

# **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 63 and 65: Baldwin Burma Sites - 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 October 19 through October 25, 2014 at the Burma Road 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) or in radiologically-impacted areas;
- 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> TVOC, and Radiological Concentrations

During the report period there were no elevated 15-minute Time Weighted Average (TWA)  $PM_{10}$  or Total Volatile Organic Compounds (TVOCs) readings above the Site action levels shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$ , TVOC, and radiological concentrations are shown in Table 3. TVOC and Radiological data is presented for those days when work in the area of the site containing petroleum impacted soils and naturally occurring radioactive material 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/m³	339 μg/m³		
TVOC	1 ppm	1.4 ppm		
Radiological		4.00 E-12 μCi/mI (Derived Air Concentration)		

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

Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³)							
Date	AMS 1	AMS 2	AMS 3	AMS 4	AMS 5		
10.20.14	44.6	31.3	26.1	26.9	21.2		
10.21.14	48.1	29.1	28.5	26.1	25.0		
10.22.14	11.0	15.1	15.7	10.3	10.5		
10.23.14	8.8	6.9	6.8	4.2	4.3		
10.24.14	3.3	4.8	3.5	2.4	3.0		
Max	48.1	31.3	28.5	26.9	25.0		
Average	11.6	10.8	10.0	9.7	8.5		

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

Maximum Instantaneous PM <sub>10</sub> , TVOC, & Radiological Concentration							
Date	PM <sub>10</sub> (μg/m³)	TVOC (ppm)	Radiological (µCi/ml)				
10.20.14	28.0	0.0	5.99E-14				
10.21.14	22.0	0.0	3.81E-14				
10.22.14	15.0	0.0	NA				
10.23.14	27.0	0.0	NA				
10.24.14	21.0	0.0	NA				

Note: No radiological sampling conducted on 10/22 and 10/23 due to precipitation.

No radiological sampling conducted on 10/24 due to no load-out activity and excavation activities.

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 <sup>+6</sup> Concentration (ng/m³)	7.4	7.3	2.2	7.3	6.5		
Total Dust Concentration (μg/m³)	44.0	36.6	20.6	45.8	50.3		
Real-Time PM <sub>10</sub> (μg/m³)	26.9	25.4	28.3	31.3	37.0		

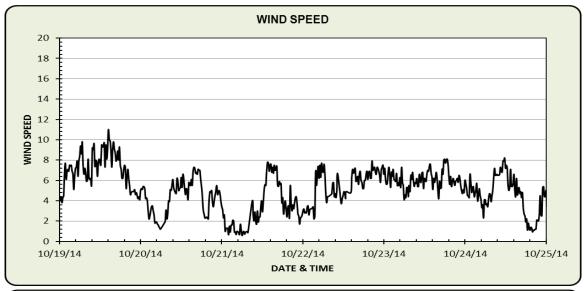
ng/m³ Nanograms per cubic meter μg/m³ Micrograms per cubic meter

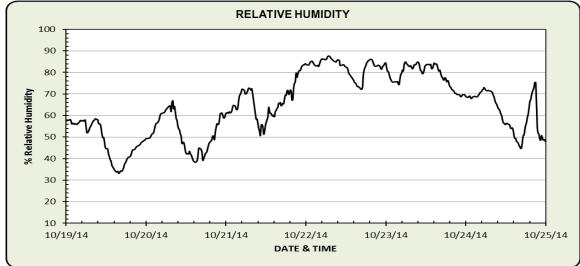
ppm Parts per millionNA Not Applicable

μCi/mL Microcuries per milliliter



Figure 1: Meteorological Monitoring Results Summary





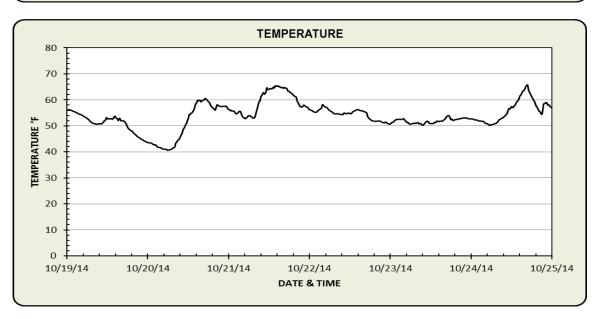




Figure 2: Air Monitoring Station Location Map

