Weekly Air Monitoring Summary

Client: PPG Industries

Location: Site 174: Dennis Collins Park Site - Bayonne, 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:
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from March 23 through 29, 2020 at the Dennis Collins Park 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 6 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;
- 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.

Summary of Real-Time Air Monitoring Results for PM₁₀ 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. 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 PM_{10} 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	AMS 6			
3/23/2020	6.6	14.1	22.3	34.6	11.9	8.6			
3/24/2020	7.7	12.8	17.8	48.9	12.1	14.7			
3/25/2020	8.4	25.4	20.9	49.1	23.2	N/A			
3/26/2020	11.0	38.3	47.6	101.0	22.3	N/A			
3/27/2020	10.8	26.9	34.1	65.7	44.3	N/A			
3/28/2020	N/A	N/A	N/A	N/A	20.6	N/A			
3/29/2020	N/A	N/A	N/A	N/A	16.3	N/A			
_	Weekly Statistics								
Max	11.0	38.3	47.6	101.0	44.3	14.7			
Average	6.9	14.5	16.7	44.6	10.8	8.2			

Note: Highlighted cells indicate exceedance of the action level. AMS 6 was removed from use on 3/25/20 and monitoring stations were reconfigured around the site.

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

Maximum Instantaneous Hand-Held PM₁₀ Concentration						
Date	PM ₁₀ (μg/m³)	Time	Location			
3/23/2020	130	7:00	AMS 2			
3/24/2020	60	7:00	AMS 2			
3/25/2020	86	15:00	AMS 2			
3/26/2020	24	18:00	AMS 4			
3/27/2020	58	14:00	AMS 4			

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

NA - Not Applicable

Program-to-Date Averages (Cr ⁺⁶ & Total Dust Results from 1/1/20-3/20/20)						
	AMS 1	AMS 2	AMS 3	AMS 4	AMS 5	AMS 6
Cr ⁺⁶ Concentration (ng/m ³)	5.8	6.5	6.4	7.2	2.4	10.4
Total Dust Concentration (µg/m³)	45.8	53.5	48.6	51.2	14.5	30.1
Real-Time PM ₁₀ (μg/m³)	8.9	23.6	23.4	51.3	14.1	18.1

ng/m³ - Nanograms per cubic meter

μg/m³ - Micrograms per cubic meter



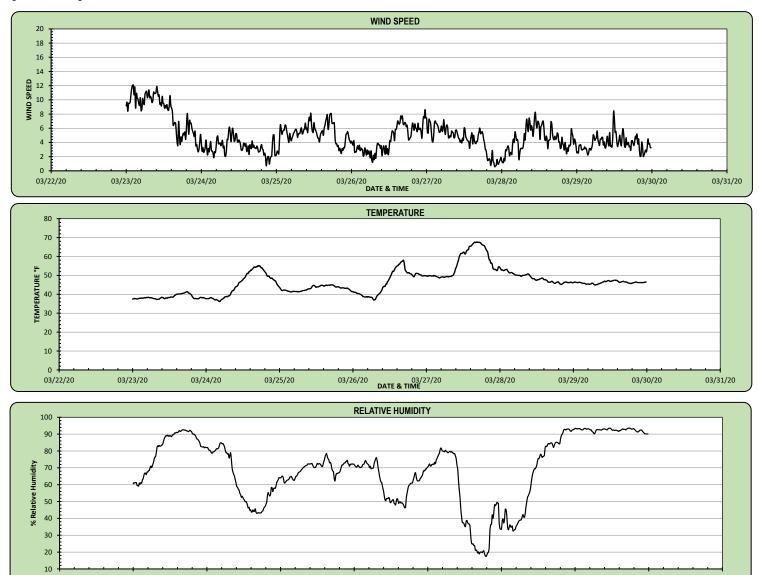
Figure 1: Meteorological Data

03/23/20

03/24/20

03/25/20

03/22/20



03/26/20 03/27/20 DATE & TIME 03/28/20



03/31/20

03/30/20

03/29/20

Figure 2: Station Location Map



Legend:

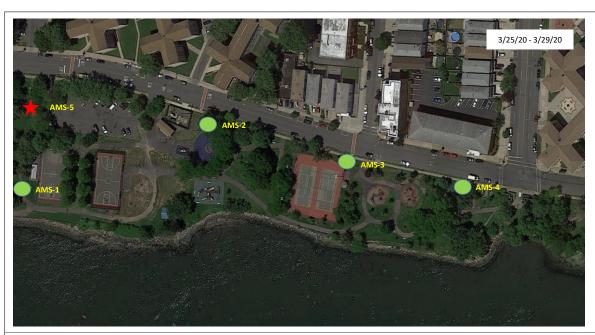




Definitions:

AMS - Air Monitoring Station





Legend:

Fenceline AMS



Definitions:

AMS - Air Monitoring Station

