Weekly Air Monitoring Summary

Client: PPG Industries

Location: Site 107: Fashionland 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: Weekly Real-Time PM₁₀ Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- Table 4: Weekly Elevated Readings Summary for PM₁₀;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM₁₀;
- Table 6: Weekly Real-Time H₂S Data Summary;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from July 15 through July 21, 2019 at the Fashionland 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 stations and periodic hand-held monitoring. See Figure 2 for station locations.

Perimeter air monitoring includes the following:

- $\bullet~$ Real-time 15-minute average PM_{10} readings at each location during the work day;
- Real-time H₂S readings at upwind and downwind locations during the work day;
- Periodic hand-held readings during remedial activities;
- 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 4.

Summary of Real-Time Air Monitoring Results for PM₁₀ and H₂S Concentrations

15-minute Time Weighted Average (TWA) PM_{10} Site action levels are shown in Table 1. The maximum 15 minute TWA PM_{10} readings are shown in Table 2. The maximum hand-held PM_{10} concentrations are shown in Table 3. The maximum H_2S readings are shown in Table 6. Elevated readings above the Site alarm levels are presented and explained 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/m³ | 339 µg/m³ | |

Table 2: Weekly Real-Time PM₁₀ Data Summary

| Maximum 15-Minute PM ₁₀ TWA (Action Level: 339 μg/m³) | | | | | |
|--|-------|-------|-------|-------|-------|
| Date | AMS 1 | AMS 2 | AMS 3 | AMS 4 | AMS 5 |
| 7/15/2019 | 29.6 | 10.9 | 3.7 | 19.7 | 14.3 |
| 7/16/2019 | 41.8 | 18.5 | 23.1 | 95.7 | 14.4 |
| 7/17/2019 | 47.5 | 29.0 | 4.3 | 167.9 | 22.7 |
| 7/18/2019 | 58.1 | 33.0 | 4.1 | 61.0 | 25.0 |
| 7/19/2019 | 53.9 | 29.1 | 4.3 | 42.4 | 16.8 |
| 7/20/2019 | 46.1 | 24.3 | 3.7 | 48.0 | 20.4 |
| 7/21/2019 | 45.1 | 24.3 | 3.6 | 48.0 | 20.1 |
| Weekly Statistics | | | | | |
| Max | 58.1 | 33.0 | 23.1 | 167.9 | 25.0 |
| Average | 24.8 | 16.6 | 2.9 | 23.3 | 9.7 |

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM₁₀ Concentration

| Maximum Instantaneous Hand-Held PM₁₀ Concentration | | | | | |
|--|--------------------------|-------|----------|--|--|
| Date | PM ₁₀ (μg/m³) | Time | Location | | |
| 7/15/2019 | 12 | 11:00 | AMS1 | | |
| 7/16/2019 | 16 | 11:00 | AMS2 | | |
| 7/17/2019 | 82 | 9:00 | AMS5 | | |
| 7/18/2019 | 44 | 10:00 | AMS3 | | |
| 7/19/2019 | 91 | 9:00 | AMS2 | | |

Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated Concentration | Explanation |
|----------|------|------|--------------------|------------------------|-------------|
| N/A | N/A | N/A | N/A | N/A | N/A |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM₁₀ Summary

| Program-to-Date Averages (Cr ⁺⁶ & Total Dust Results from 5/7/18-7/12/19) | | | | | | | |
|--|------|------|------|------|------|--|--|
| AMS 1 AMS 2 AMS 3 AMS 4 AMS 5 | | | | | | | |
| Cr ⁺⁶ Concentration (ng/m ³) | 5.7 | 5.6 | 5.8 | 1.5 | 5.4 | | |
| Total Dust Concentration (µg/m³) | 57.0 | 51.9 | 54.0 | 19.7 | 53.6 | | |
| Real-Time PM ₁₀ (µg/m ³) | 19.1 | 18.3 | 16.6 | 24.3 | 17.6 | | |

ng/m³ - Nanograms per cubic meter µg/m³ - Micrograms per cubic meter NA - Not Applicable

Table 6: Weekly Real-Time H₂S Data Summary

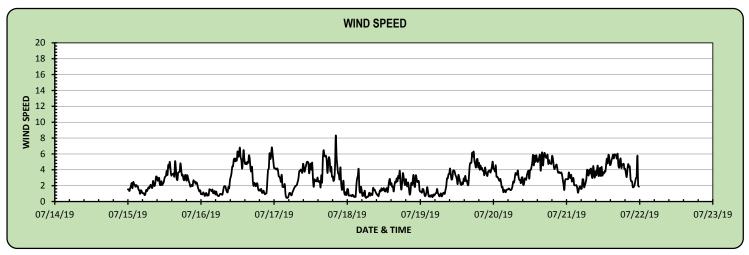
| Maximum H₂S Concentration (Action Level: 1000 ppb) | | | | | | |
|--|-------|-------|-------|-------|-------|--|
| Date | AMS 1 | AMS 2 | AMS 3 | AMS 4 | AMS 5 | |
| 7/15/2019 | N/A | N/A | N/A | N/A | N/A | |
| 7/16/2019 | N/A | N/A | N/A | N/A | N/A | |
| 7/17/2019 | N/A | N/A | N/A | N/A | N/A | |
| 7/18/2019 | N/A | N/A | N/A | N/A | N/A | |
| 7/19/2019 | N/A | N/A | N/A | N/A | N/A | |
| Weekly Statistics | | | | | | |
| Max | N/A | N/A | N/A | N/A | N/A | |
| Average | N/A | N/A | N/A | N/A | N/A | |

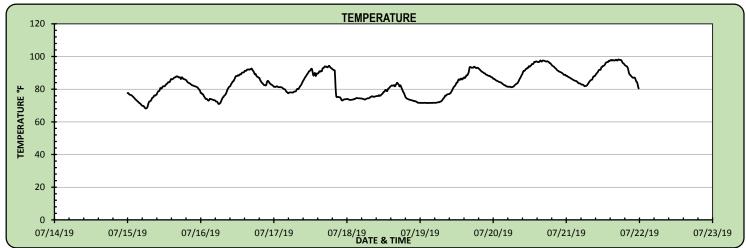
Note: N/A indicates H₂S monitoring was not conducted at the station.

ppb - parts per billion



Figure 1: Meteorological Data





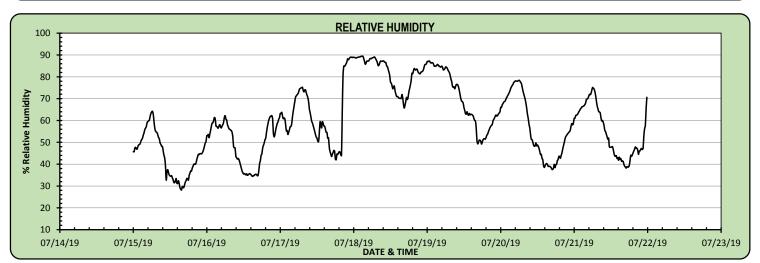




Figure 2: Station Location Map



