

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 PM₁₀ Data Summary;
- **Table 3:** Weekly Hand-Held Data Summary;
- **Table 4:** Elevated Readings Summary for PM₁₀;
- **Table 5:** Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM₁₀;
- **Figure 1:** Meteorological Data; and
- **Figure 2:** Station Location Map.

This report covers real-time air monitoring from November 16 through November 22, 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 PM₁₀ 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 PM₁₀ and TVOC

During the report period there were no elevated 15-minute Time Weighted Average (TWA) PM₁₀ above the Site action levels shown in Table 1. There were no elevated 15-minute TWA Total Volatile Organic Compounds (TVOCs) readings above the Site action levels shown in Table 1. The maximum 15 minute TWA PM₁₀ readings are shown in Table 2. The maximum hand-held PM₁₀, 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⁺⁶) and total dust are updated when available. Program-to-date average concentrations for integrated Cr⁺⁶, total dust, and real-time PM₁₀ 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 ₁₀ | 255 µg/m ³ | 339 µg/m ³ |
| TVOC | 1 ppm | 1.3 ppm |

Table 2: Weekly Real-Time PM₁₀ Data Summary

| Maximum 15-Minute PM ₁₀ TWA (Action Level: 339 µg/m ³) | | | | | |
|---|-------|-------|-------|-------|-------|
| Date | AMS 1 | AMS 2 | AMS 3 | AMS 4 | AMS 5 |
| 11.17.14 | 59.3 | 71.1 | 36.0 | 56.0 | 89.1 |
| 11.18.14 | 17.1 | 22.0 | 20.2 | 15.4 | 22.6 |
| 11.19.14 | 13.1 | 17.2 | 19.7 | 18.7 | 62.3 |
| 11.20.14 | 16.9 | 23.1 | 34.1 | 26.9 | 51.1 |
| 11.21.14 | 17.6 | 21.4 | 24.3 | 17.8 | 45.4 |
| Weekly Statistics | | | | | |
| Max | 59.3 | 71.1 | 36.0 | 56.0 | 89.1 |
| Average | 15.7 | 21.9 | 17.8 | 15.5 | 25.6 |

Table 3: Weekly Hand-Held Data Summary for PM₁₀ & TVOC

| Maximum Instantaneous PM ₁₀ & TVOC | | |
|---|---------------------------------------|------------|
| Date | PM ₁₀ (µg/m ³) | TVOC (ppm) |
| 11.17.14 | 45.0 | N/A |
| 11.18.14 | 11.0 | N/A |
| 11.19.14 | 33.0 | N/A |
| 11.20.14 | 41.0 | N/A |
| 11.21.14 | 29.0 | N/A |

Note: No VOC monitoring was conducted. Known area of VOCs is no longer an area of open excavation.

Table 4: Weekly Elevated Readings Summary

| Parameter | Date | Time | Location | Wind Conditions | Elevated Concentration | Explanation |
|-----------|------|------|----------|-----------------|------------------------|-------------|
| NA | NA | NA | NA | NA | NA | NA |
| NA | NA | NA | NA | NA | NA | NA |

Table 5: Program-to-Date Average Data Summary

| Program-to-Date Averages | | | | | |
|---|-------|-------|-------|-------|-------|
| | AMS 1 | AMS 2 | AMS 3 | AMS 4 | AMS 5 |
| Cr ⁺⁶ Concentration (ng/m ³) | 7.0 | 6.9 | 1.6 | 6.9 | 6.9 |
| Total Dust Concentration (µg/m ³) | 49.5 | 44.2 | 28.8 | 64.5 | 98.9 |
| Real-Time PM ₁₀ (µg/m ³) | 14.8 | 22.8 | 19.1 | 13.3 | 21.3 |

ng/m³ Nanograms per cubic meter
 µg/m³ Micrograms per cubic meter

ppm Parts per million
 NA Not Applicable

Figure 1: Meteorological Monitoring Results Summary

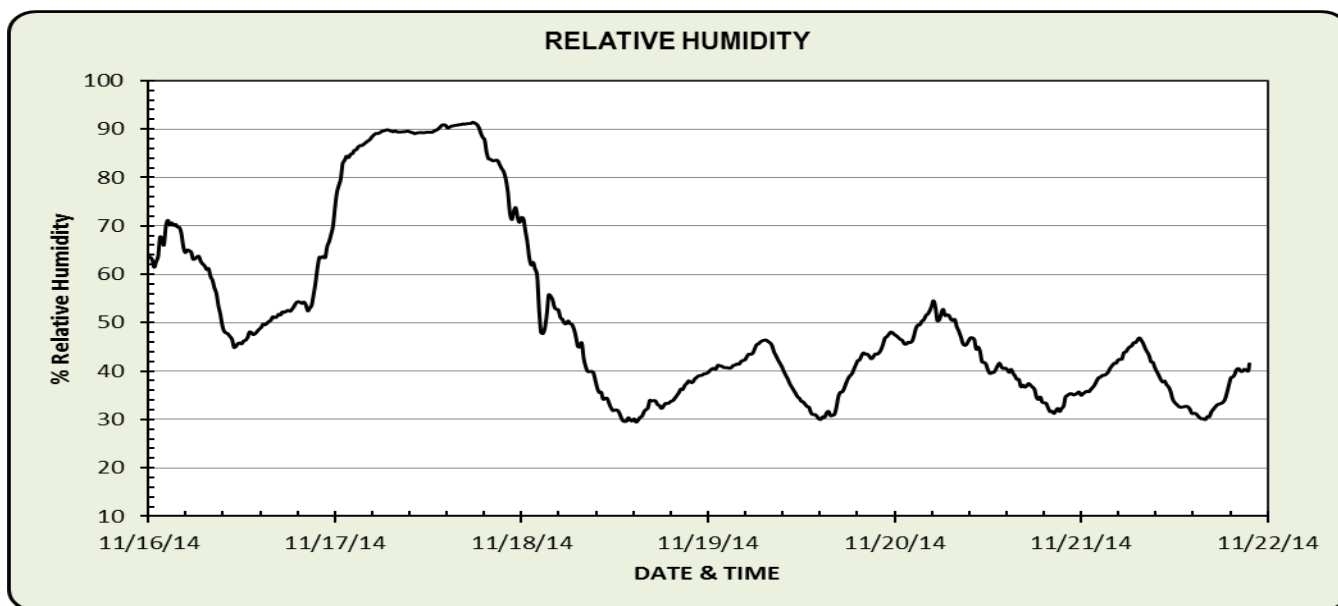
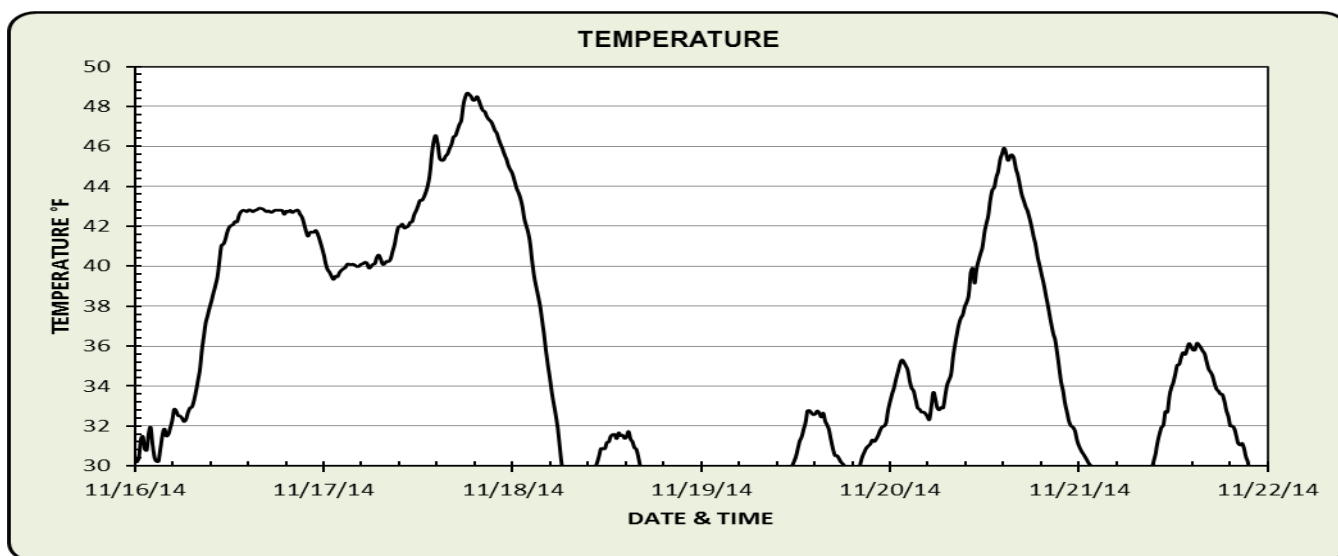
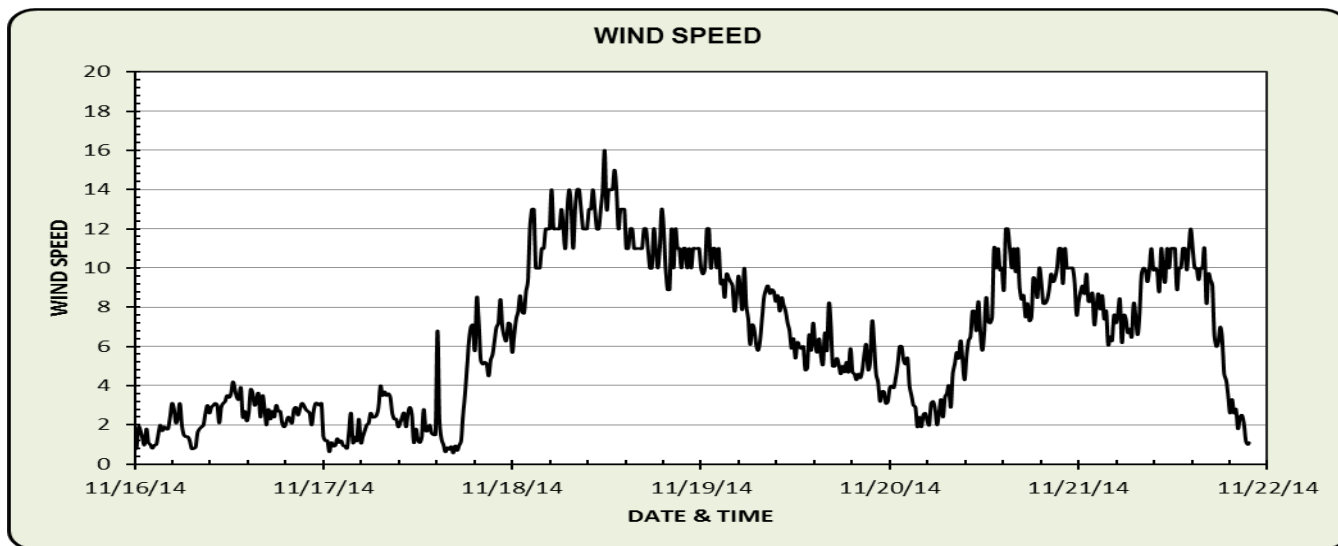


Figure 2: Air Monitoring Station Location Map

