

## Weekly Air Monitoring Summary

**Client:** PPG Industries

**Location:** Site 16: Linden Ave Site - Jersey City, NJ

---

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- **Table 1:** Site-Specific Alarm Levels;
- **Table 2:** Real-Time PM<sub>10</sub> Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Elevated Readings Summary for PM<sub>10</sub>;
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from July 06 through July 12, 2014 at the Linden Avenue Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 5 fixed stations and periodic hand-held monitoring. See Figure 2 for station locations.

### Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- Periodic hand-held readings when remedial activities are in known areas of Volatile Organic Compounds (VOCs);
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

### Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> and TVOC

During the report period there were no elevated 15-minute Time Weighted Average (TWA) PM<sub>10</sub> above the Site action levels shown in Table 1. There were elevated 15-minute TWA Total Volatile Organic Compounds (TVOCs) readings above the Site action levels shown in Table 1. The maximum 15 minute TWA PM<sub>10</sub> readings are shown in Table 2. The maximum hand-held PM<sub>10</sub>, TVOC concentrations are shown in Table 3. TVOC data is presented for those days when work in the area of the site containing petroleum impacted soils is performed. Elevated readings above the Site alarm levels are presented in Table 4, if applicable.

### Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium (Cr<sup>+6</sup>) and total dust are updated when available. Program-to-date average concentrations for integrated Cr<sup>+6</sup>, total dust, and real-time PM<sub>10</sub> readings are shown in Table 5.

### Summary of Meteorological Monitoring

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.

Table 1: Site-Specific Action Levels

Alarm Levels	Alert Level (15 minute TWA)	Action Level (15 minute TWA)
PM <sub>10</sub>	255 µg/m <sup>3</sup>	339 µg/m <sup>3</sup>
TVOC	1 ppm	1.3 ppm

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 µg/m <sup>3</sup> )					
Date	AMS 1	AMS 2	AMS 3	AMS 4	AMS 5
07.07.14	21.5	73.1	29.9	15.7	14.0
07.08.14	61.1	87.3	62.0	52.1	18.9
07.09.14	12.1	67.7	26.5	15.5	5.6
07.10.14	40.1	52.2	18.4	9.9	6.4
07.11.14	251.9	10.4	12.1	10.9	4.4
Weekly Statistics					
Max	251.9	87.3	62.0	52.1	18.9
Average	16.4	42.8	16.6	10.9	6.8

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> & TVOC

Maximum Instantaneous PM <sub>10</sub> & TVOC		
Date	PM <sub>10</sub> (µg/m <sup>3</sup> )	TVOC (ppm)
07.07.14	91.0	2.1
07.08.14	56.0	0.3
07.09.14	104.0	0.1
07.10.14	60.0	0.3
07.11.14	52.0	0.1

Table 4: Weekly Elevated Readings Summary

Parameter	Date	Time	Location	Wind Conditions	Elevated Concentration	Explanation
TVOC	07.07.14	0928	Site perimeter between stations 4 and 5	SW, WSW (offsite)	1.5 ppm	Readings were at a location upwind of excavation. PID readings in the excavation read 0. Readings due to offsite source.

Table 5: Program-to-Date Average Data Summary

Program-to-Date Averages					
	AMS 1	AMS 2	AMS 3	AMS 4	AMS 5
Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )	6.8	6.8	1.3	6.8	6.8
Total Dust Concentration (µg/m <sup>3</sup> )	38.2	68.3	28.6	48.2	60.6
Real-Time PM <sub>10</sub> (µg/m <sup>3</sup> )	14.7	42.1	30.7	16.3	7.4

ng/m<sup>3</sup> Nanograms per cubic meter

ppm Parts per million

µg/m<sup>3</sup> Micrograms per cubic meter

NA Not Applicable

Figure 1: Meteorological Monitoring Results Summary

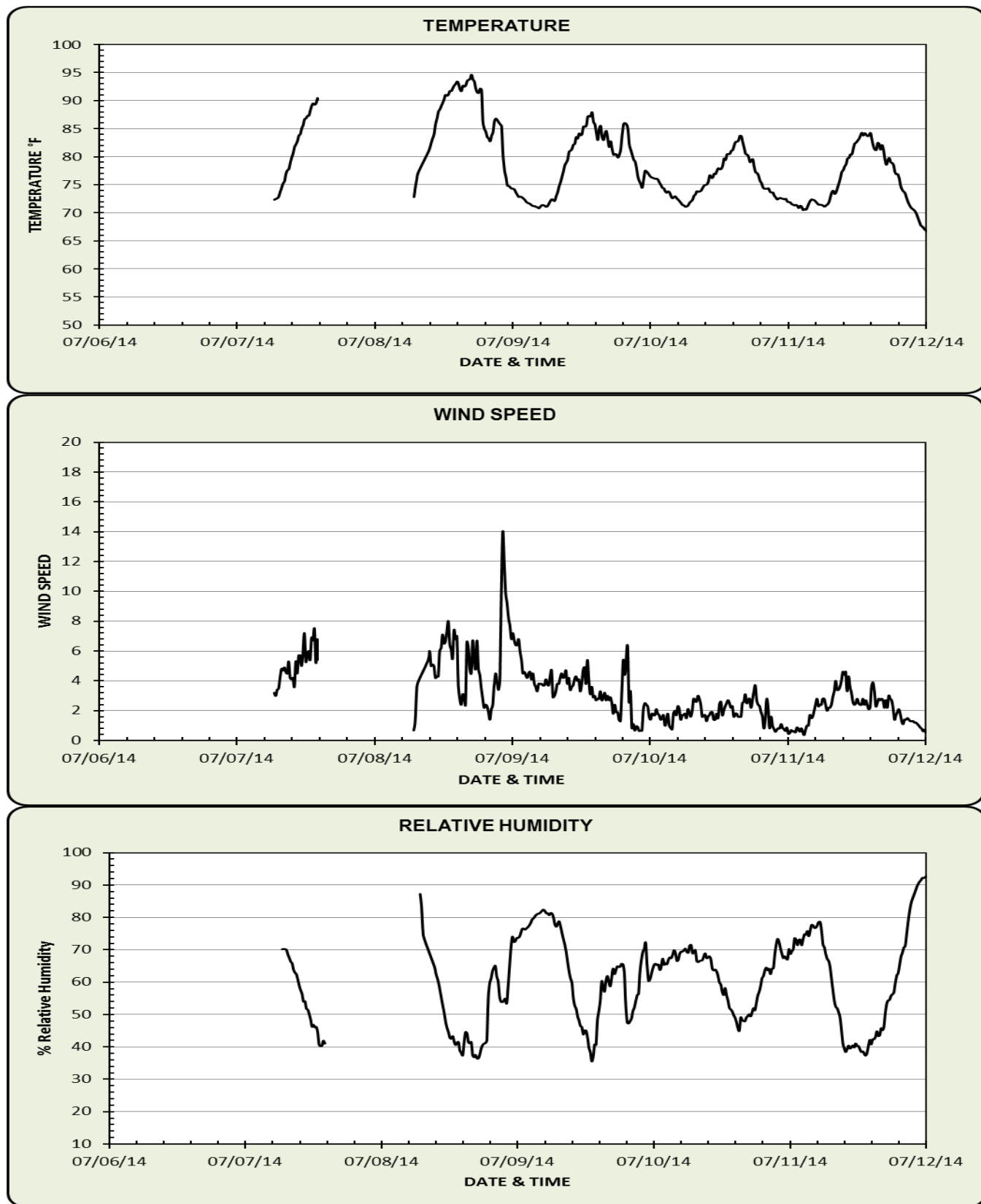


Figure 2: Air Monitoring Station Location Map

