Remediation Resources Group, Inc. (ERRG), 2010. "Final Remedial Action Work Plan for Installation Restoration Sites 07 and 18 at Parcel B; Soil Hotspot Locations at Parcels B, D-1, and G; and Soil Stockpiles at Parcels D-1 and G Hunters Point Shipyard, San Francisco, California." July.
- U.S. Environmental Protection Agency (EPA), 1999a. "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition. Compendium Method TO-10A, Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using Low Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD)." EPA/625/R-96-010b. Office of Research and Development. January. Available Online at: <<http://www.epa.gov/ttnamti1/files/ambient/airtox/to-10ar.pdf>>.
- EPA, 1999b. "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition. Compendium Method TO-13A, Determination of Polycyclic Aromatic Hydrocarbons in Ambient Air Using Gas Chromatography/Mass Spectrometry (GC/MS)." EPA/625/R-96/010b. January. Available Online at: <<http://www.epa.gov/ttnamti1/files/ambient/airtox/to-13arr.pdf>>.
- EPA, 1999c. "Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air." EPA/625/R-96/010a. Office of Research and Development. June. Available Online at: <<http://www.epa.gov/ttnamti1/files/ambient/inorganic/iocompen.pdf>>.
- EPA, 2007. "Method 12 – Determination of Inorganic Lead Emissions from Stationary Sources." Available Online at: <<http://www.epa.gov/ttn/emc/methods/method12.html>>.

## **Figures**

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## **Attachment 1. Air Monitoring Results**

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**Table A-1. Ambient Pressure and Temperature Monitoring Results**

Date	Ambient Pressure (inches of mercury)	Ambient Temperature (degrees Celsius)
17-Jun-10	30.01	16.7
21-Jun-10	30.00	13.1
21-Jun-10	30.00	13.1
22-Jun-10	30.05	16.1
22-Jun-10	30.05	16.1
23-Jun-10	30.03	15.0
23-Jun-10	30.03	15.0
24-Jun-10	30.00	16.7
24-Jun-10	30.00	16.7
28-Jun-10	29.81	16.1
28-Jun-10	29.81	16.1
29-Jun-10	29.91	17.2
29-Jun-10	29.91	17.2
30-Jun-10	29.95	17.8
30-Jun-10	29.95	17.8
01-Jul-10	29.90	18.6
01-Jul-10	29.90	18.6
06-Jul-10	29.87	15.6
06-Jul-10	29.87	15.6
07-Jul-10	29.90	16.1
07-Jul-10	29.90	16.1
08-Jul-10	29.95	17.2
08-Jul-10	29.95	17.2
12-Jul-10	29.94	17.2
12-Jul-10	29.94	17.2
13-Jul-10	29.98	20.6
13-Jul-10	29.98	20.6
14-Jul-10	29.99	21.4
14-Jul-10	29.99	21.4
15-Jul-10	29.98	21.4
15-Jul-10	29.98	21.4
21-Jul-10	29.86	13.3
21-Jul-10	29.86	13.3
22-Jul-10	29.91	13.5
22-Jul-10	29.91	13.5
23-Jul-10	29.94	14.5
23-Jul-10	29.94	14.5
24-Jul-10	29.94	13.5
24-Jul-10	29.94	13.5
25-Jul-10	29.92	15.5
25-Jul-10	29.92	15.5
26-Jul-10	29.94	16.0
26-Jul-10	29.94	16.0
27-Jul-10	29.99	16.0
27-Jul-10	29.99	16.0
02-Aug-10	29.99	15.6
02-Aug-10	29.99	15.6
03-Aug-10	29.99	16.4
03-Aug-10	29.99	16.4
04-Aug-10	29.96	15.6
04-Aug-10	29.96	15.6

**Table A-1. Ambient Pressure and Temperature Monitoring Results**

Date	Ambient Pressure (inches of mercury)	Ambient Temperature (degrees Celsius)
09-Aug-10	29.90	16.7
09-Aug-10	29.90	16.7
10-Aug-10	29.92	17.8
10-Aug-10	29.92	17.8
11-Aug-10	29.99	14.7
11-Aug-10	29.99	14.7
12-Aug-10	29.90	16.1
12-Aug-10	29.90	16.1
16-Aug-10	29.85	15.8
16-Aug-10	29.85	15.8
17-Aug-10	29.96	17.2
17-Aug-10	29.96	17.2
18-Aug-10	29.97	17.2
18-Aug-10	29.97	17.2
23-Aug-10	29.95	25.0
23-Aug-10	29.95	25.0
24-Aug-10	29.83	27.2
24-Aug-10	29.83	27.2
25-Aug-10	29.89	22.5
25-Aug-10	29.89	22.5
26-Aug-10	29.90	16.9
26-Aug-10	29.90	16.9
30-Aug-10	29.99	16.7
30-Aug-10	29.99	16.7
31-Aug-10	29.98	20.2
31-Aug-10	29.98	20.2
01-Sep-10	29.84	25.1
01-Sep-10	29.84	25.1
07-Sep-10	29.84	17.8
07-Sep-10	29.84	17.8
08-Sep-10	29.91	16.8
08-Sep-10	29.91	16.8
09-Sep-10	29.99	17.8
09-Sep-10	29.99	17.8
13-Sep-10	29.98	17.2
13-Sep-10	29.98	17.2
14-Sep-10	30.02	16.9
14-Sep-10	30.02	16.9
15-Sep-10	30.03	17.2
15-Sep-10	30.03	17.2
16-Sep-10	29.94	19.4
16-Sep-10	29.94	19.4
20-Sep-10	29.85	20.0
20-Sep-10	29.85	20.0
21-Sep-10	29.79	18.1
21-Sep-10	29.79	18.1
22-Sep-10	29.91	17.2
22-Sep-10	29.91	17.2
23-Sep-10	30.00	17.2
23-Sep-10	30.00	17.2
27-Sep-10	29.85	26.4

**Table A-1. Ambient Pressure and Temperature Monitoring Results**

Date	Ambient Pressure (inches of mercury)	Ambient Temperature (degrees Celsius)
27-Sep-10	29.85	26.4
28-Sep-10	29.84	25.3
28-Sep-10	29.84	25.3
29-Sep-10	29.76	21.7
29-Sep-10	29.76	21.7
30-Sep-10	29.90	18.3
30-Sep-10	29.90	18.3
04-Oct-10	29.94	16.9
05-Oct-10	29.94	18.6
06-Oct-10	30.06	18.9
13-Oct-10	30.02	25.0
13-Oct-10	30.02	25.0
14-Oct-10	30.02	22.5
14-Oct-10	30.02	22.5
18-Oct-10	30.03	15.6
18-Oct-10	30.03	15.6
19-Oct-10	29.95	16.7
19-Oct-10	29.95	16.7
20-Oct-10	30.04	16.7
20-Oct-10	30.04	16.7
21-Oct-10	30.05	18.3
21-Oct-10	30.05	18.3
06-Dec-10	30.27	11.4
06-Dec-10	30.27	11.4
07-Dec-10	30.19	11.8
07-Dec-10	30.19	11.8
13-Dec-10	30.04	12.9
13-Dec-10	30.04	12.9
14-Dec-10	29.99	12.4
14-Dec-10	29.99	12.4
15-Dec-10	29.99	8.3
15-Dec-10	29.99	8.3
18-Apr-11	29.99	14.1
18-Apr-11	29.99	14.1
19-Apr-11	29.99	14.2
20-Apr-11	30.01	13.1
20-Apr-11	30.01	13.1
21-Apr-11	30.09	11.7
21-Apr-11	30.09	11.7
26-Apr-11	30.18	12.3
26-Apr-11	30.18	12.3
27-Apr-11	30.18	12.4
27-Apr-11	30.18	12.4
28-Apr-11	30.24	14.4
28-Apr-11	30.24	14.4
02-May-11	30.23	13.3
02-May-11	30.23	13.3
03-May-11	30.06	16.7
03-May-11	30.06	16.7
04-May-11	30.01	18.6
04-May-11	30.01	18.6

**Table A-1. Ambient Pressure and Temperature Monitoring Results**

Date	Ambient Pressure (inches of mercury)	Ambient Temperature (degrees Celsius)
05-May-11	29.99	14.4
05-May-11	29.99	14.4
09-May-11	29.96	13.1
09-May-11	29.96	13.1
10-May-11	30.01	11.9
11-May-11	30.12	13.1
11-May-11	30.12	13.1
12-May-11	30.09	12.3
12-May-11	30.09	12.3
16-May-11	29.86	11.8
16-May-11	29.86	11.8
17-May-11	29.81	11.7
17-May-11	29.81	11.7
18-May-11	29.94	12.9
18-May-11	29.94	12.9
23-May-11	30.06	12.6
23-May-11	30.06	12.6
24-May-11	30.08	12.9
24-May-11	30.08	12.9
25-May-11	30.10	13.5
25-May-11	30.10	13.5
26-May-11	30.17	14.2
26-May-11	30.17	14.2
31-May-11	30.06	12.9
31-May-11	30.06	12.9
01-Jun-11	30.16	13.0
01-Jun-11	30.16	13.0
02-Jun-11	30.09	13.2
02-Jun-11	30.09	13.2
07-Jun-11	30.01	15.0
07-Jun-11	30.01	15.0
08-Jun-11	30.01	14.7
08-Jun-11	30.01	14.7
09-Jun-11	30.02	14.3
09-Jun-11	30.02	14.3
14-Jun-11	29.97	15.7
14-Jun-11	29.97	15.7
15-Jun-11	29.81	15.3
15-Jun-11	29.81	15.3
16-Jun-11	29.80	14.6
16-Jun-11	29.80	14.6
20-Jun-11	29.77	21.2
20-Jun-11	29.77	21.2
21-Jun-11	29.81	17.9
21-Jun-11	29.81	17.9
22-Jun-11	29.88	14.9
22-Jun-11	29.88	14.9

Table A-2. TSP and Metals Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	TSP (mg/m <sup>3</sup> )	TSP Exceedance? (Yes/No)	Arsenic (µg/m <sup>3</sup> )	Arsenic Exceedance? (Yes/No)	Chromium (µg/m <sup>3</sup> )	Chromium Exceedance? (Yes/No)	Lead (µg/m <sup>3</sup> )*	Lead Exceedance? (Yes/No)	Manganese (µg/m <sup>3</sup> )	Manganese Exceedance? (Yes/No)
17-Jun-10	1	27.2	1910.0	0.0560	No	0.0000	No	0.0000	No	0.0000	No	0.0141	No
21-Jun-10	1	24.5	1736.1	0.0444	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Jun-10	3	24.4	1737.5	0.0351	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
22-Jun-10	1	23.6	1669.0	0.0216	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
22-Jun-10	3	24.4	1725.6	0.0168	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Jun-10	1	24.8	1760.2	0.0159	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Jun-10	3	23.5	1668.6	0.0144	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
24-Jun-10	3	25.1	1779.6	0.0084	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
24-Jun-10	1	25.1	1772.4	0.0090	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
28-Jun-10	1	24.6	1717.2	0.0390	No	0.0000	No	0.0000	No	0.0000	No	0.0157	No
28-Jun-10	3	24.4	1724.2	0.0267	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
29-Jun-10	1	26.7	1872.4	0.0507	No	0.0000	No	0.0000	No	0.0000	No	0.0176	No
29-Jun-10	3	26.7	1877.9	0.0405	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
30-Jun-10	1	25.5	1808.5	0.0763	No	0.0000	No	0.0000	No	0.0000	No	0.0321	No
30-Jun-10	3	25.8	1823.6	0.0395	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
01-Jul-10	1	24.8	1752.0	0.0451	No	0.0000	No	0.0000	No	0.0000	No	0.0228	No
01-Jul-10	3	24.8	1743.5	0.0224	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
06-Jul-10	1	24.6	1737.7	0.0351	No	0.0000	No	0.0000	No	0.0000	No	0.0150	No
06-Jul-10	3	24.4	1724.7	0.0226	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
07-Jul-10	1	25.2	1787.5	0.0403	No	0.0000	No	0.0000	No	0.0000	No	0.0190	No
07-Jul-10	3	25.3	1794.6	0.0552	No	0.0000	No	0.0000	No	0.0000	No	0.0323	No
08-Jul-10	1	28.2	1977.9	0.0217	No	0.0000	No	0.0000	No	0.0000	No	0.0147	No
08-Jul-10	3	28.8	2030.4	0.0187	No	0.0000	No	0.0000	No	0.0000	No	0.0153	No
12-Jul-10	1	32.4	2286.2	0.0192	No	0.0000	No	0.0000	No	0.0000	No	0.0157	No
12-Jul-10	3	32.2	2281.3	0.0153	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Jul-10	1	24.1	1695.3	0.0212	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Jul-10	3	24.2	1705.7	0.0070	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
14-Jul-10	1	24.9	1749.5	0.0019	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
14-Jul-10	3	24.6	1730.7	0.0121	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
15-Jul-10	1	24.1	1674.4	0.0281	No	0.0000	No	0.0000	No	0.0000	No	0.0221	No
15-Jul-10	3	24.3	1710.2	0.0099	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Jul-10	1	26.9	1902.9	0.0347	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Jul-10	3	26.3	1857.6	0.0194	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
22-Jul-10	1	24.9	1763.5	0.0346	No	0.0000	No	0.0000	No	0.0000	No	0.0204	No
22-Jul-10	3	25.5	1806.2	0.0144	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Jul-10	1	24.8	1746.8	0.0343	No	0.0000	No	0.0000	No	0.0000	No	0.0223	No
23-Jul-10	3	7.5	530.8	0.0122	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
24-Jul-10	1	24.6	1736.1	0.0202	No	0.0000	No	0.0000	No	0.0000	No	0.0150	No
24-Jul-10	3	25.3	1793.9	0.0117	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
25-Jul-10	1	26.3	1847.8	0.0400	No	0.0000	No	0.0000	No	0.0000	No	0.0319	No
25-Jul-10	3	25.5	1800.9	0.0106	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
26-Jul-10	3	24.0	1695.9	0.0124	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
26-Jul-10	1	24.1	1691.5	0.0337	No	0.0000	No	0.0000	No	0.0000	No	0.0201	No
27-Jul-10	1	24.3	1709.4	0.0263	No	0.0000	No	0.0000	No	0.0000	No	0.0205	No
27-Jul-10	3	24.3	1719.0	0.0093	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
02-Aug-10	1	8.3	591.1	0.0338	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No

Table A-2. TSP and Metals Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	TSP (mg/m <sup>3</sup> )	TSP Exceedance? (Yes/No)	Arsenic (µg/m <sup>3</sup> )	Arsenic Exceedance? (Yes/No)	Chromium (µg/m <sup>3</sup> )	Chromium Exceedance? (Yes/No)	Lead (µg/m <sup>3</sup> )*	Lead Exceedance? (Yes/No)	Manganese (µg/m <sup>3</sup> )	Manganese Exceedance? (Yes/No)
02-Aug-10	3	10.4	733.6	0.0150	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
03-Aug-10	3	24.3	1716.5	0.0033	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
03-Aug-10	1	24.2	1713.9	0.0105	No	0.0000	No	0.0000	No	0.0181	No	0.0508	No
04-Aug-10	1	26.8	1900.3	0.0510	No	0.0000	No	0.0000	No	0.0000	No	0.0521	No
04-Aug-10	3	26.9	1900.7	0.0110	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
09-Aug-10	1	33.3	2352.3	0.0221	No	0.0000	No	0.0000	No	0.0000	No	0.0183	No
09-Aug-10	3	33.1	2326.2	0.0082	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
10-Aug-10	1	25.8	1815.7	0.0430	No	0.0000	No	0.0000	No	0.0000	No	0.0308	No
10-Aug-10	3	26.7	1872.9	0.0107	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
11-Aug-10	1	24.5	1738.3	0.0190	No	0.0000	No	0.0000	No	0.0000	No	0.0190	No
11-Aug-10	3	25.2	1793.1	0.0055	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
12-Aug-10	1	30.0	2116.5	0.0250	No	0.0000	No	0.0000	No	0.0000	No	0.0255	No
12-Aug-10	3	29.3	2067.5	0.0082	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
16-Aug-10	1	24.2	1709.6	0.0368	No	0.0000	No	0.0000	No	0.0000	No	0.0328	No
16-Aug-10	3	25.1	1773.5	0.0090	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
17-Aug-10	1	29.8	2099.1	0.0191	No	0.0000	No	0.0000	No	0.0000	No	0.0157	No
17-Aug-10	3	29.5	2078.9	0.0077	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
18-Aug-10	1	40.4	2850.5	0.0168	No	0.0000	No	0.0000	No	0.0000	No	0.0116	No
18-Aug-10	3	40.8	2874.1	0.0094	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Aug-10	1	24.4	1701.8	0.0447	No	0.0000	No	0.0000	No	0.0000	No	0.0194	No
23-Aug-10	3	25.1	1744.5	0.0338	No	0.0000	No	0.0000	No	0.0000	No	0.0149	No
24-Aug-10	1	24.1	1663.8	0.0721	No	0.0000	No	0.0000	No	0.0000	No	0.0385	No
24-Aug-10	0	24.1	1656.8	0.0471	No	0.0000	No	0.0000	No	0.0000	No	0.0235	No
25-Aug-10	1	24.8	1724.6	0.0574	No	0.0000	No	0.0000	No	0.0000	No	0.0278	No
25-Aug-10	3	24.8	1725.8	0.0562	No	0.0000	No	0.0000	No	0.0000	No	0.0290	No
26-Aug-10	1	31.7	2230.7	0.0444	No	0.0000	No	0.0000	No	0.0000	No	0.0215	No
26-Aug-10	3	31.5	2219.5	0.0275	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
30-Aug-10	3	25.1	1766.1	0.0125	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
30-Aug-10	1	25.0	1765.0	0.0300	No	0.0000	No	0.0000	No	0.0000	No	0.0187	No
31-Aug-10	1	24.0	1679.0	0.0554	No	0.0000	No	0.0000	No	0.0000	No	0.0363	No
31-Aug-10	3	24.0	1678.0	0.0274	No	0.0000	No	0.0000	No	0.0000	No	0.0155	No
01-Sep-10	1	23.8	1629.5	0.0528	No	0.0000	No	0.0000	No	0.0000	No	0.0313	No
01-Sep-10	3	24.0	1651.1	0.0382	No	0.0000	No	0.0000	No	0.0000	No	0.0236	No
07-Sep-10	1	23.9	1677.0	0.0352	No	0.0000	No	0.0000	No	0.0000	No	0.0209	No
07-Sep-10	4	23.7	1660.8	0.0102	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
08-Sep-10	1	24.0	1689.3	0.0189	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
08-Sep-10	4	23.8	1685.3	0.0101	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
09-Sep-10	1	24.0	1690.8	0.0024	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Sep-10	1	23.9	1677.0	0.0244	No	0.0000	No	0.0000	No	0.0000	No	0.0155	No
13-Sep-10	4	23.6	1668.3	0.0120	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
14-Sep-10	1	23.8	1711.8	0.0298	No	0.0000	No	0.0000	No	0.0000	No	0.0245	No
14-Sep-10	4	24.0	1700.1	0.0082	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
15-Sep-10	1	23.8	1673.8	0.0364	No	0.0000	No	0.0000	No	0.0000	No	0.0275	No
15-Sep-10	4	24.0	1695.1	0.0071	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
16-Sep-10	1	23.8	1665.8	0.0138	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
16-Sep-10	4	23.8	1664.8	0.0046	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No

Table A-2. TSP and Metals Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	TSP (mg/m <sup>3</sup> )	TSP Exceedance? (Yes/No)	Arsenic (µg/m <sup>3</sup> )	Arsenic Exceedance? (Yes/No)	Chromium (µg/m <sup>3</sup> )	Chromium Exceedance? (Yes/No)	Lead (µg/m <sup>3</sup> )*	Lead Exceedance? (Yes/No)	Manganese (µg/m <sup>3</sup> )	Manganese Exceedance? (Yes/No)
20-Sep-10	1	23.8	1659.3	0.0271	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
20-Sep-10	4	23.5	1634.9	0.0177	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Sep-10	1	23.8	1658.3	0.0374	No	0.0000	No	0.0000	No	0.0000	No	0.0169	No
21-Sep-10	4	23.8	1656.0	0.0217	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
22-Sep-10	1	23.8	1663.6	0.0403	No	0.0000	No	0.0000	No	0.0000	No	0.0186	No
22-Sep-10	4	23.8	1671.7	0.0197	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Sep-10	1	23.9	1683.8	0.0143	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-Sep-10	4	24.0	1688.7	0.0249	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
27-Sep-10	1	23.7	1624.1	0.0536	No	0.0000	No	0.0000	No	0.0000	No	0.0271	No
27-Sep-10	4	23.7	1629.7	0.0669	No	0.0000	No	0.0000	No	0.0000	No	0.0362	No
28-Sep-10	1	24.0	1647.4	0.0388	No	0.0000	No	0.0000	No	0.0000	No	0.0249	No
28-Sep-10	4	24.1	1653.1	0.0557	No	0.0000	No	0.0000	No	0.0000	No	0.0309	No
29-Sep-10	1	24.3	1671.8	0.0251	No	0.0000	No	0.0000	No	0.0000	No	0.0197	No
29-Sep-10	4	24.5	1693.6	0.0201	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
30-Sep-10	1	24.0	1673.4	0.0550	No	0.0000	No	0.0000	No	0.0000	No	0.0406	No
30-Sep-10	4	24.0	1677.9	0.0107	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
04-Oct-10	5	23.1	1610.6	0.0528	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
05-Oct-10	6	23.7	1649.3	0.0703	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
06-Oct-10	7	23.6	1649.5	0.0436	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Oct-10	3	23.3	1613.6	0.0601	No	0.0000	No	0.0000	No	0.0000	No	0.0304	No
13-Oct-10	8	23.6	1628.7	0.0565	No	0.0000	No	0.0000	No	0.0000	No	0.0301	No
14-Oct-10	3	24.0	1668.7	0.0485	No	0.0000	No	0.0000	No	0.0000	No	0.0264	No
14-Oct-10	8	24.0	1664.2	0.0535	No	0.0000	No	0.0000	No	0.0000	No	0.0312	No
18-Oct-10	8	24.0	1689.7	0.0290	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
18-Oct-10	3	24.0	1695.7	0.0236	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
19-Oct-10	3	24.0	1687.4	0.0249	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
19-Oct-10	8	23.5	1652.2	0.0291	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
20-Oct-10	3	24.0	1691.4	0.0242	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
20-Oct-10	8	23.8	1671.5	0.0359	No	0.0000	No	0.0000	No	0.0000	No	0.0197	No
21-Oct-10	3	24.3	1701.2	0.0159	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Oct-10	8	24.5	1716.4	0.0227	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
06-Dec-10	3	23.8	1710.6	0.0222	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
06-Dec-10	8	23.8	1701.8	0.0276	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
07-Dec-10	3	23.7	1694.4	0.0236	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
07-Dec-10	8	23.8	1695.7	0.0224	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Dec-10	3	23.8	1681.4	0.0280	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
13-Dec-10	8	24.0	1702.8	0.0282	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
14-Dec-10	3	24.2	1722.6	0.0157	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
14-Dec-10	8	24.0	1701.5	0.0147	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
15-Dec-10	3	23.8	1701.1	0.0270	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
15-Dec-10	8	24.5	1748.1	0.0269	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
18-Apr-11	9	23.8	1675.9	0.0060	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
18-Apr-11	3	25.4	1798.4	0.0056	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
19-Apr-11	9	23.6	1660.2	0.0060	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
20-Apr-11	3	24.0	1711.9	0.0129	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
20-Apr-11	9	24.1	1713.2	0.0187	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No

Table A-2. TSP and Metals Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	TSP (mg/m <sup>3</sup> )	TSP Exceedance? (Yes/No)	Arsenic (µg/m <sup>3</sup> )	Arsenic Exceedance? (Yes/No)	Chromium (µg/m <sup>3</sup> )	Chromium Exceedance? (Yes/No)	Lead (µg/m <sup>3</sup> )*	Lead Exceedance? (Yes/No)	Manganese (µg/m <sup>3</sup> )	Manganese Exceedance? (Yes/No)
21-Apr-11	9	24.1	1722.7	0.0319	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
21-Apr-11	3	23.6	1686.9	0.0279	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
26-Apr-11	10	24.0	1727.0	0.0405	No	0.0000	No	0.0000	No	0.0000	No	0.0174	No
26-Apr-11	9	24.1	1725.0	0.0864	No	0.0000	No	0.0000	No	0.0000	No	0.0301	No
27-Apr-11	10	24.0	1725.6	0.0336	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
27-Apr-11	9	24.0	1717.5	0.0611	No	0.0000	No	0.0000	No	0.0000	No	0.0274	No
28-Apr-11	10	10.9	775.9	0.2101	No	0.0000	No	0.0000	No	0.0000	No	0.0915	No
28-Apr-11	9	12.2	868.2	0.4273	No	0.0000	No	0.0000	No	0.0000	No	0.1497	No
02-May-11	10	24.5	1756.8	0.0717	No	0.0000	No	0.0000	No	0.0000	No	0.0319	No
02-May-11	9	23.9	1706.5	0.2250	No	0.0000	No	0.0000	No	0.0000	No	0.0879	No
03-May-11	10	23.9	1685.6	0.0670	No	0.0000	No	0.0000	No	0.0000	No	0.0267	No
03-May-11	10	24.0	1696.2	0.0495	No	0.0000	No	0.0000	No	0.0000	No	0.0218	No
04-May-11	9	23.9	1678.8	0.0614	No	0.0000	No	0.0000	No	0.0000	No	0.0262	No
04-May-11	10	24.0	1687.2	0.0474	No	0.0000	No	0.0000	No	0.0000	No	0.0184	No
05-May-11	9	23.9	1695.8	0.1639	No	0.0000	No	0.0000	No	0.0000	No	0.0560	No
05-May-11	10	23.8	1692.0	0.0952	No	0.0000	No	0.0000	No	0.0000	No	0.0414	No
09-May-11	9	30.4	2155.2	0.1791	No	0.0000	No	0.0000	No	0.0000	No	0.0557	No
09-May-11	10	29.6	2102.4	0.0742	No	0.0000	No	0.0000	No	0.0000	No	0.0309	No
10-May-11	9	24.1	1726.2	0.0724	No	0.0000	No	0.0000	No	0.0000	No	0.0359	No
10-May-11	10	24.8	1773.1	0.0558	No	0.0000	No	0.0000	No	0.0000	No	0.0271	No
11-May-11	9	23.8	1712.0	0.0397	No	0.0000	No	0.0000	No	0.0000	No	0.0181	No
11-May-11	10	23.2	1666.6	0.0312	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
12-May-11	9	23.1	1659.2	0.0844	No	0.0000	No	0.0000	No	0.0000	No	0.0356	No
12-May-11	10	23.7	1703.2	0.0822	No	0.0000	No	0.0000	No	0.0000	No	0.0264	No
16-May-11	9	24.8	1771.3	0.0175	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
16-May-11	10	25.3	1803.5	0.0133	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
17-May-11	9	24.5	1748.3	0.0132	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
17-May-11	10	23.8	1700.7	0.0135	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
18-May-11	10	25.6	1828.3	0.0312	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
23-May-11	9	24.0	1713.0	0.5377	Yes	0.0000	No	0.0368	No	0.0000	No	0.3036	No
23-May-11	10	24.2	1741.2	0.0672	No	0.0000	No	0.0000	No	0.0000	No	0.0235	No
24-May-11	9	24.4	1744.2	0.4547	No	0.0000	No	0.0361	No	0.0000	No	0.2809	No
24-May-11	10	24.2	1738.0	0.0293	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
25-May-11	9	23.3	1671.1	0.0365	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
25-May-11	10	21.0	1511.2	0.0212	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
26-May-11	9	23.7	1695.0	0.0838	No	0.0000	No	0.0000	No	0.0000	No	0.0295	No
26-May-11	10	23.6	1701.6	0.0294	No	0.0000	No	0.0000	No	0.0000	No	0.0000	No
31-May-11	9	27.5	1975.1	0.0294	No	0.0000	No	0.0000	No	0.0000	No	0.0137	No
09-Jun-11	9	23.9	1713.8	0.1605	No	0.0000	No	0.0000	No	0.0000	No	0.0759	No
09-Jun-11	10	23.5	1674.9	0.0639	No	0.0000	No	0.0000	No	0.0000	No	0.0281	No
14-Jun-11	9	25.1	1790.7	0.2586	No	0.0000	No	0.0000	No	0.0000	No	0.0782	No
14-Jun-11	10	25.3	1799.2	0.0928	No	0.0000	No	0.0000	No	0.0000	No	0.0389	No
15-Jun-11	9	24.1	1697.3	1.0770	Yes	0.0000	No	0.0943	No	0.0147	No	0.7070	No
15-Jun-11	10	24.0	1700.8	0.1170	No	0.0000	No	0.0000	No	0.0000	No	0.0453	No
16-Jun-11	9	24.1	1711.6	0.1519	No	0.0000	No	0.0000	No	0.0000	No	0.0701	No
16-Jun-11	10	24.1	1707.0	0.0644	No	0.0000	No	0.0000	No	0.0000	No	0.0170	No

Table A-2. TSP and Metals Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	TSP (mg/m <sup>3</sup> )	TSP Exceedance? (Yes/No)	Arsenic (µg/m <sup>3</sup> )	Arsenic Exceedance? (Yes/No)	Chromium (µg/m <sup>3</sup> )	Chromium Exceedance? (Yes/No)	Lead (µg/m <sup>3</sup> )*	Lead Exceedance? (Yes/No)	Manganese (µg/m <sup>3</sup> )	Manganese Exceedance? (Yes/No)
20-Jun-11	9	24.0	1680.7	0.2315	No	0.0000	No	0.0000	No	0.0000	No	0.0773	No
20-Jun-11	10	24.1	1678.4	0.0924	No	0.0000	No	0.0000	No	0.0000	No	0.0387	No
21-Jun-11	9	24.0	1699.1	0.1589	No	0.0000	No	0.0247	No	0.0000	No	0.0765	No
21-Jun-11	10	24.0	1688.8	0.0675	No	0.0000	No	0.0000	No	0.0000	No	0.0379	No
22-Jun-11	9	22.5	1596.2	0.4567	No	0.0000	No	0.0320	No	0.0000	No	0.2443	No
22-Jun-11	10	22.3	1583.3	0.1168	No	0.0000	No	0.0000	No	0.0000	No	0.0695	No

Notes:

Threshold value for TSP = 0.5 mg/m<sup>3</sup>

Threshold value for arsenic = 10 µg/m<sup>3</sup>

Threshold value for chromium = 500 µg/m<sup>3</sup>

Threshold value for lead = 50 µg/m<sup>3</sup>

Threshold value for manganese = 200 µg/m<sup>3</sup>

Detection limit for TSP is 0.06 µg/m<sup>3</sup> (assuming a minimum sample volume of 1,600 m<sup>3</sup>)

Detection limits for arsenic, lead, and manganese are 16 ng/m<sup>3</sup> (assuming minimum sample volumes of 1,600 m<sup>3</sup>)

m<sup>3</sup> = cubic meters

mg/m<sup>3</sup> = milligrams per cubic meter

ng/m<sup>3</sup> = nanograms per cubic meter

TSP = total suspended particulates

µg/m<sup>3</sup> = milligrams per cubic meter

**Table A-3. PM<sub>10</sub> Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> Exceedance? (Yes/No)
17-Jun-10	1	27.2	1893.5	36.441	No
21-Jun-10	1	24.5	1720.1	30.231	No
21-Jun-10	3	24.4	1714.0	29.755	No
22-Jun-10	1	23.6	1662.6	3.007	No
22-Jun-10	3	24.4	1716.7	12.233	No
23-Jun-10	1	24.8	1762.4	2.270	No
23-Jun-10	3	23.5	1642.1	10.962	No
24-Jun-10	3	25.1	1751.3	6.852	No
24-Jun-10	1	25.1	1771.3	2.258	No
28-Jun-10	1	24.6	1707.8	23.421	No
28-Jun-10	3	24.4	1693.0	23.036	No
29-Jun-10	1	26.7	1860.3	33.329	No
29-Jun-10	3	26.7	1861.6	38.676	No
30-Jun-10	1	25.5	1792.9	34.581	No
30-Jun-10	3	25.8	1790.8	40.206	No
01-Jul-10	1	24.8	1740.2	22.411	No
01-Jul-10	3	24.8	1716.7	25.048	No
06-Jul-10	1	24.6	1718.0	14.552	No
06-Jul-10	3	24.4	1693.6	16.533	No
07-Jul-10	1	25.2	1767.2	16.410	No
07-Jul-10	3	25.3	1763.1	24.388	No
08-Jul-10	1	28.2	1971.5	8.116	No
08-Jul-10	3	28.8	1996.5	10.519	No
12-Jul-10	1	32.4	2266.4	11.472	No
12-Jul-10	3	32.2	2243.3	11.144	No
13-Jul-10	3	24.1	1680.7	11.305	No
13-Jul-10	3	24.2	1695.6	11.795	No
14-Jul-10	1	24.9	1728.3	0.810	No
14-Jul-10	3	24.6	1720.5	10.462	No
15-Jul-10	1	24.1	1666.8	13.199	No
15-Jul-10	3	24.3	1698.7	11.773	No
21-Jul-10	1	26.9	1882.7	18.590	No
21-Jul-10	3	26.3	1848.0	20.563	No
22-Jul-10	1	24.9	1747.2	15.453	No
22-Jul-10	3	25.5	1794.0	13.936	No
23-Jul-10	1	24.8	1735.0	14.410	No
23-Jul-10	3	24.6	1731.7	12.704	No
24-Jul-10	1	24.6	1725.7	11.010	No
24-Jul-10	3	25.3	1784.1	11.771	No
25-Jul-10	1	26.3	1835.3	13.077	No
25-Jul-10	3	25.5	1790.2	12.289	No
26-Jul-10	3	24.0	1685.8	14.236	No
26-Jul-10	1	24.1	1682.3	14.266	No
27-Jul-10	1	24.3	1698.3	12.365	No
27-Jul-10	3	24.3	1708.7	7.023	No
02-Aug-10	3	10.4	729.2	13.714	No
03-Aug-10	3	24.3	1706.3	16.410	No
03-Aug-10	1	24.2	1705.0	12.317	No
04-Aug-10	1	26.8	1886.4	16.433	No
04-Aug-10	3	26.9	1888.3	9.532	No
09-Aug-10	1	33.3	2337.0	7.702	No
09-Aug-10	3	33.1	2312.4	7.352	No
10-Aug-10	1	25.8	1804.9	13.851	No
10-Aug-10	3	26.7	1856.7	8.617	No
11-Aug-10	1	24.5	1725.6	6.375	No
11-Aug-10	3	25.2	1764.1	0.000	No
12-Aug-10	1	30.0	2105.6	7.124	No
12-Aug-10	3	29.3	2038.5	5.887	No
16-Aug-10	1	24.2	1696.2	13.559	No
16-Aug-10	3	25.1	1746.2	8.590	No

**Table A-3. PM<sub>10</sub> Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> Exceedance? (Yes/No)
17-Aug-10	1	29.8	2082.6	8.643	No
17-Aug-10	3	29.5	2046.9	7.817	No
18-Aug-10	1	40.4	2832.0	9.181	No
18-Aug-10	3	40.8	2841.5	8.798	No
23-Aug-10	1	24.4	1692.8	29.538	No
23-Aug-10	3	25.1	1719.3	28.501	No
24-Aug-10	1	24.1	1654.1	37.483	No
24-Aug-10	3	24.1	1632.7	34.299	No
25-Aug-10	1	24.8	1715.4	30.314	No
25-Aug-10	3	24.8	1704.0	34.038	No
26-Aug-10	1	31.7	2221.6	23.856	No
26-Aug-10	3	31.5	2191.3	20.992	No
30-Aug-10	3	25.1	1749.4	9.718	No
30-Aug-10	1	25.0	1754.5	13.109	No
31-Aug-10	1	24.0	1664.5	25.833	No
31-Aug-10	3	24.0	1654.5	17.528	No
01-Sep-10	1	23.8	1621.3	30.223	No
01-Sep-10	3	24.0	1634.7	26.305	No
07-Sep-10	1	23.9	1659.3	8.437	No
07-Sep-10	4	23.7	1639.7	6.708	No
08-Sep-10	1	24.0	1674.6	8.360	No
08-Sep-10	4	23.8	1648.2	7.888	No
09-Sep-10	1	24.0	1671.7	15.553	No
09-Sep-10	4	24.0	1670.3	15.566	No
13-Sep-10	1	23.9	1663.4	16.232	No
13-Sep-10	4	23.6	1646.2	13.364	No
14-Sep-10	1	23.8	1655.2	10.875	No
14-Sep-10	4	24.0	1670.3	5.747	No
15-Sep-10	1	23.8	1658.5	9.648	No
15-Sep-10	4	24.0	1671.4	5.026	No
16-Sep-10	1	23.8	1645.6	3.282	No
16-Sep-10	4	23.8	1639.7	1.952	No
20-Sep-10	1	23.8	1651.8	13.319	No
20-Sep-10	4	23.5	1620.7	14.191	No
21-Sep-10	1	23.8	1640.3	17.680	No
21-Sep-10	4	23.8	1639.4	17.079	No
22-Sep-10	1	23.8	1651.4	15.744	No
22-Sep-10	4	7.2	497.9	44.184	No
23-Sep-10	1	23.9	1663.8	15.026	No
23-Sep-10	4	24.0	1667.3	16.794	No
27-Sep-10	1	23.7	1614.5	35.304	No
27-Sep-10	4	23.7	1618.8	41.388	No
28-Sep-10	1	24.0	1637.7	26.256	No
28-Sep-10	4	24.1	1641.1	31.686	No
29-Sep-10	1	24.3	1661.9	12.636	No
29-Sep-10	4	24.5	1680.4	12.497	No
30-Sep-10	1	24.0	1664.8	14.416	No
30-Sep-10	4	24.0	1663.4	6.012	No
04-Oct-10	5	23.1	1601.0	34.978	No
05-Oct-10	6	23.7	1638.6	34.786	No
06-Oct-10	7	23.6	1642.0	23.143	No
13-Oct-10	3	23.3	1601.1	39.349	No
13-Oct-10	8	23.6	1623.5	35.109	No
14-Oct-10	3	24.0	1661.1	32.508	No
14-Oct-10	8	24.0	1654.4	32.641	No
18-Oct-10	8	24.0	1681.0	26.175	No
18-Oct-10	3	24.0	1681.0	24.985	No
19-Oct-10	3	24.0	1670.5	23.945	No
19-Oct-10	8	23.5	1640.2	21.949	No
20-Oct-10	3	24.0	1675.8	22.079	No

**Table A-3. PM<sub>10</sub> Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> Exceedance? (Yes/No)
20-Oct-10	8	23.8	1660.6	22.883	No
21-Oct-10	3	24.3	1694.3	17.117	No
21-Oct-10	8	24.5	1707.1	17.574	No
06-Dec-10	3	23.8	1699.3	21.185	No
06-Dec-10	8	23.8	1708.0	22.248	No
07-Dec-10	3	23.7	1689.6	22.490	No
07-Dec-10	8	23.6	1682.8	21.393	No
13-Dec-10	3	23.8	1680.4	30.350	No
13-Dec-10	8	24.0	1699.5	30.598	No
14-Dec-10	3	24.2	1708.6	19.315	No
14-Dec-10	8	24.0	1699.1	17.657	No
15-Dec-10	3	23.8	1690.8	24.249	No
15-Dec-10	8	24.5	1746.5	25.766	No
18-Apr-11	9	23.7	1665.5	18.013	No
18-Apr-11	3	25.4	1787.7	11.188	No
19-Apr-11	9	23.6	1659.3	5.424	No
20-Apr-11	3	24.0	1678.7	10.723	No
20-Apr-11	9	24.1	1703.9	9.390	No
21-Apr-11	9	24.1	1703.1	17.028	No
21-Apr-11	3	23.6	1672.2	22.127	No
26-Apr-11	10	24.0	1698.2	22.376	No
26-Apr-11	9	24.1	1717.8	22.703	No
27-Apr-11	10	24.0	1703.7	25.239	No
27-Apr-11	9	24.0	1704.9	19.942	No
28-Apr-11	10	10.9	765.3	135.904	No
28-Apr-11	9	12.2	859.7	161.677	No
02-May-11	10	24.5	1736.9	39.726	No
02-May-11	9	23.9	1689.5	70.436	No
03-May-11	9	23.9	1674.6	32.844	No
03-May-11	10	24.0	1667.9	35.375	No
04-May-11	9	23.9	1659.8	31.329	No
04-May-11	10	24.0	1666.7	33.599	No
05-May-11	9	23.9	1670.6	55.667	No
05-May-11	10	23.8	1661.4	58.383	No
09-May-11	9	30.4	2128.9	55.897	No
09-May-11	10	29.6	2070.0	36.231	No
10-May-11	9	24.1	1698.8	31.788	No
10-May-11	10	24.8	1741.0	43.078	No
11-May-11	9	23.8	1679.0	13.699	No
11-May-11	10	23.2	1635.7	16.507	No
12-May-11	9	23.1	1630.6	46.608	No
12-May-11	10	23.7	1659.0	44.606	No
16-May-11	9	24.8	1741.6	9.761	No
16-May-11	10	25.3	1769.4	9.043	No
17-May-11	9	24.5	1715.3	9.911	No
17-May-11	10	23.8	1659.4	11.450	No
18-May-11	9	23.9	1669.3	21.567	No
23-May-11	9	24.0	1687.6	217.474	No
23-May-11	10	24.2	1698.4	37.682	No
24-May-11	9	24.4	1718.3	158.877	No
24-May-11	10	24.2	1704.4	19.948	No
25-May-11	9	23.3	1644.7	18.241	No
25-May-11	10	21.0	1474.1	16.960	No
26-May-11	9	23.7	1664.6	30.038	No
26-May-11	10	23.6	1665.7	17.411	No
31-May-11	9	27.5	1937.0	9.809	No
31-May-11	10	27.6	1937.3	9.291	No
01-Jun-11	9	23.9	1684.0	14.845	No
01-Jun-11	10	23.7	1674.8	9.553	No
02-Jun-11	9	23.8	1674.6	28.663	No

**Table A-3. PM<sub>10</sub> Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> Exceedance? (Yes/No)
02-Jun-11	10	23.9	1675.8	15.515	No
07-Jun-11	9	23.1	1617.6	190.403	No
07-Jun-11	10	23.4	1636.0	21.394	No
08-Jun-11	9	23.6	1654.7	47.742	No
08-Jun-11	10	24.8	1731.4	21.947	No
09-Jun-11	9	23.9	1673.9	48.390	No
09-Jun-11	10	23.5	1646.1	18.225	No
14-Jun-11	9	25.1	1757.5	88.191	No
14-Jun-11	10	25.3	1757.3	34.713	No
15-Jun-11	9	24.1	1672.4	461.601	No
15-Jun-11	10	24.0	1668.7	39.552	No
16-Jun-11	9	24.1	1684.2	74.219	No
16-Jun-11	10	24.1	1668.3	32.368	No
20-Jun-11	9	24.0	1642.3	93.162	No
20-Jun-11	10	24.1	1653.9	29.626	No
21-Jun-11	9	24.0	1667.6	63.564	No
21-Jun-11	10	24.0	1652.8	30.857	No
22-Jun-11	9	22.5	1566.1	173.043	No
22-Jun-11	10	22.3	1556.8	27.621	No

## Notes:

Threshold value for PM<sub>10</sub> = 5,000 µg/m<sup>3</sup>Detection limit for PM<sub>10</sub> is 0.06 µg/m<sup>3</sup> (assuming a minimum sample volume of 1,600 m<sup>3</sup>)m<sup>3</sup> = cubic metersPM<sub>10</sub> = particulate matter of 10 micrometers or lessµg/m<sup>3</sup> = milligrams per cubic meter

**Table A-4. PCB Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m³)	Aroclor-1016 (µg/m³)	Aroclor-1221 (µg/m³)	Aroclor-1232 (µg/m³)	Aroclor-1242 (µg/m³)	Aroclor-1248 (µg/m³)	Aroclor-1254 (µg/m³)	Aroclor-1260 (µg/m³)	Total PCBs (µg/m³)	PCB Exceedance?	
21-Jun-10	1	24.5	444.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
21-Jun-10	3	24.4	401.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Jun-10	1	24.6	451.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Jun-10	3	24.6	446.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
28-Jun-10	1	24.6	442.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
28-Jun-10	3	24.4	403.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
30-Jun-10	1	25.5	458.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
30-Jun-10	3	25.8	432.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
06-Jul-10	1	24.6	446.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
06-Jul-10	3	24.4	401.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
08-Jul-10	1	28.2	499.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
13-Jul-10	1	24.1	422.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
13-Jul-10	3	24.2	390.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
15-Jul-10	1	24.1	424.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
15-Jul-10	3	24.3	384.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Jul-10	1	24.9	441.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Jul-10	3	25.5	426.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
24-Jul-10	1	24.6	446.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
24-Jul-10	3	25.3	409.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
26-Jul-10	3	24.0	382.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
26-Jul-10	1	24.1	424.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
02-Aug-10	1	8.3	150.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
02-Aug-10	3	10.4	168.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
04-Aug-10	1	26.8	415.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
04-Aug-10	3	26.9	429.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
10-Aug-10	1	25.8	445.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
10-Aug-10	3	26.7	392.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
11-Aug-10	1	24.5	441.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
12-Aug-10	1	30.0	535.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
17-Aug-10	1	29.8	540.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
17-Aug-10	3	29.5	473.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Aug-10	1	24.4	441.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Aug-10	3	25.1	421.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
25-Aug-10	1	24.8	451.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
25-Aug-10	3	24.8	421.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
30-Aug-10	3	25.1	433.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
30-Aug-10	1	25.0	455.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
01-Sep-10	1	23.8	418.9	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	No
01-Sep-10	3	24.0	402.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
08-Sep-10	1	24.0	425.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
08-Sep-10	4	23.8	456.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	No
13-Sep-10	1	23.9	435.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
13-Sep-10	4	23.6	405.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
15-Sep-10	1	23.8	430.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
15-Sep-10	4	24.0	415.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
20-Sep-10	1	23.8	431.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
20-Sep-10	4	23.5	403.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Sep-10	1	23.8	432.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Sep-10	4	23.8	411.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
27-Sep-10	1	23.7	419.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
27-Sep-10	4	23.7	403.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
29-Sep-10	1	24.3	431.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
29-Sep-10	4	24.5	422.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	

**Table A-4. PCB Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	Aroclor-1016 (µg/m <sup>3</sup> )	Aroclor-1221 (µg/m <sup>3</sup> )	Aroclor-1232 (µg/m <sup>3</sup> )	Aroclor-1242 (µg/m <sup>3</sup> )	Aroclor-1248 (µg/m <sup>3</sup> )	Aroclor-1254 (µg/m <sup>3</sup> )	Aroclor-1260 (µg/m <sup>3</sup> )	Total PCBs (µg/m <sup>3</sup> )	PCB Exceedance?
13-Oct-10	3	23.3	398.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
13-Oct-10	8	23.6	416.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
18-Oct-10	8	24.0	439.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
18-Oct-10	3	24.0	406.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
20-Oct-10	3	24.0	412.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
20-Oct-10	8	23.8	437.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
07-Dec-10	3	23.8	448.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
07-Dec-10	8	23.6	438.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
14-Dec-10	3	24.2	414.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
14-Dec-10	8	24.0	444.1	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	No
18-Apr-11	9	23.8	400.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
18-Apr-11	3	25.4	411.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
20-Apr-11	3	24.0	348.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
20-Apr-11	9	24.1	373.9	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	No
26-Apr-11	10	24.0	410.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
26-Apr-11	9	24.1	431.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
27-Apr-11	10	24.0	401.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
27-Apr-11	9	24.0	449.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No
02-May-11	10	24.5	395.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No

Notes:

Threshold value for PCBs = 500 µg/m<sup>3</sup>Detection limit for PCBs is 0.0017 µg/m<sup>3</sup> (assuming a minimum sample volume of 300 m<sup>3</sup>)m<sup>3</sup> = cubic meters

PCB = polychlorinated biphenyl

µg/m<sup>3</sup> = milligrams per cubic meter

Table A-5. PAH Monitoring Results

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m³)	2-Chloronaphthalene (µg/m³)	2-Methylnaphthalene (µg/m³)	Aceanaphthalene (µg/m³)	Aceanaphthylenne (µg/m³)	Anthracene (µg/m³)	Benzo(a)Anthracene (µg/m³)	Benzo(a)pyrene (µg/m³)	Benzo(b)fluoranthene (µg/m³)	Benzo(g,h,i)perylene (µg/m³)	Benzo(k)fluoranthene (µg/m³)	Chrysene (µg/m³)	Dibenz(a,h)anthracene (µg/m³)	Fluoranthene (µg/m³)	Fluorene (µg/m³)	Indeno(1,2,3-c,d) pyrene (µg/m³)	Naphthalene (µg/m³)	Phenanthrene (µg/m³)	Pyrene (µg/m³)	Total PAHs (µg/m³)	PAH Exceedance?
17-Jun-10	1	27.2	484.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
17-Jun-10	3	24.1	435.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Jun-10	1	23.6	346.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
22-Jun-10	3	24.4	398.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
24-Jun-10	3	25.1	450.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
24-Jun-10	1	25.1	458.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
29-Jun-10	1	26.8	486.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
29-Jun-10	3	26.5	382.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
01-Jul-10	1	24.8	377.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
01-Jul-10	3	24.8	411.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
07-Jul-10	1	25.2	447.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
07-Jul-10	3	25.3	407.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.013	0.000	No	
12-Jul-10	1	32.4	573.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
12-Jul-10	3	32.2	539.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.010	0.000	No	
14-Jul-10	1	24.9	436.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
14-Jul-10	3	24.6	389.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.024	0.000	No	
21-Jul-10	1	26.9	495.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
21-Jul-10	3	26.3	424.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Jul-10	1	24.8	449.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
23-Jul-10	3	24.6	417.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
25-Jul-10	1	26.3	472.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
25-Jul-10	3	25.5	407.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
27-Jul-10	1	24.3	431.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
27-Jul-10	3	24.3	387.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
03-Aug-10	3	24.3	418.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
03-Aug-10	1	24.2	381.9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
09-Aug-10	1	33.3	603.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
09-Aug-10	3	33.1	536.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.006	0.000	0.000	No	
11-Aug-10	3	25.2	424.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No	
12-Aug-10	3	29.3	490.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.011	0.000	0.000	No	
16-Aug-10	1	24.2	440.6	0.00																			

**Table A-5. PAH Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	2-Chloronaphthalene (µg/m <sup>3</sup> )	2-Methylnaphthalene (µg/m <sup>3</sup> )	Acenaphthene (µg/m <sup>3</sup> )	Acenaphthylene (µg/m <sup>3</sup> )	Anthracene (µg/m <sup>3</sup> )	Benzo(a)Anthracene (µg/m <sup>3</sup> )	Benzo(a)pyrene (µg/m <sup>3</sup> )	Benzo(b)fluoranthene (µg/m <sup>3</sup> )	Benzo(g,h,i)perylene (µg/m <sup>3</sup> )	Benzo(k)fluoranthene (µg/m <sup>3</sup> )	Chrysene (µg/m <sup>3</sup> )	Dibenz(a,h)anthracene (µg/m <sup>3</sup> )	Fluoranthene (µg/m <sup>3</sup> )	Fluorene (µg/m <sup>3</sup> )	Indeno(1,2,3-c,d) pyrene (µg/m <sup>3</sup> )	Naphthalene (µg/m <sup>3</sup> )	Phenanthrene (µg/m <sup>3</sup> )	Pyrene (µg/m <sup>3</sup> )	Total PAHs (µg/m <sup>3</sup> )	PAH Exceedance?
30-Sep-10	4	24.0	403.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
04-Oct-10	5	23.1	402.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
05-Oct-10	6	23.7	430.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.006	0.006	No		
06-Oct-10	7	23.6	426.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.006	0.006	No		
14-Oct-10	3	24.0	411.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.015	0.015	No		
14-Oct-10	8	24.0	428.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.013	0.013	No		
19-Oct-10	8	24.0	415.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.008	0.008	No		
19-Oct-10	3	23.5	431.8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
21-Oct-10	3	24.3	412.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.007	0.007	No		
21-Oct-10	8	24.5	443.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
06-Dec-10	3	23.8	449.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
06-Dec-10	8	23.8	434.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.005	0.005	No		
13-Dec-10	3	23.8	420.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
13-Dec-10	8	24.0	434.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.008	0.008	No		
15-Dec-10	3	23.8	386.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
15-Dec-10	8	24.5	426.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
19-Apr-11	9	23.6	408.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
21-Apr-11	9	24.1	390.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
21-Apr-11	3	23.6	369.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
28-Apr-11	10	10.9	186.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		
28-Apr-11	9	12.2	200.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	No		

Notes:

Threshold value for PAHs = 200 µg/m<sup>3</sup>Detection limit for PAHs is 0.017 µg/m<sup>3</sup> (assuming a minimum sample volume of 300 m<sup>3</sup>)m<sup>3</sup> = cubic meters

PAH = polycyclic aromatic hydrocarbons

µg/m<sup>3</sup> = milligrams per cubic meter

**Table A-6. Asbestos Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	Asbestos (fibers/cm <sup>3</sup> )	Asbestos Exceedance? (Yes/No)
17-Jun-10	1	27.2	4.2	0.0000	No
21-Jun-10	1	24.5	3.1	0.0000	No
21-Jun-10	3	24.4	3.4	0.0000	No
22-Jun-10	1	23.6	3.4	0.0009	No
22-Jun-10	3	24.4	4.1	0.0000	No
23-Jun-10	1	24.8	4.1	0.0000	No
23-Jun-10	3	23.5	4.0	0.0009	No
24-Jun-10	3	25.1	3.7	0.0000	No
24-Jun-10	1	25.1	3.9	0.0000	No
28-Jun-10	1	24.6	3.1	0.0000	No
28-Jun-10	3	24.4	3.8	0.0000	No
29-Jun-10	1	26.7	4.6	0.0000	No
29-Jun-10	3	26.7	4.5	0.0000	No
30-Jun-10	1	25.5	4.1	0.0007	No
30-Jun-10	3	25.8	4.8	0.0006	No
01-Jul-10	1	24.8	4.0	0.0010	No
01-Jul-10	3	24.8	3.8	0.0000	No
06-Jul-10	1	24.6	2.7	0.0000	No
06-Jul-10	3	24.4	3.5	0.0000	No
07-Jul-10	1	25.2	3.7	0.0000	No
07-Jul-10	3	25.3	3.4	0.0000	No
08-Jul-10	1	28.2	3.4	0.0000	No
08-Jul-10	3	28.8	4.6	0.0009	No
12-Jul-10	1	32.4	5.3	0.0000	No
12-Jul-10	3	32.2	3.4	0.0000	No
13-Jul-10	1	24.1	3.7	0.0000	No
13-Jul-10	3	24.2	3.3	0.0000	No
14-Jul-10	1	24.9	3.8	0.0000	No
14-Jul-10	3	24.6	3.1	0.0000	No
15-Jul-10	1	24.1	3.9	0.0000	No
15-Jul-10	3	24.3	3.1	0.0000	No
21-Jul-10	1	26.9	5.1	0.0000	No
21-Jul-10	3	26.3	4.1	0.0000	No
22-Jul-10	1	24.9	3.4	0.0000	No
22-Jul-10	3	25.5	4.0	0.0000	No
23-Jul-10	1	24.8	3.6	0.0000	No
23-Jul-10	3	24.6	3.6	0.0000	No
24-Jul-10	1	24.6	3.7	0.0000	No
24-Jul-10	3	25.3	4.0	0.0008	No
25-Jul-10	1	26.3	3.6	0.0000	No
25-Jul-10	3	25.5	3.9	0.0000	No
26-Jul-10	3	24.0	3.6	0.0000	No
26-Jul-10	1	24.1	3.5	0.0000	No
27-Jul-10	1	24.3	4.2	0.0000	No
27-Jul-10	3	24.3	3.6	0.0000	No
02-Aug-10	1	8.3	1.2	0.0000	No
02-Aug-10	3	10.4	1.7	0.0000	No
03-Aug-10	3	24.3	4.1	0.0000	No
03-Aug-10	1	24.2	4.1	0.0000	No
04-Aug-10	1	26.8	4.7	0.0000	No
04-Aug-10	3	26.9	4.7	0.0000	No
09-Aug-10	1	33.3	6.0	0.0000	No
09-Aug-10	3	33.1	5.2	0.0000	No

**Table A-6. Asbestos Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	Asbestos (fibers/cm <sup>3</sup> )	Asbestos Exceedance? (Yes/No)
10-Aug-10	1	25.8	4.3	0.0000	No
10-Aug-10	3	26.7	4.8	0.0000	No
11-Aug-10	1	24.5	4.1	0.0000	No
11-Aug-10	3	25.2	3.4	0.0000	No
12-Aug-10	1	30.0	4.5	0.0000	No
12-Aug-10	3	29.3	3.4	0.0000	No
16-Aug-10	1	24.2	3.7	0.0000	No
16-Aug-10	3	25.1	4.4	0.0000	No
17-Aug-10	1	29.8	5.0	0.0000	No
17-Aug-10	3	29.6	5.4	0.0000	No
18-Aug-10	1	40.4	7.1	0.0000	No
18-Aug-10	3	40.8	7.1	0.0000	No
23-Aug-10	1	24.4	4.3	0.0000	No
23-Aug-10	3	25.1	4.1	0.0007	No
24-Aug-10	1	24.1	4.0	0.0000	No
24-Aug-10	3	24.1	3.6	0.0000	No
25-Aug-10	1	24.8	4.6	0.0000	No
25-Aug-10	3	24.8	4.4	0.0000	No
26-Aug-10	1	31.7	5.6	0.0000	No
26-Aug-10	3	31.5	5.2	0.0000	No
30-Aug-10	3	23.3	4.0	0.0008	No
30-Aug-10	1	25.0	3.9	0.0000	No
31-Aug-10	1	24.0	3.9	0.0010	No
31-Aug-10	3	24.0	3.9	0.0000	No
01-Sep-10	1	23.8	4.1	0.0014	No
01-Sep-10	3	24.0	3.2	0.0000	No
07-Sep-10	1	23.9	4.3	0.0000	No
07-Sep-10	4	23.7	4.2	0.0000	No
08-Sep-10	1	24.0	4.3	0.0000	No
08-Sep-10	4	23.8	4.5	0.0000	No
09-Sep-10	1	24.0	4.4	0.0000	No
09-Sep-10	4	24.0	3.9	0.0000	No
13-Sep-10	1	23.9	4.4	0.0000	No
13-Sep-10	4	23.6	4.5	0.0000	No
14-Sep-10	1	23.8	4.4	0.0000	No
14-Sep-10	4	24.0	4.2	0.0000	No
15-Sep-10	1	23.8	3.8	0.0000	No
15-Sep-10	4	24.0	3.9	0.0000	No
16-Sep-10	1	23.8	3.4	0.0000	No
16-Sep-10	4	23.8	4.4	0.0000	No
20-Sep-10	1	23.8	4.5	0.0000	No
20-Sep-10	4	23.5	4.3	0.0007	No
21-Sep-10	1	23.8	3.6	0.0000	No
21-Sep-10	4	23.8	4.2	0.0000	No
22-Sep-10	1	23.8	3.5	0.0000	No
22-Sep-10	4	23.8	4.0	0.0008	No
23-Sep-10	1	23.9	3.6	0.0000	No
23-Sep-10	4	24.0	4.3	0.0007	No
27-Sep-10	1	23.7	4.3	0.0010	No
27-Sep-10	4	23.7	4.1	0.0009	No
28-Sep-10	1	24.0	3.7	0.0000	No
28-Sep-10	4	24.1	4.2	0.0000	No
29-Sep-10	1	24.3	4.4	0.0000	No

**Table A-6. Asbestos Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	Asbestos (fibers/cm <sup>3</sup> )	Asbestos Exceedance? (Yes/No)
29-Sep-10	4	24.5	4.3	0.0000	No
30-Sep-10	1	24.0	4.5	0.0000	No
30-Sep-10	4	24.0	4.7	0.0000	No
04-Oct-10	5	23.1	3.6	0.0000	No
05-Oct-10	6	23.7	3.6	0.0000	No
06-Oct-10	7	23.6	4.1	0.0000	No
13-Oct-10	3	23.3	3.7	0.0009	No
13-Oct-10	8	23.6	4.1	0.0000	No
14-Oct-10	3	24.0	4.2	0.0010	No
14-Oct-10	8	24.0	4.2	0.0007	No
18-Oct-10	8	24.0	3.5	0.0000	No
18-Oct-10	3	24.0	4.0	0.0000	No
19-Oct-10	3	24.0	4.0	0.0000	No
19-Oct-10	8	23.5	3.4	0.0000	No
20-Oct-10	3	24.0	4.5	0.0000	No
20-Oct-10	8	23.8	4.1	0.0000	No
21-Oct-10	3	24.3	3.7	0.0010	No
21-Oct-10	8	24.5	4.1	0.0000	No
06-Dec-10	3	23.8	3.6	0.0000	No
06-Dec-10	8	23.8	3.3	0.0008	No
07-Dec-10	3	23.7	3.6	0.0009	No
07-Dec-10	8	23.6	3.7	0.0000	No
13-Dec-10	3	23.8	4.3	0.0000	No
13-Dec-10	8	24.0	4.5	0.0000	No
14-Dec-10	3	24.2	3.8	0.0000	No
14-Dec-10	8	24.0	3.7	0.0000	No
15-Dec-10	3	23.8	4.2	0.0000	No
15-Dec-10	8	24.5	3.7	0.0000	No
18-Apr-11	9	23.7	3.3	0.0000	No
18-Apr-11	3	25.4	4.4	0.0009	No
19-Apr-11	9	23.6	3.3	0.0000	No
20-Apr-11	3	24.0	2.7	0.0000	No
20-Apr-11	9	24.1	3.4	0.0000	No
21-Apr-11	9	24.1	3.2	0.0000	No
21-Apr-11	3	23.6	4.0	0.0000	No
26-Apr-11	10	24.0	3.5	0.0010	No
26-Apr-11	9	24.1	2.7	0.0000	No
27-Apr-11	10	24.0	3.7	0.0000	No
27-Apr-11	9	24.0	3.3	0.0000	No
28-Apr-11	10	10.9	1.8	0.0026	No
28-Apr-11	9	12.2	1.3	0.0029	No
02-May-11	10	24.5	3.3	0.0012	No
02-May-11	9	23.9	2.0	0.0029	No
03-May-11	9	23.9	1.5	0.0000	No
03-May-11	10	24.0	1.6	0.0000	No
04-May-11	9	23.9	2.5	0.0018	No
04-May-11	10	24.0	2.8	0.0000	No

**Table A-6. Asbestos Monitoring Results**

Sample Date	Sample Location	Sampling Period (hours)	Sample Volume (m <sup>3</sup> )	Asbestos (fibers/cm <sup>3</sup> )	Asbestos Exceedance? (Yes/No)
05-May-11	9	23.9	3.4	0.0018	No
05-May-11	10	23.8	2.6	0.0018	No
09-May-11	9	30.4	3.8	0.0016	No
09-May-11	10	24.6	3.1	0.0015	No
10-May-11	10	24.8	3.1	0.0014	No
11-May-11	9	23.8	2.2	0.0000	No
11-May-11	10	23.2	2.3	0.0000	No
12-May-11	9	23.1	2.2	0.0000	No
12-May-11	10	23.7	2.6	0.0000	No
16-May-11	9	24.8	2.6	0.0000	No
16-May-11	10	25.3	2.6	0.0000	No
17-May-11	9	24.5	2.3	0.0000	No
17-May-11	10	23.8	1.9	0.0000	No
18-May-11	9	23.9	2.6	0.0000	No
18-May-11	10	25.6	1.8	0.0000	No
23-May-11	9	24.0	2.6	0.0000	No
23-May-11	10	24.2	2.0	0.0000	No
24-May-11	9	24.4	2.7	0.0000	No
24-May-11	10	24.2	3.2	0.0000	No
25-May-11	9	23.3	2.6	0.0000	No
25-May-11	10	21.0	1.5	0.0000	No
26-May-11	9	23.7	2.6	0.0000	No
26-May-11	10	23.6	2.0	0.0000	No
31-May-11	9	27.5	3.1	0.0000	No
31-May-11	10	27.6	2.6	0.0000	No
01-Jun-11	9	23.9	2.7	0.0000	No
01-Jun-11	10	23.7	2.7	0.0000	No
02-Jun-11	9	23.8	2.6	0.0000	No
02-Jun-11	10	23.9	2.6	0.0000	No
07-Jun-11	9	23.1	2.2	0.0000	No
07-Jun-11	10	23.4	2.1	0.0000	No
08-Jun-11	9	23.6	2.2	0.0000	No
08-Jun-11	10	24.8	2.2	0.0000	No
09-Jun-11	9	23.9	2.4	0.0000	No
09-Jun-11	10	23.5	2.6	0.0000	No
14-Jun-11	9	25.1	2.3	0.0000	No
14-Jun-11	10	25.2	2.2	0.0000	No
15-Jun-11	9	24.1	2.2	0.0000	No
15-Jun-11	10	24.0	2.8	0.0000	No
16-Jun-11	9	24.1	2.2	0.0000	No
16-Jun-11	10	24.1	1.5	0.0000	No
20-Jun-11	9	24.0	2.2	0.0000	No
20-Jun-11	10	24.1	1.7	0.0000	No
21-Jun-11	9	24.0	2.2	0.0000	No
21-Jun-11	10	24.0	3.2	0.0000	No
22-Jun-11	9	22.5	2.1	0.0000	No
22-Jun-11	10	22.3	2.2	0.0000	No

Notes:

Threshold value for asbestos = 0.1 fibers per cm<sup>3</sup>Detection limit for asbestos is 0.003 fibers/cm<sup>3</sup> (assuming a minimum sample volume of 900 liters)cm<sup>3</sup> = cubic centimeter