



May 24, 2023

**Ms. Maureen Hatfield, P.G.**

Texas Commission on Environmental Quality  
MC-127  
VCP-CA Section, Team 1, Remediation Division  
P.O. Box 13087  
Austin, Texas 78711-3087

**RE: WEEKLY STATUS UPDATE – ENGLEWOOD YARD NORTH BYPASS PROJECT  
UNION PACIFIC RAILROAD HOUSTON WOOD PRESERVING WORKS SITE  
4910 LIBERTY ROAD FACILITY, HOUSTON, TEXAS  
POST-CLOSURE CARE PERMIT NO. 50343, INDUSTRIAL SWR NO. 31547**

Dear Ms. Hatfield:

WSP USA Inc. (WSP), on behalf of Union Pacific Railroad (UPRR), prepared this weekly status update for the Englewood Yard North By-Pass Project (the Project) that includes areas of construction within the UPRR Houston Wood Preserving Works (HWPW) site (the Site) (Post-Closure Care Permit No. 50343) located at 4910 Liberty Road, Houston, Texas. Below is a summary of the Project activities conducted at the Site for the reporting period:

**Week Period:** *May 15 through 21, 2023*

Construction activities performed during this reporting period involved excavating within the HWPW Site using hydro-vac methods to install the Signal Bridge Foundations near the Lockwood Drive bridge.

**Dust Control and Air Monitoring**

IHST conducted real time air and dust monitoring at the Site in accordance with the Air Monitoring Plan (July 8, 2021), and the results for this period are provided in **Attachment A**. There were no events where PM 2.5 and PM 10 readings increased above the Take-Action Level or Stop-Work Level during the monitoring period.

**Soil Management**

Approximately 14 CY of soil was generated during hydro-vac activities located near the Lockwood Drive bridge within the Railroad Ballast Cap but outside of the former wood treating operations at the Site. Soils were initially contained in a truck-mounted hydro-vac tank and deposited into lined roll-off containers with secondary containment. The roll-offs are staged at the HWPW Container Storage Area (CSA) pending characterization, profiling, and disposal.

**Stormwater/Hydro-Vac Water Management**

Approximately 1,000 gallons of stormwater and hydro-vac water were contained during excavation activities within the Railroad Ballast Cap Area near the Lockwood Drive bridge. Stormwater and hydro-vac water were pumped into the 4,800-gallon stormwater container with secondary containment staged at the HWPW CSA pending sampling to characterize the water for disposal.

Planned Construction Activities for the period between **May 22 through 28, 2023** for the Site include continuing the installation of the signal bridge foundations and the signal line trench within the Railroad Ballast Cap areas near the Lockwood Drive bridge. Construction activities within the HWPW Site are anticipated to conclude in June 2023.

**Dust Control and Air Monitoring**

Air monitoring per the approved Air Monitoring Plan (July 8, 2021) will continue to be conducted as soil excavation activities are taking place.

**Soil Management**

Managing excavated soils, in the event excavated soils are generated, within the Site will follow the approved Soil Management Plan (SMP).

**Stormwater Management**

Stormwater management, in the event of rainfall in the area, per the approved Storm Water Pollution Prevention Plan (SWPPP) will be conducted.

If you have any questions or need additional information, please feel free to contact Mr. Kevin Peterburs of UPRR at (414) 267-4164.

Sincerely,

**WSP USA Inc.**



Anthony Reid, P.G.  
*Sr. Consultant Geologist*



Patrick Marty, P.M.P.  
*Assistant Vice President Environmental Scientist*

**ATTACHMENT A**

# Weekly Report of Air Monitoring



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Leaders in  
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and Innovation



## **Weekly Report of Air Monitoring**

### **Union Pacific Railroad North Bypass Construction Project**

**Former Houston Wood Preserving Works Site  
Houston, TX**

**For Period from 2023-05-15 to 2023-05-21**

## Contents

Summary Results of Daily Dust Monitoring .....	3
Summary Results of Daily Weather Conditions .....	7
Daily Time History Detail for PM 2.5 and PM 10 Dust Levels.....	11

## Summary Results of Daily Dust Monitoring

This section provides overall summary results for perimeter dust monitoring conducted during the week specified. Dust monitoring results include the average PM 2.5 and PM 10 monitoring results over the sample period at each sample location for each day. Each day's summary provides also includes a description of the work activities performed that day, and any items, issues or occurrences of note.

The 24-hour USEPA National Ambient Air Quality Standard (NAAQS) for PM 2.5 particulate matter is 35 ug/m<sup>3</sup>, and 150 ug/m<sup>3</sup> for PM 10 particulate matter. The Texas Department of Environmental Quality (TCEQ) has adopted these values. UPRR has established dust control levels for railroad construction activities to help ensure that particulate levels do not exceed the 24-hour NAAQS as a result of construction activities.

Overall averages provided are for the sample period specified by the start and stop times. Unless otherwise specified, the sample periods are inclusive of all potentially significant dust generating activities.

Location of air sampling stations are consistent the Dust Control and Air Monitoring Plan dated 7/8/2021 and approved by the Texas Commission on Environmental Quality (TCEQ). Minor variations in station placement may occur, based on work activities, environmental factors, observed patterns of dust dispersion and practical constraints. One sample location specified in the original plan, located on the far southwest corner of the site just southwest of Kirk Street, has not been used to date. The originally proposed location is not readily accessible for daily equipment deployment and is outside of the current excavation areas of the construction.

Work on or near the capped area of the former Houston Wood Preserving Works site occurred on Tuesday, May 16, Wednesday, May 17 and Sunday, May 21, 2023. Air monitoring data is provided for these days. On May 16-17, the air monitoring station normally located on the north side of the capped area, near the intersection of Liberty and Fontinot was not deployed due to wet conditions making the location inaccessible. Site had sufficient dried by May 21, and the station was re-deployed.

## PM 2.5 and PM 10 Daily Summary Results

**Sample Date**  
May 16, 2023

### Description of Work Performed

Work plan for the day included hydro-vacuuming, excavation and backfilling for signal tower foundations near the east end of the North Bypass Service Road of the former Houston Wood Preserving Works site, and also on the south side of the railroad tracks in the intermodal yard. Work occurred near the Lockwood overpass. Work hours were from approximately 08:00 – 11:00.

### Overview Map of Daily Sample Locations



Station ID	Location Description	Start	Stop	Latitude	Longitude	Overall Average PM 2.5	Overall Average PM 10
AMS-01	HWPW - Erastus	08:57	11:47	29.78759	-95.31662	9 ug/m3	21.8 ug/m3
AMS-03a	HWPW - Solo North	08:32	11:10	29.78732	-95.32103	9.6 ug/m3	26 ug/m3
AMS-05b	HWPW - Eddie and Amboy	08:41	11:23	29.7859	-95.32376	8.2 ug/m3	20.5 ug/m3
AMS-06b	IMY South - Gagne	08:01	18:42	29.78203	-95.3193	5.8 ug/m3	16.6 ug/m3
AMS-08b	IMY SE - Fontinot	08:00	12:04	29.78209	-95.31766	9.4 ug/m3	25.5 ug/m3
AMS-09	IMY South - Waco and Lee	08:08	12:50	29.7821	-95.32497	8.3 ug/m3	20 ug/m3
AMS-10b	HWPW - Kashmere and Liberty	08:36	11:14	29.78756	-95.32379	8.2 ug/m3	20 ug/m3
AMS-13a	HWPW - Quitman East	08:46	11:34	29.78478	-95.32394	9.5 ug/m3	23.1 ug/m3

**Note:** The air monitoring station on the south west area of the intermodal yard, near the intersection of Lee and Schweikhardt experienced battery pack issues and could not be brought online.

### PM 2.5 and PM 10 Daily Summary Results

**Sample Date**  
May 17, 2023

**Description of Work Performed**

Work plan for the day included hydro-vacuuming, excavation and backfilling for signal tower foundations near the east end of the North Bypass Service Road of the former Houston Wood Preserving Works site, and also on the south side of the railroad tracks in the intermodal yard. Work occurred near the Lockwood overpass. Work hours were from approximately 07:45 – 16:30.

**Overview Map of Daily Sample Locations**



Station ID	Location Description	Start	Stop	Latitude	Longitude	Overall Average PM 2.5	Overall Average PM 10
AMS-01	HWPW - Solo North	08:21	17:26	29.78734	-95.32103	7.9 ug/m3	16.9 ug/m3
AMS-03a	HWPW - Erastus	08:49	17:07	29.78761	-95.31664	7.9 ug/m3	17.9 ug/m3
AMS-05b	HWPW - Eddie and Amboy	08:32	17:18	29.7859	-95.32376	6.9 ug/m3	15.1 ug/m3
AMS-06b	IMY South - Gagne	09:50	16:56	29.78204	-95.31929	6.2 ug/m3	14.7 ug/m3
AMS-07	IMY South - Yates	12:37	17:01	29.78208	-95.32319	7.4 ug/m3	15.3 ug/m3
AMS-08b	IMY SE - Fontinot	07:47	16:55	29.78208	-95.31772	7.3 ug/m3	16 ug/m3
AMS-09	IMY South - Waco and Lee	07:51	17:01	29.78207	-95.325	6.9 ug/m3	15.4 ug/m3
AMS-10b	HWPW - Quitman East	08:39	17:14	29.78479	-95.32397	6.6 ug/m3	13.9 ug/m3
AMS-13a	HWPW - Kashmere and Liberty	08:27	17:23	29.78756	-95.32384	8.1 ug/m3	17.1 ug/m3



## PM 2.5 and PM 10 Daily Summary Results

**Sample Date**  
May 21, 2023

### Description of Work Performed

Work plan for the day included hydro-vacuuming, excavation and backfilling for signal tower foundations near the east end of the North Bypass Service Road of the former Houston Wood Preserving Works site, and also on the south side of the railroad tracks in the intermodal yard. Work occurred near the Lockwood overpass. Work hours were from approximately 07:45 – 15:50. No excavation work took place after noon, as crews were blocked by trains in the yard.

### Overview Map of Daily Sample Locations



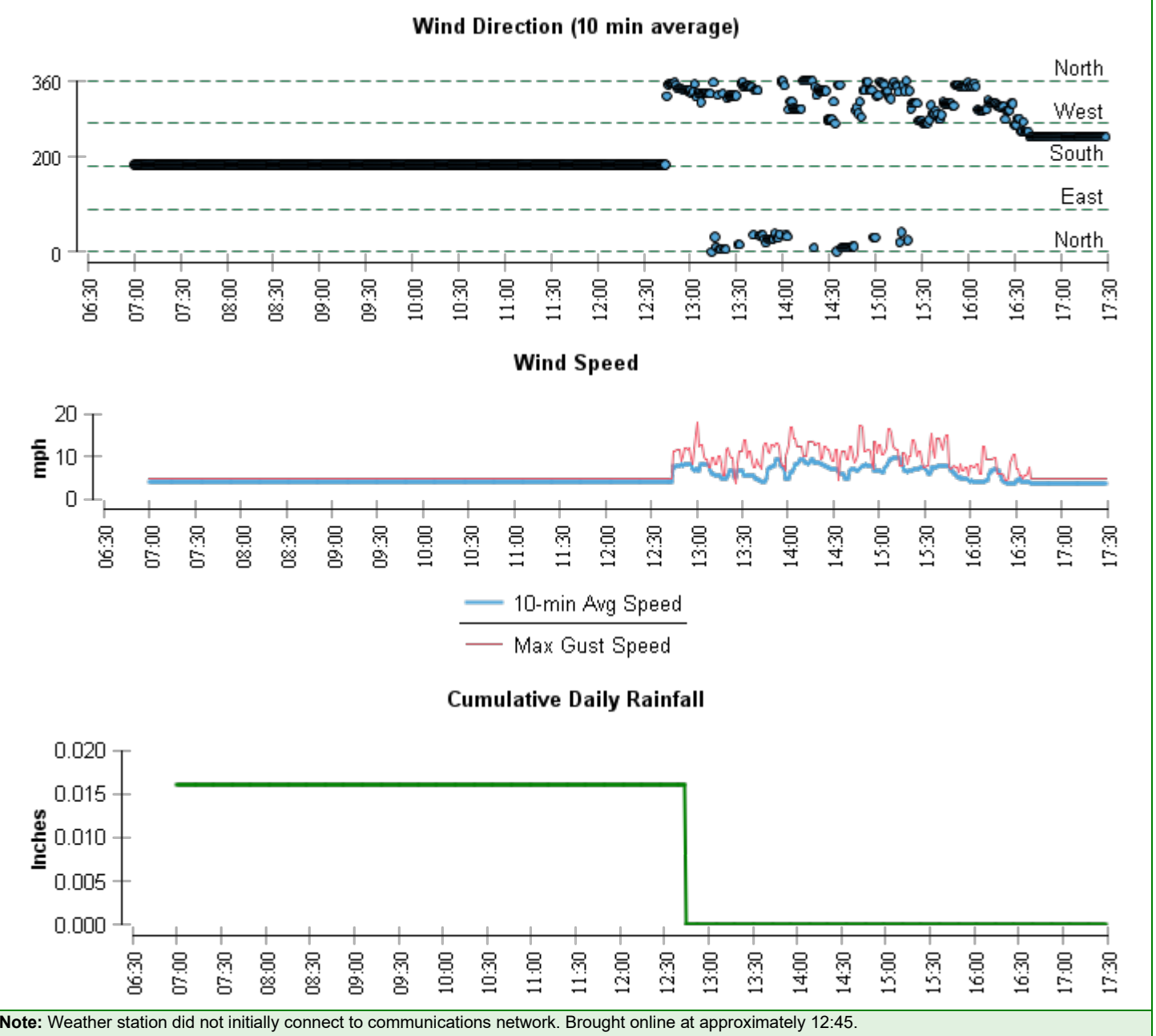
Station ID	Location Description	Start	Stop	Latitude	Longitude	Overall Average PM 2.5	Overall Average PM 10
AMS-01	HWPW - Erastus	08:17	16:05	29.78757	-95.31666	20.7 ug/m3	52.1 ug/m3
AMS-03a	HWPW - Solo North	08:35	16:19	29.78731	-95.32101	19.4 ug/m3	50.9 ug/m3
AMS-05b	HWPW - Kashmere and Liberty	08:30	16:16	29.78751	-95.32383	18.6 ug/m3	46.7 ug/m3
AMS-06b	IMY SE - Clementine	08:00	16:48	29.78206	-95.31927	15.5 ug/m3	45.5 ug/m3
AMS-07	IMY South - Yates	07:58	16:44	29.78212	-95.32325	19.2 ug/m3	52.8 ug/m3
AMS-08b	IMY SE - Fontinot	08:01	16:55	29.78206	-95.31768	19.8 ug/m3	51.9 ug/m3
AMS-09	IMY South - Waco and Lee	07:56	16:42	29.78213	-95.32496	1.2 ug/m3	1.2 ug/m3
AMS-11	HWPW - Clementine North	08:45	16:25	29.78755	-95.31895	19.8 ug/m3	52.3 ug/m3
AMS-13a	HWPW - Quitman East	08:21	16:10	29.78488	-95.32393	19.8 ug/m3	49.5 ug/m3

## Summary Results of Daily Weather Conditions

This section provides charts showing wind speed, wind direction and rainfall during each day of sampling during the specified week.

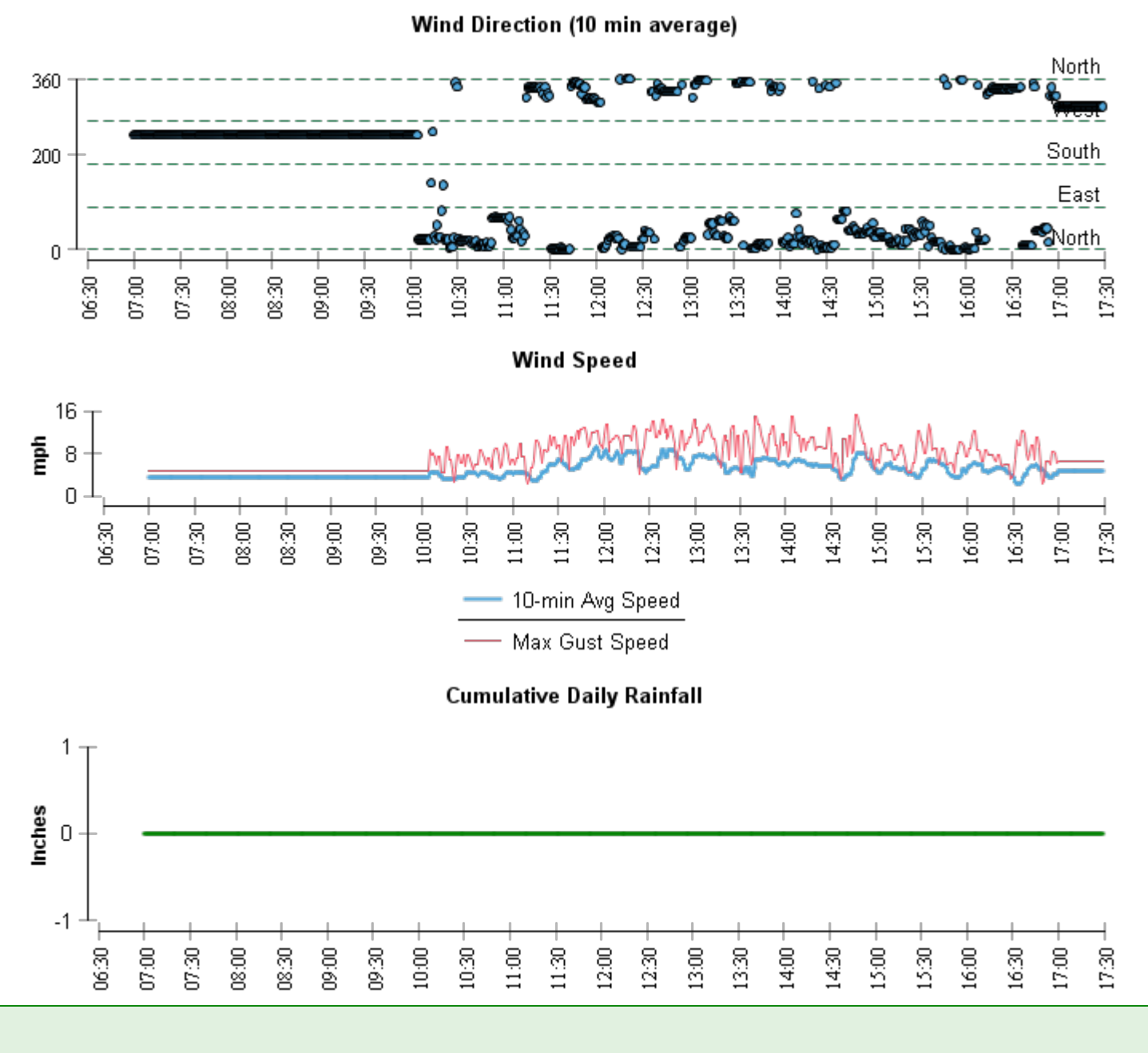
### Weather Time History Data

Sample Date **May 16, 2023**



### Weather Time History Data

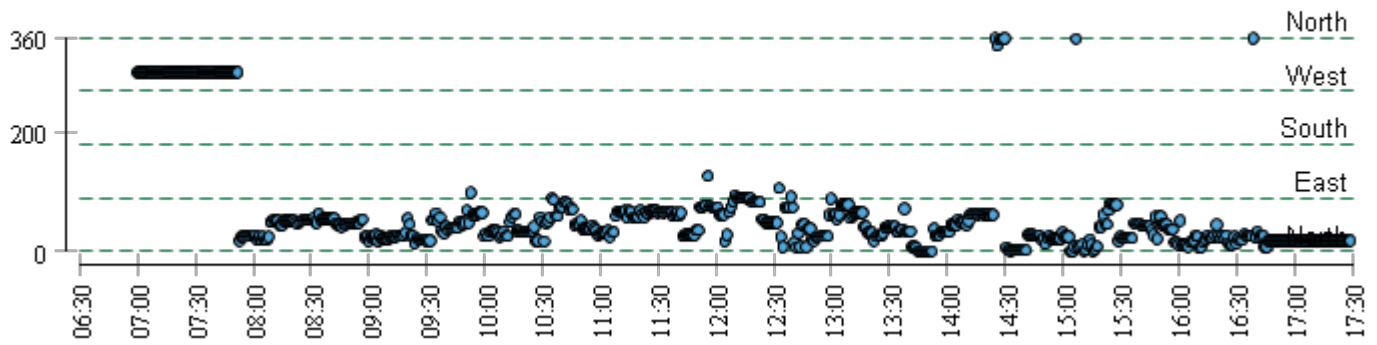
Sample Date **May 17, 2023**



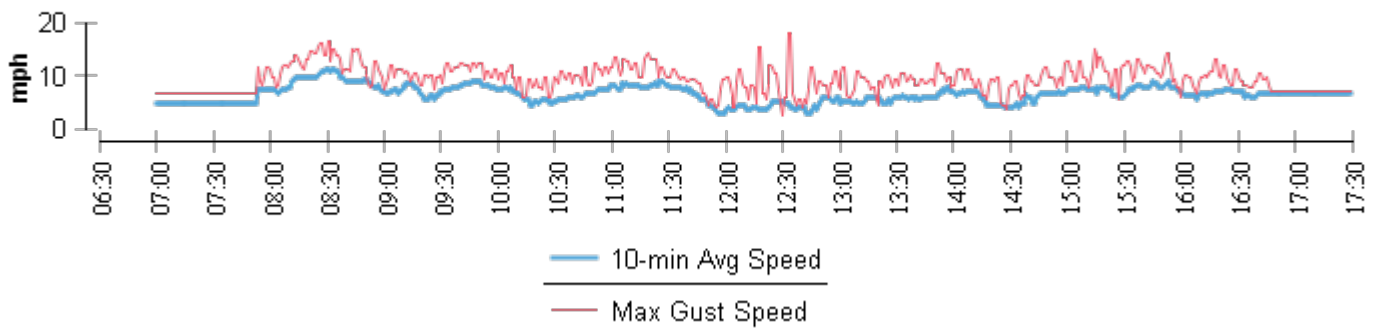
### Weather Time History Data

Sample Date **May 21, 2023**

**Wind Direction (10 min average)**



**Wind Speed**



**Cumulative Daily Rainfall**



## Daily Time History Detail for PM 2.5 and PM 10 Dust Levels

This section provides charts showing the rolling thirty-minute average concentrations of PM 2.5 and PM 10 particulates measured at each location on each sample day during the specified week.

PM 2.5 and PM 10 airborne particulate levels are measured every two minutes during the active sampling period. The charts track the average particulate concentrations over the past 30 minutes at the time of the measurement.

Union Pacific Railroad (UPRR) has established control levels for airborne particulates to help ensure that construction-related dust levels are adequately controlled. These levels are explained as follows:

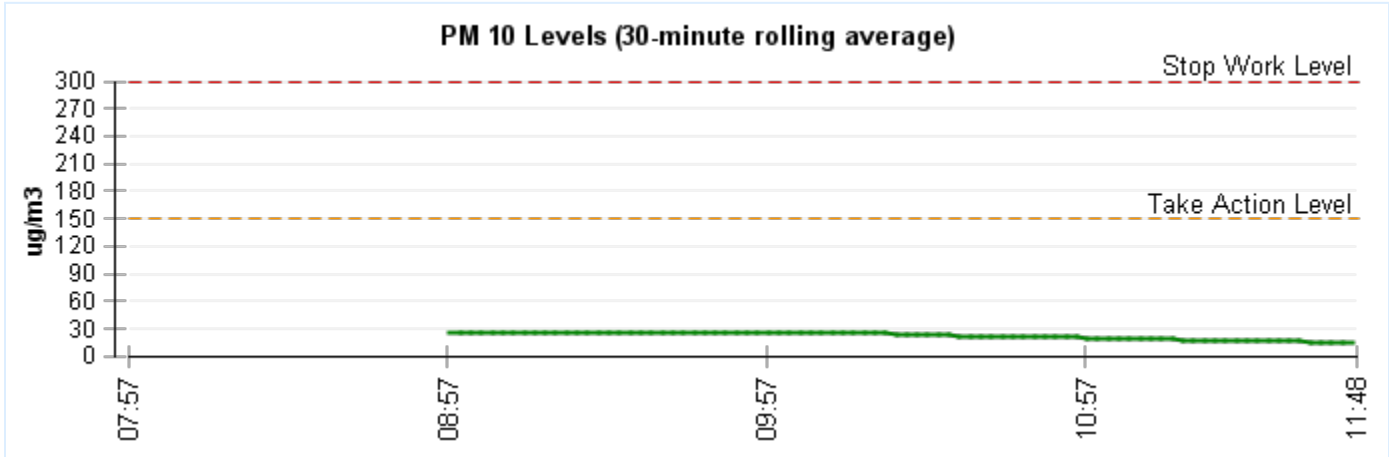
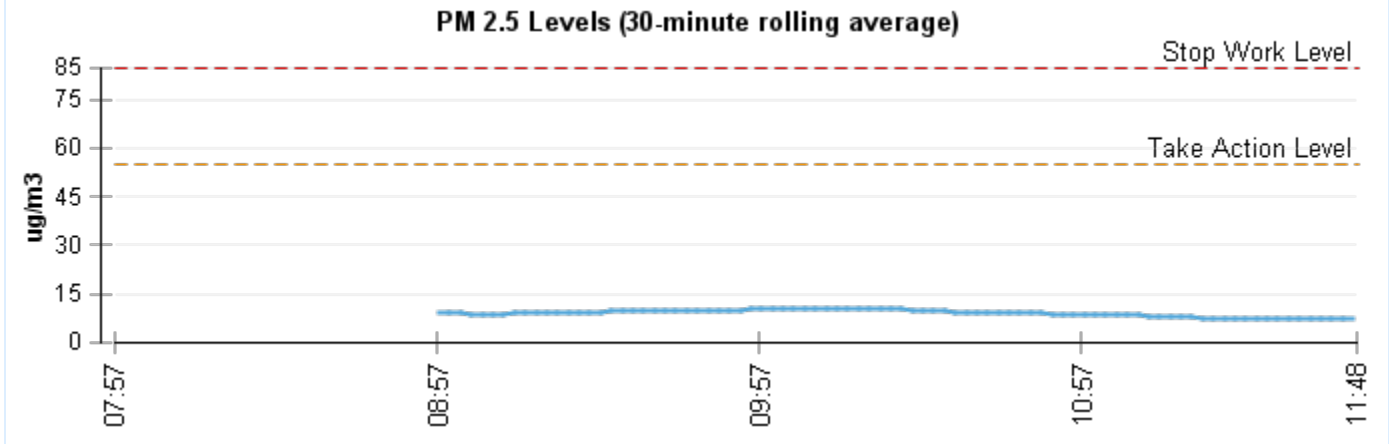
- Take-Action Level - 30-minute average dust concentrations  $>55 \text{ ug/m}^3$  (PM 2.5) or  $>150 \text{ ug/m}^3$  (PM 10)  
Additional dust control measures, as outlined in the site dust control plan, will be promptly implemented to reduce levels below the Take-Action Level.
- Stop-Work Level - 30-minute average dust concentrations  $>85 \text{ ug/m}^3$  (PM 2.5) or  $>300 \text{ ug/m}^3$  (PM 10)  
Work will be stopped immediately, as outlined in the site dust control plan, and UPRR will evaluate dust control measures. Work will not resume until UPRR has implemented additional controls that will effectively prevent generation of dust levels above the Stop-Work Level.

Air monitoring stations may exhibit higher than actual readings during the first 5 - 10 minutes after startup, before the instrumentation has fully warmed up. This is a known and expected behavior of the instrumentation.

### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

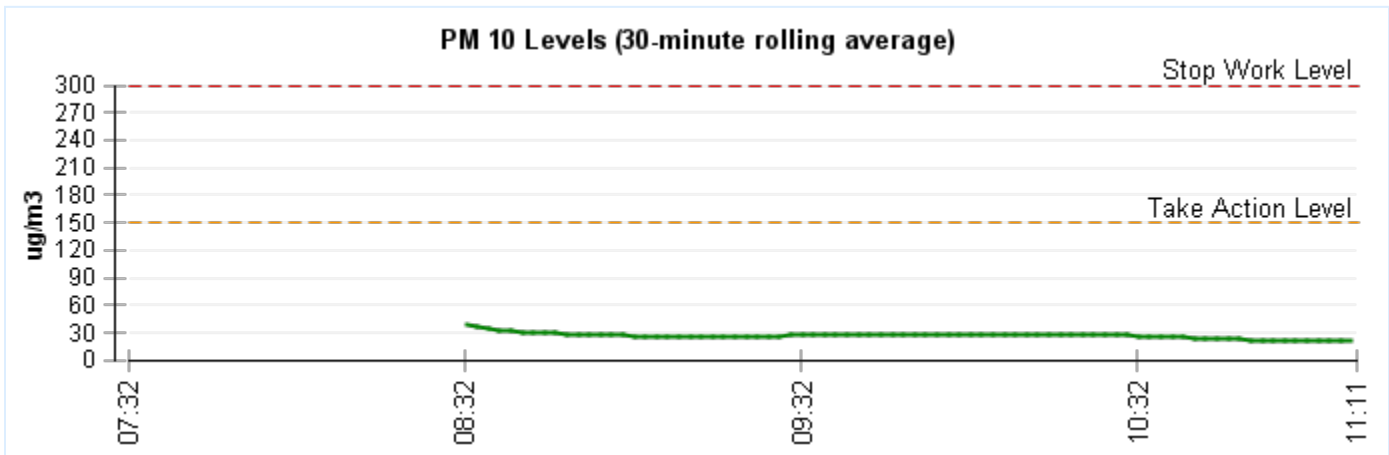
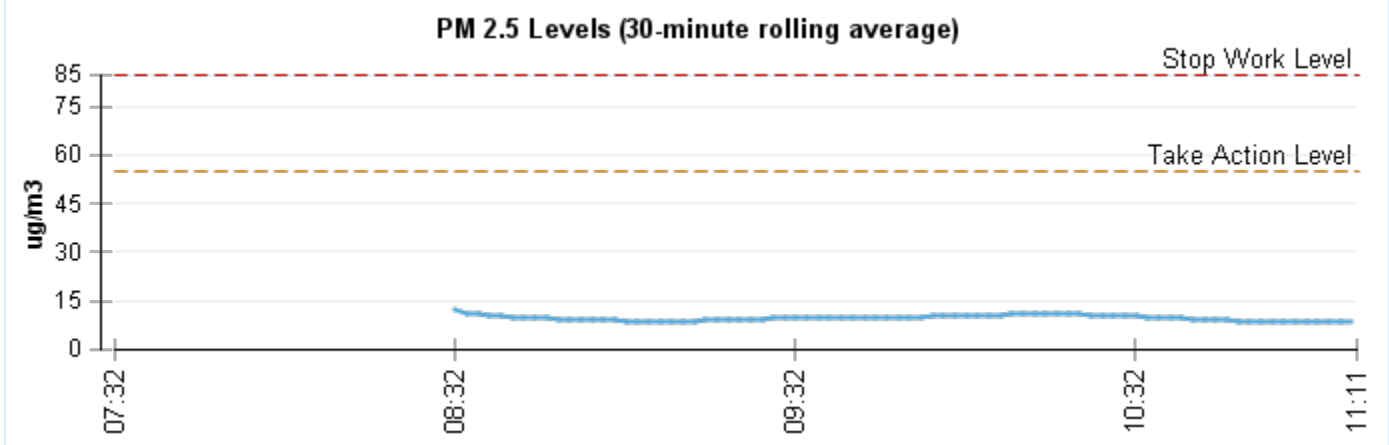
**Station ID**                              **Location Description**  
 AMS-01                                      29.78759, -95.31662 - HWPW - Erastus



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

**Station ID**                              **Location Description**  
 AMS-03a                                  29.78732, -95.32103 - HWPW - Solo North

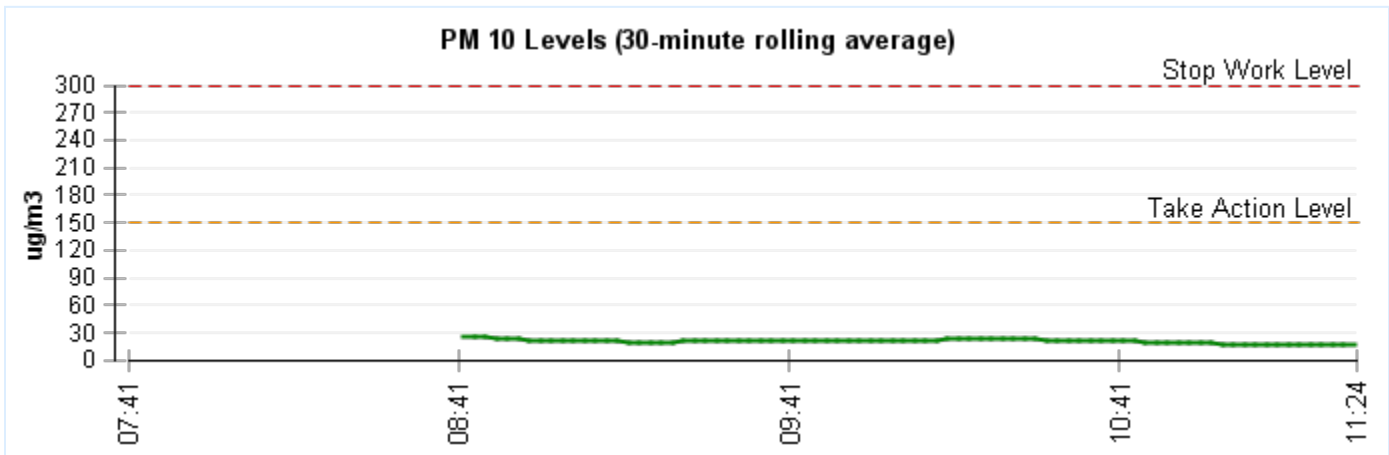
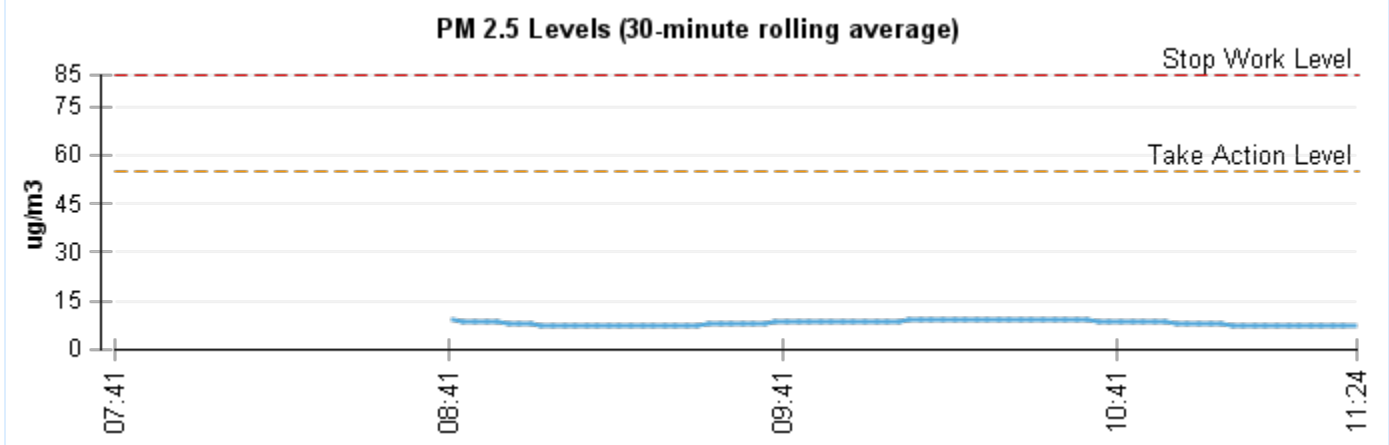




### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

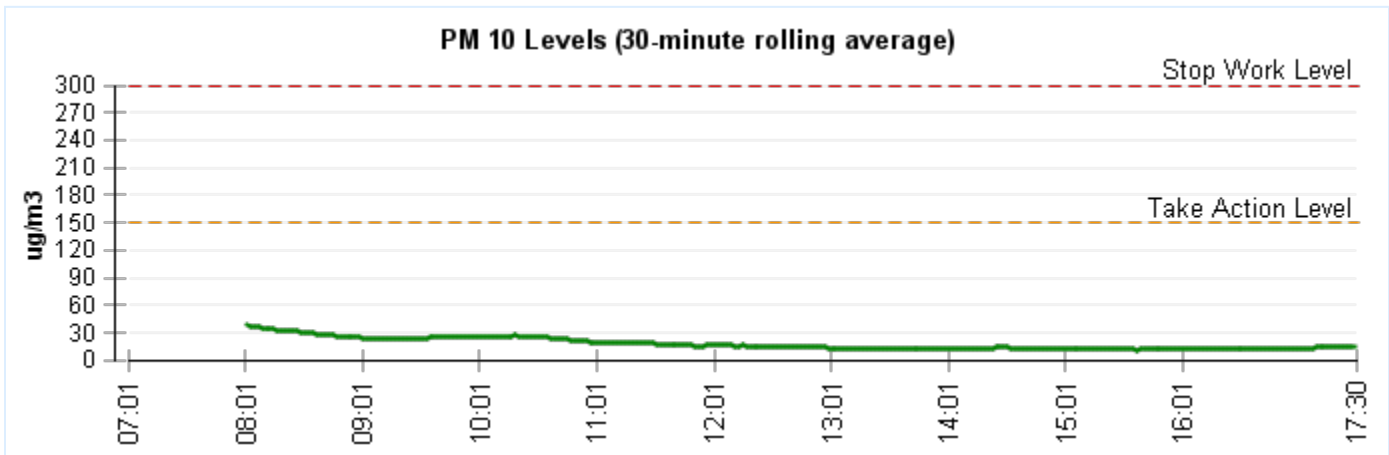
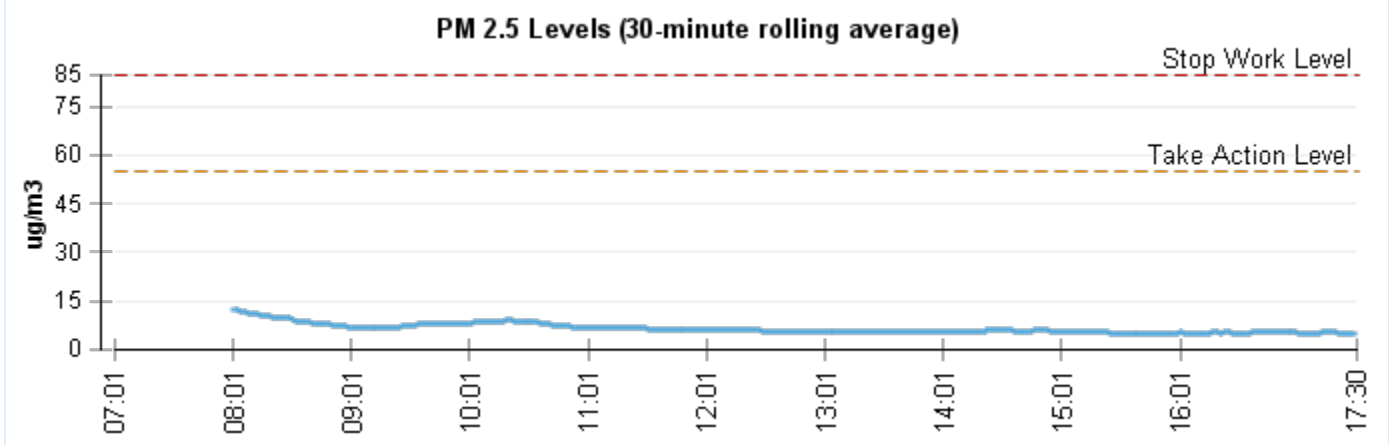
**Station ID**                              **Location Description**  
 AMS-05b                                  29.7859, -95.32376 - HWPW - Eddie and Amboy



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

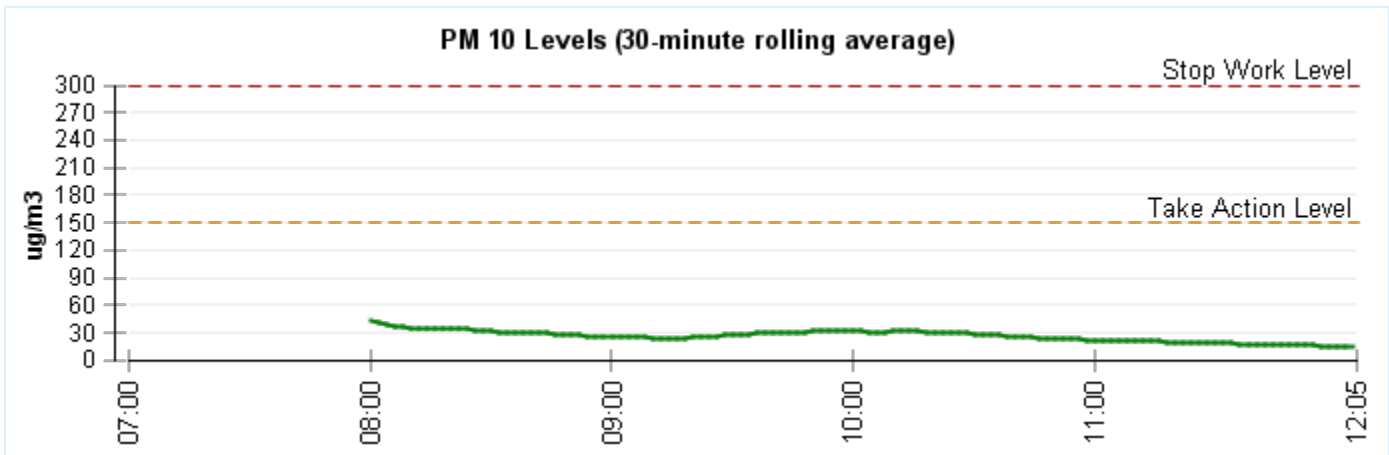
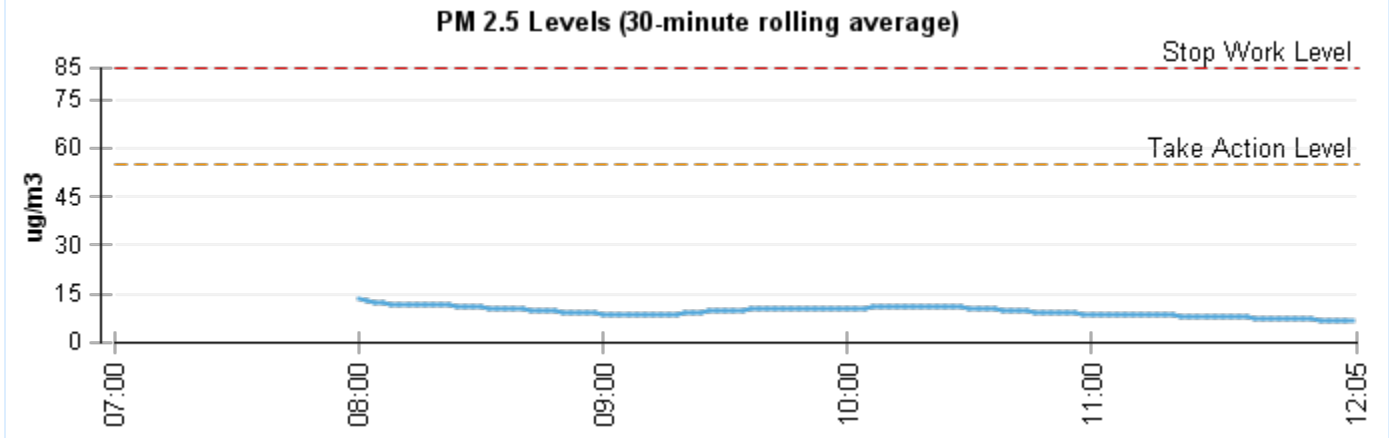
**Station ID**                              **Location Description**  
 AMS-06b                                  29.78203, -95.3193 - IMY South - Gagne



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

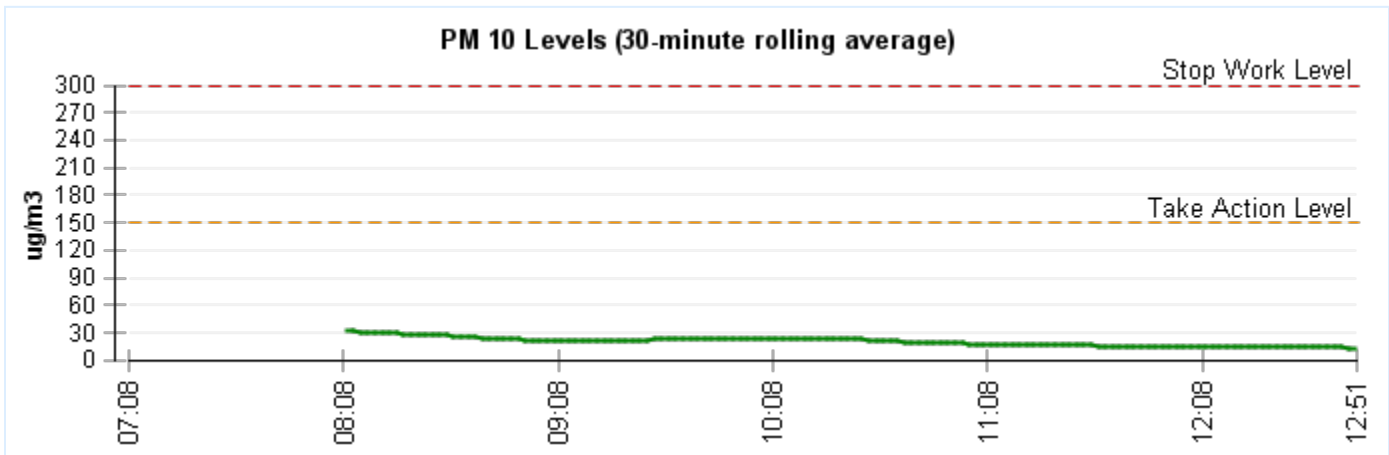
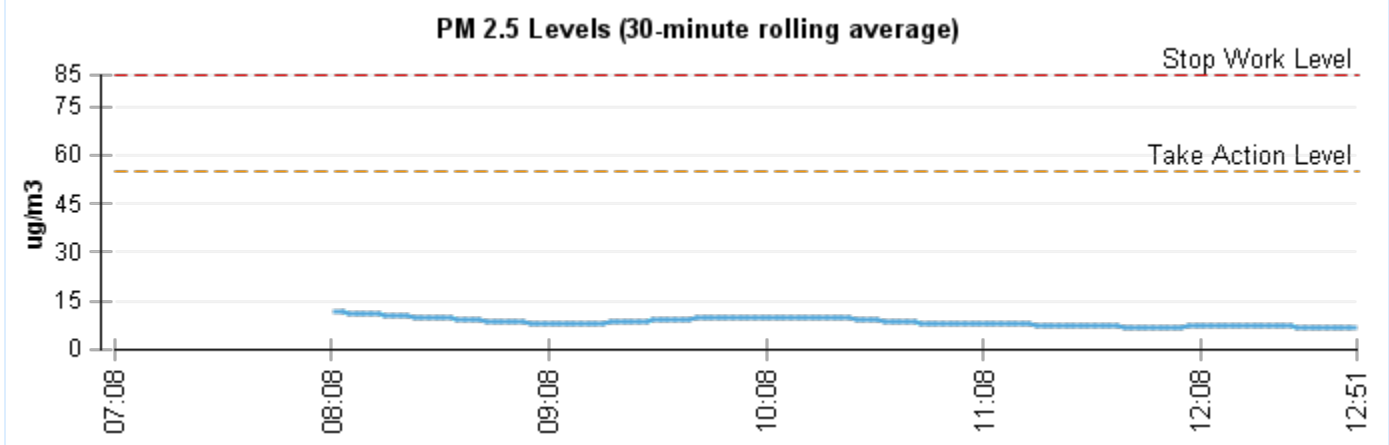
**Station ID**                              **Location Description**  
 AMS-08b                                  29.78209, -95.31766 - IMY SE - Fontinot



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

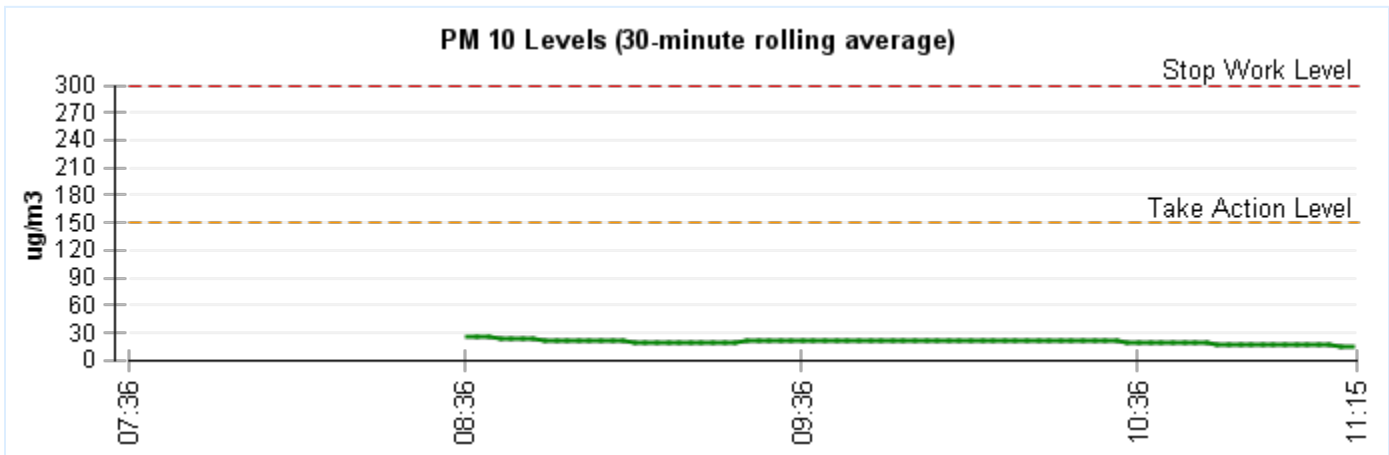
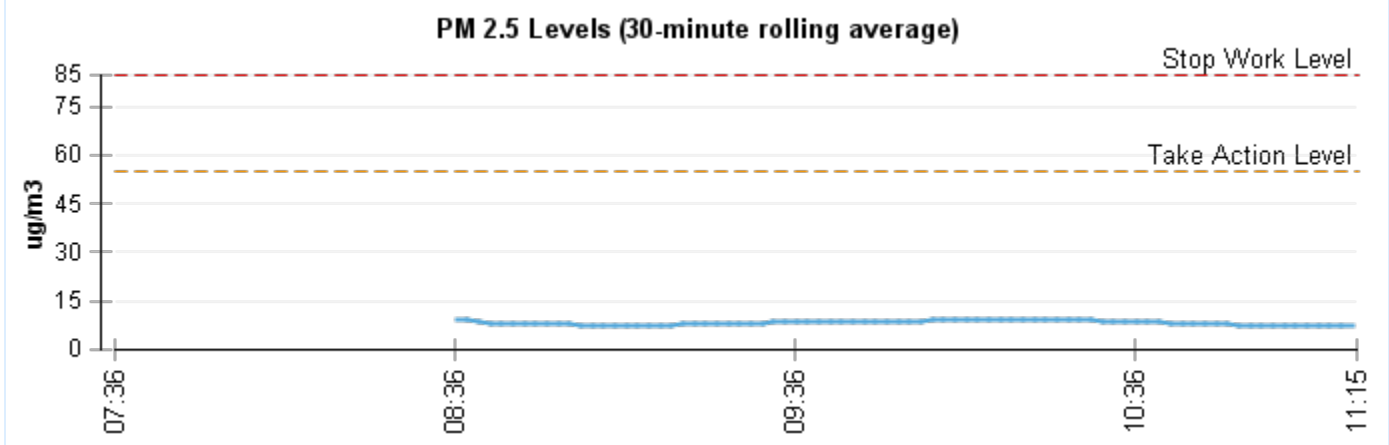
**Station ID**                              **Location Description**  
 AMS-09                                      29.7821, -95.32497 - IMY South - Waco and Lee



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

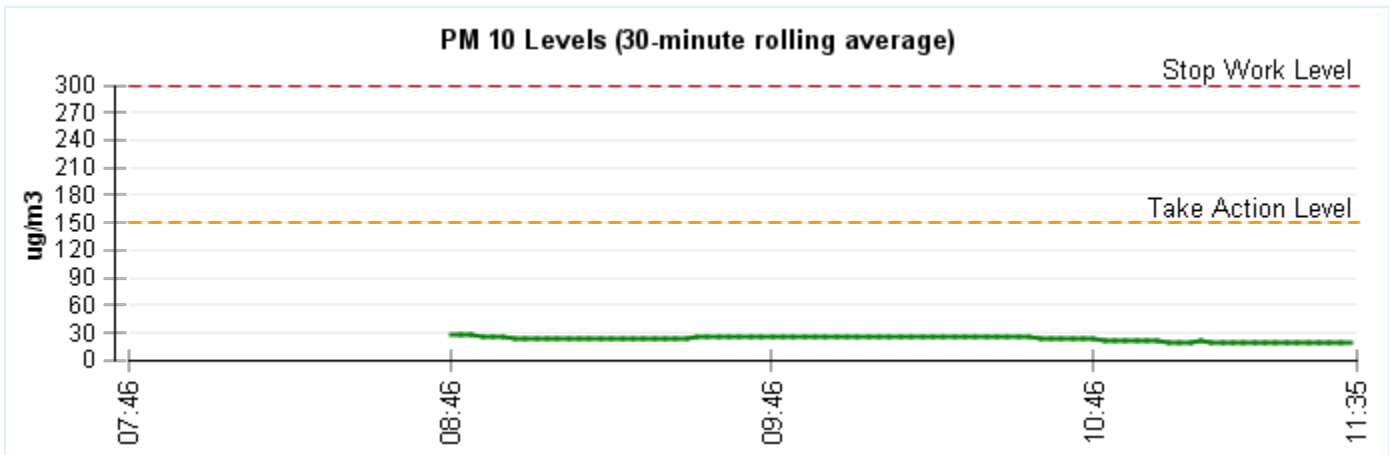
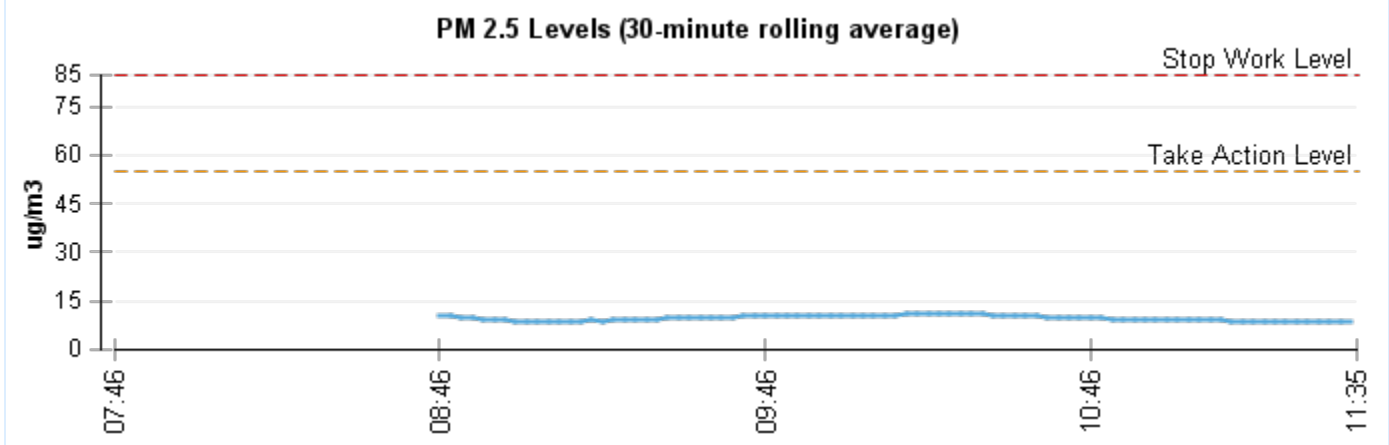
**Station ID**                              **Location Description**  
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### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 16, 2023**

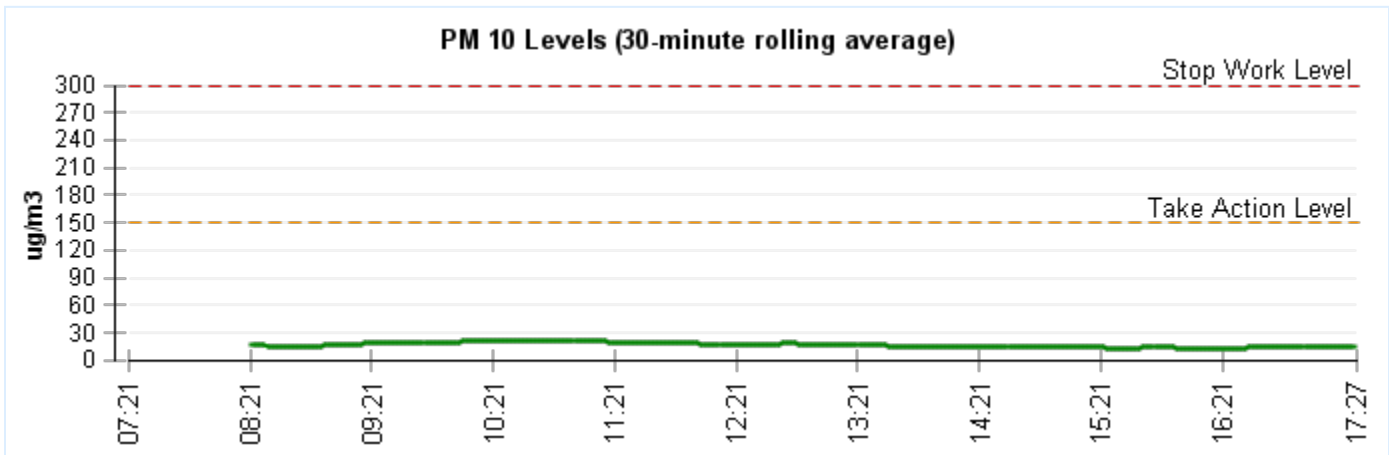
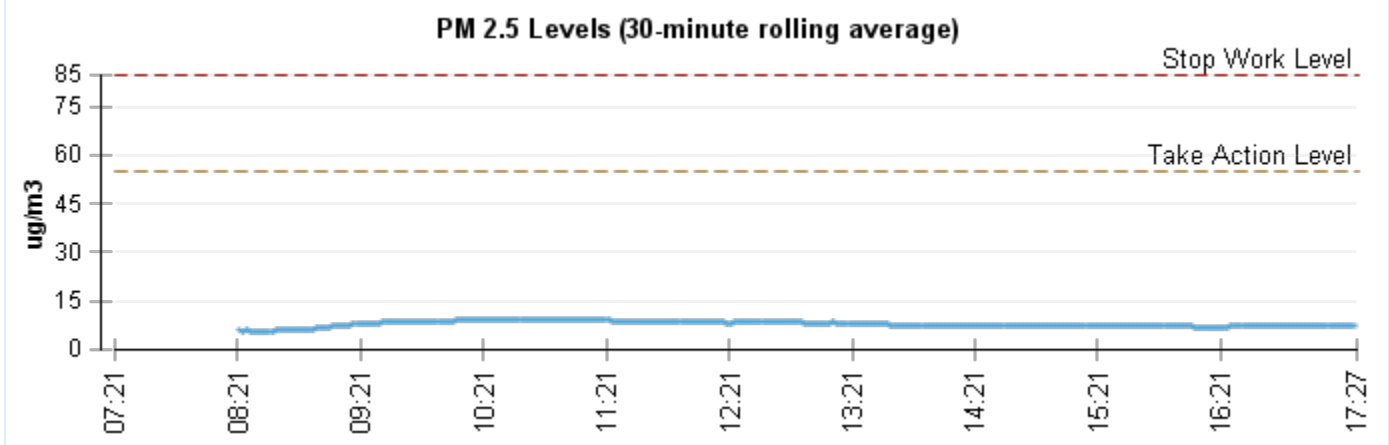
**Station ID**                              **Location Description**  
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### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

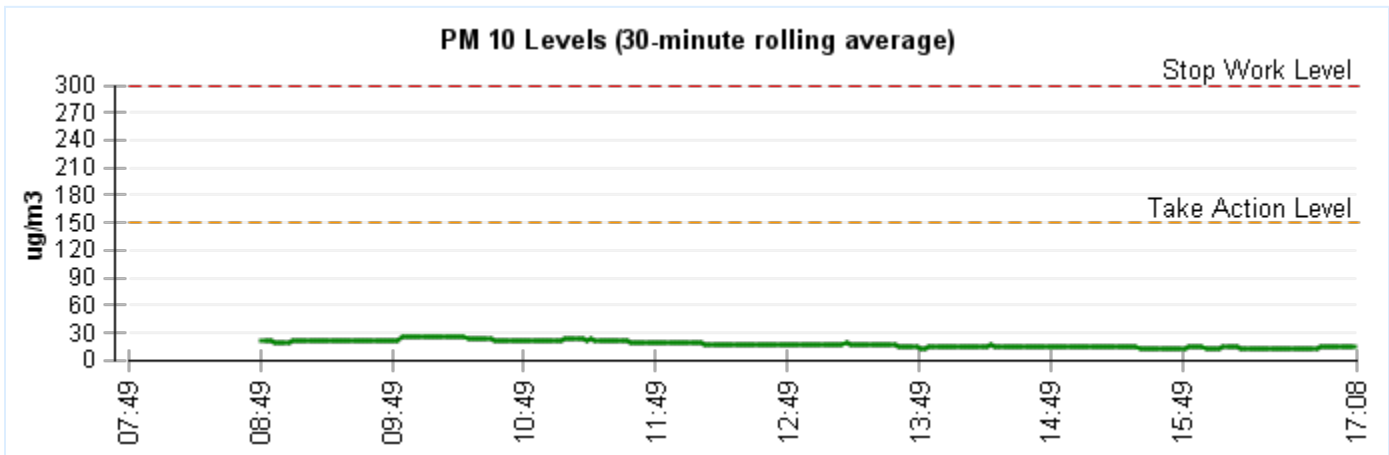
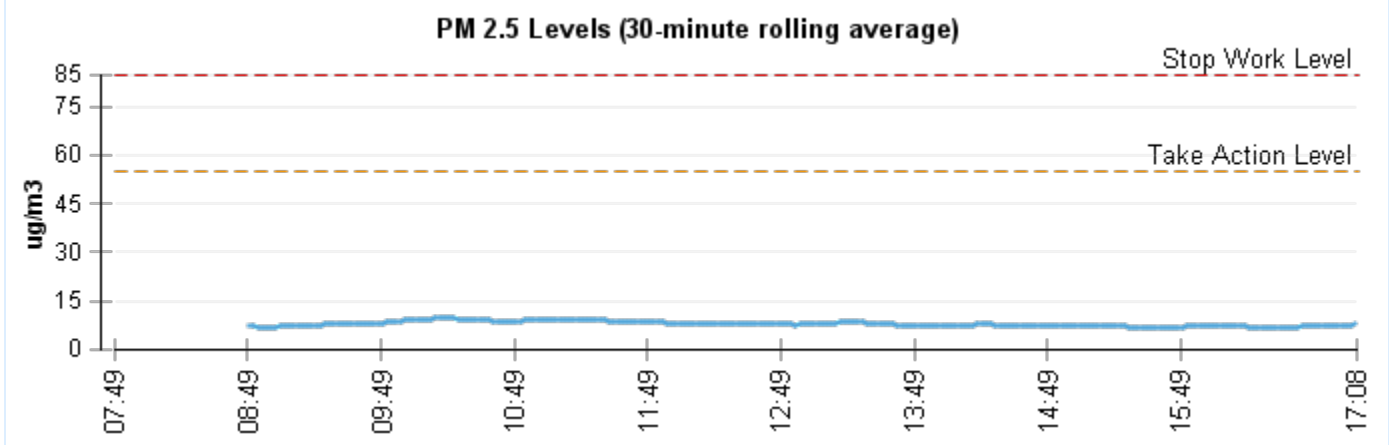
**Station ID**                              **Location Description**  
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### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

**Station ID**                              **Location Description**  
 AMS-03a                                  29.78761, -95.31664 - HWPW - Erastus

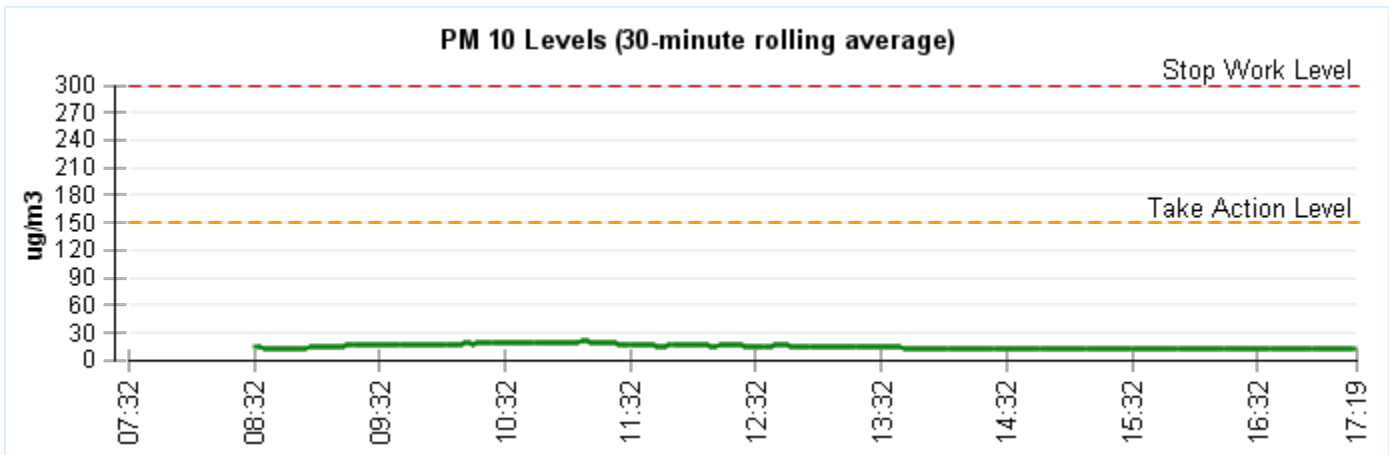
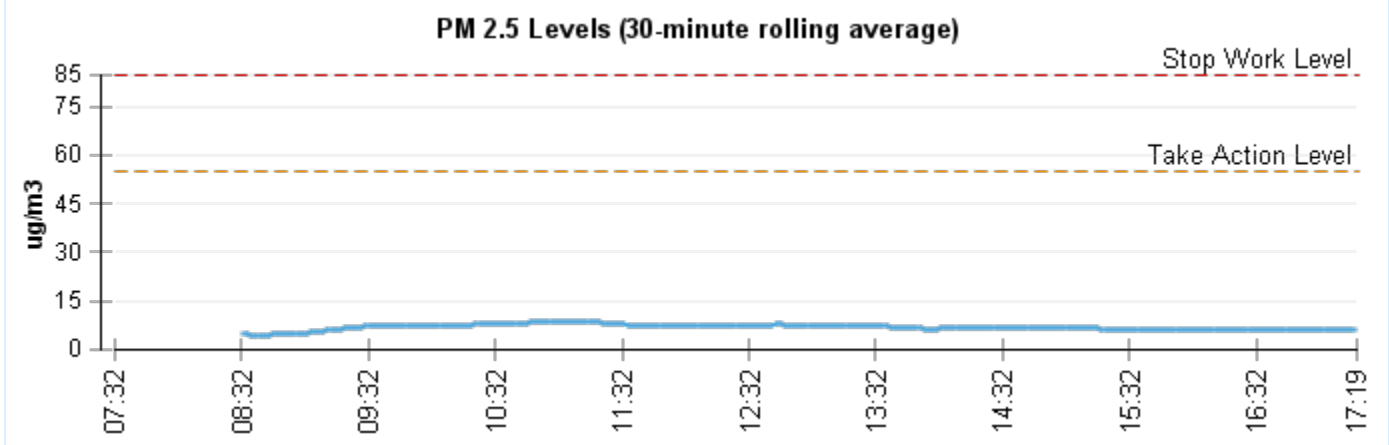




### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

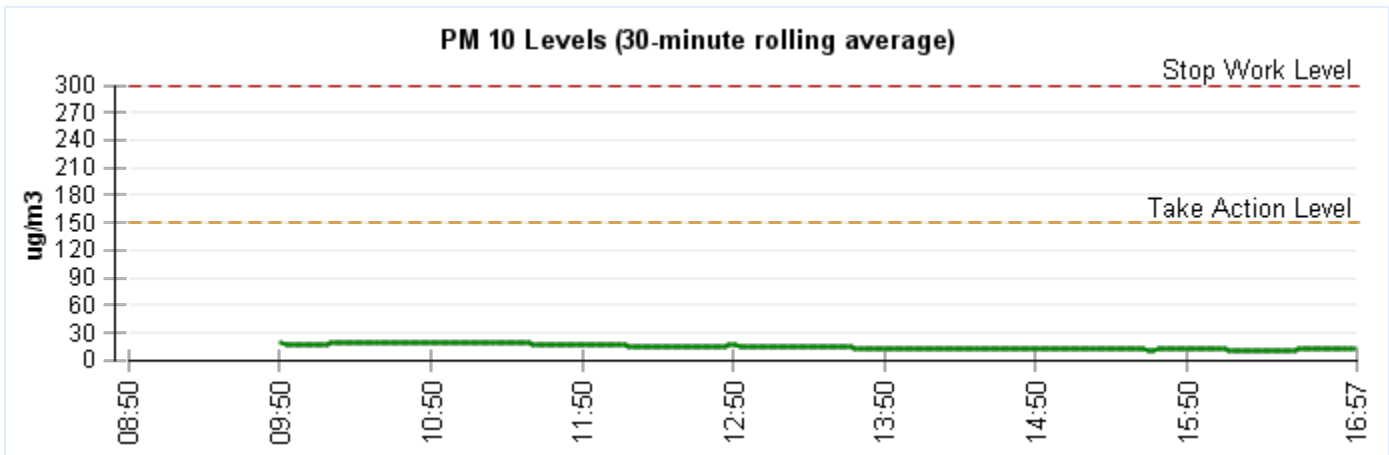
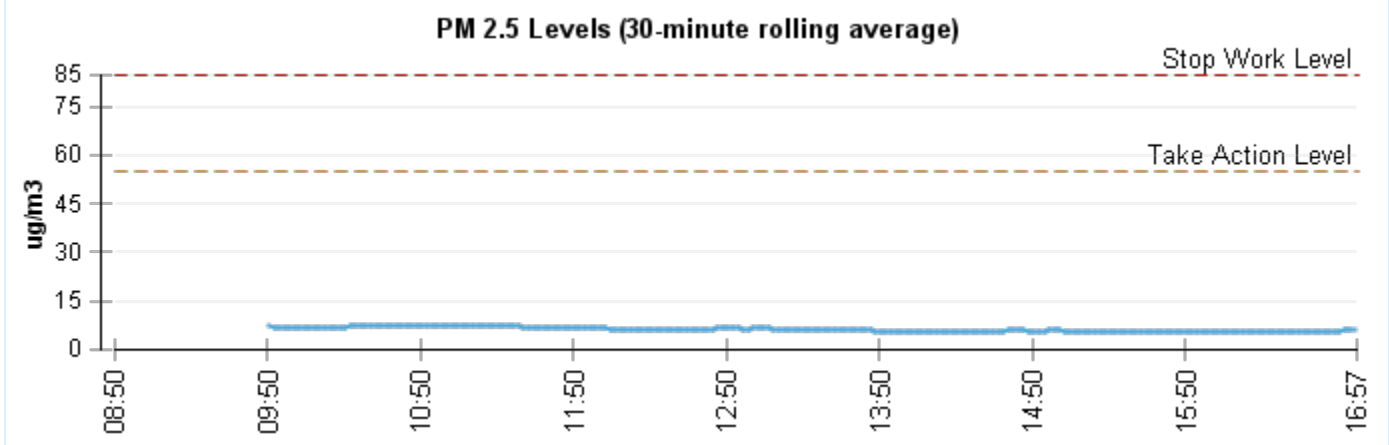
**Station ID**                              **Location Description**  
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### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

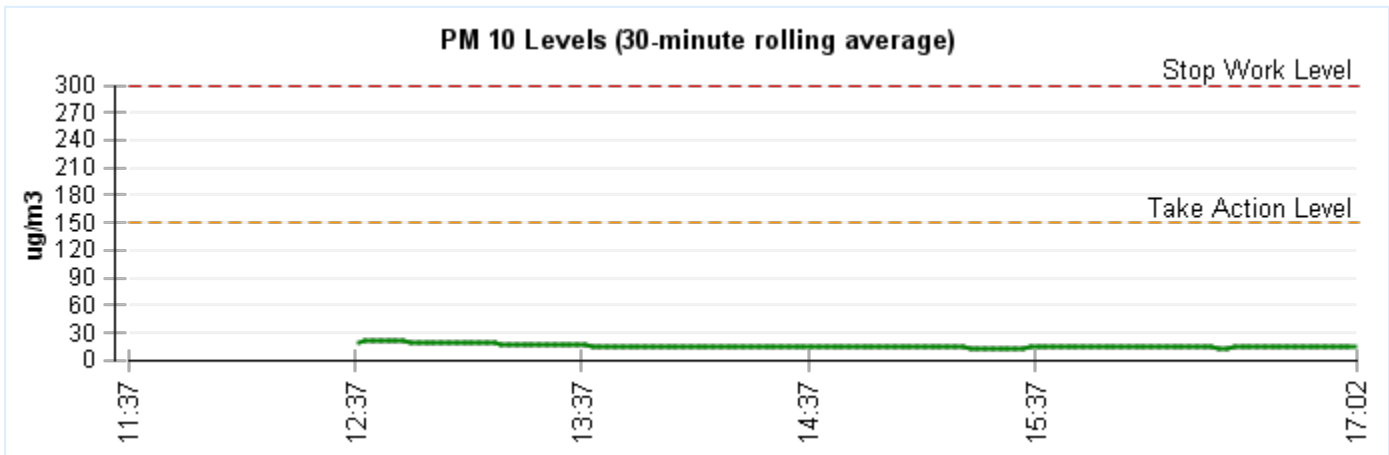
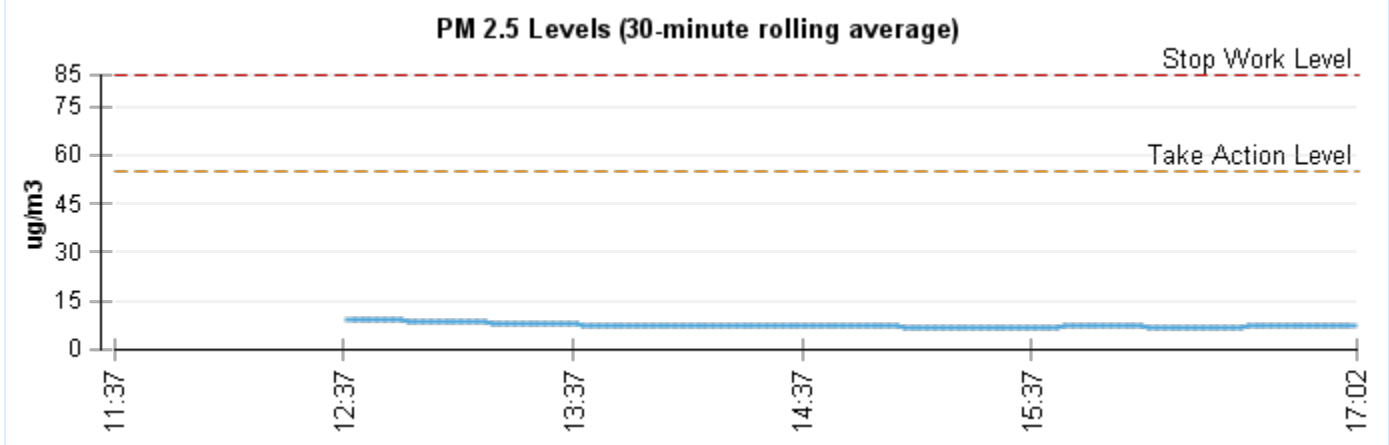
**Station ID**                              **Location Description**  
 AMS-06b                                  29.78204, -95.31929 - IMY South - Gagne



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

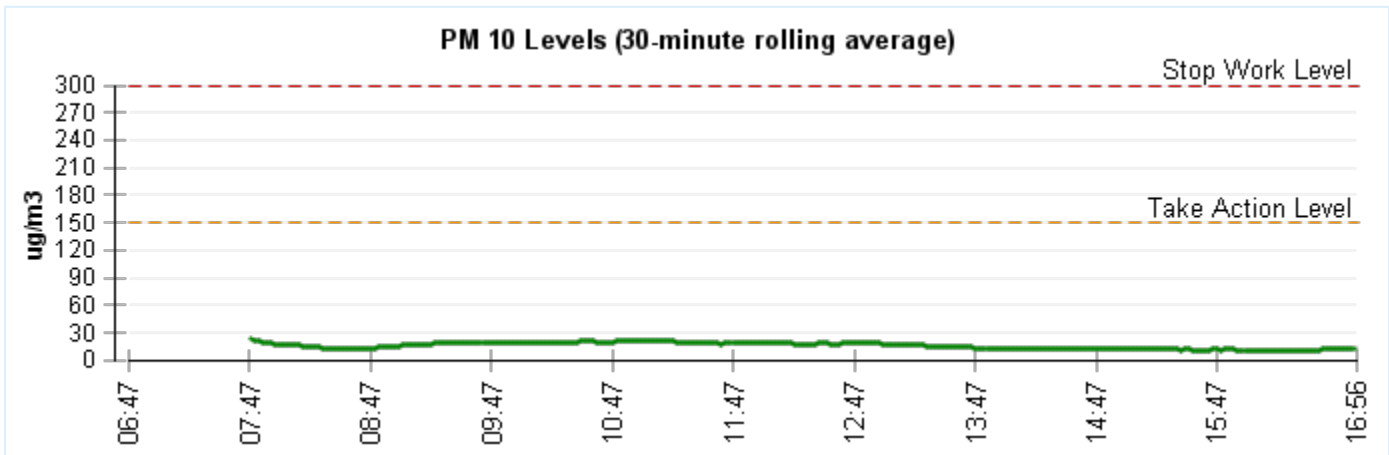
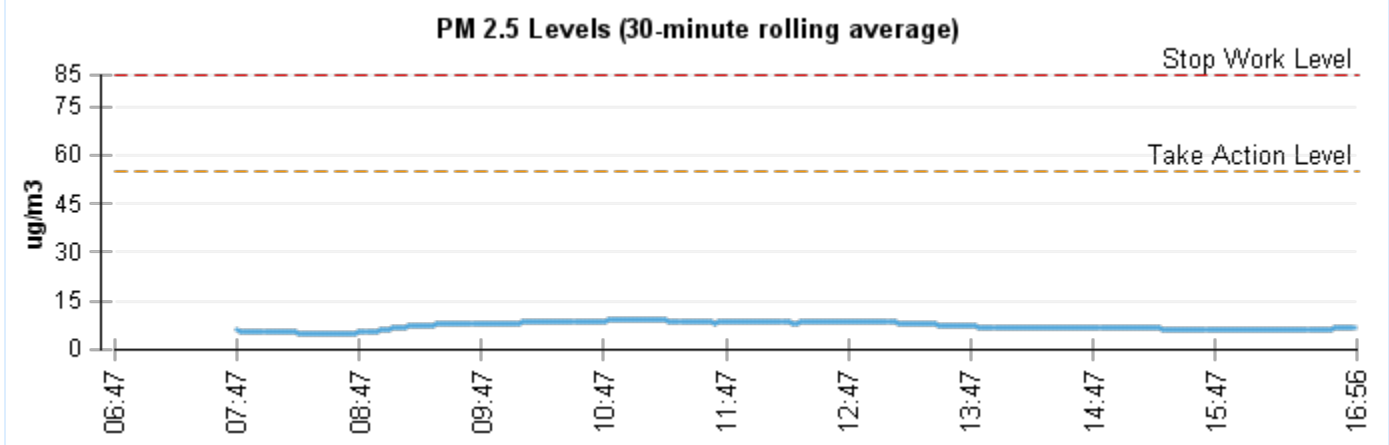
**Station ID**                              **Location Description**  
 AMS-07                                      29.78208, -95.32319 - IMY South - Yates



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

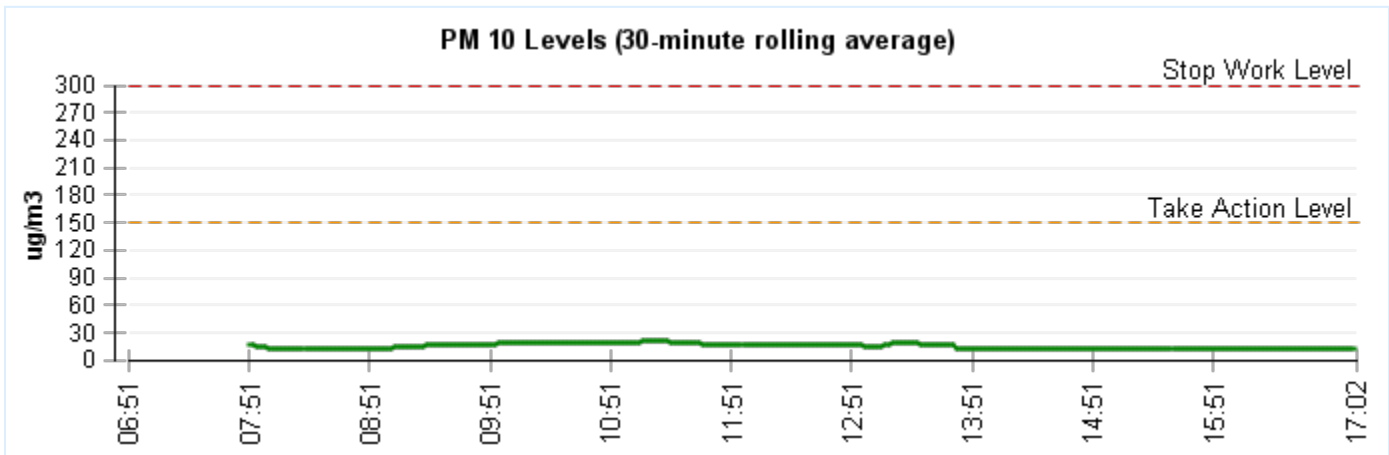
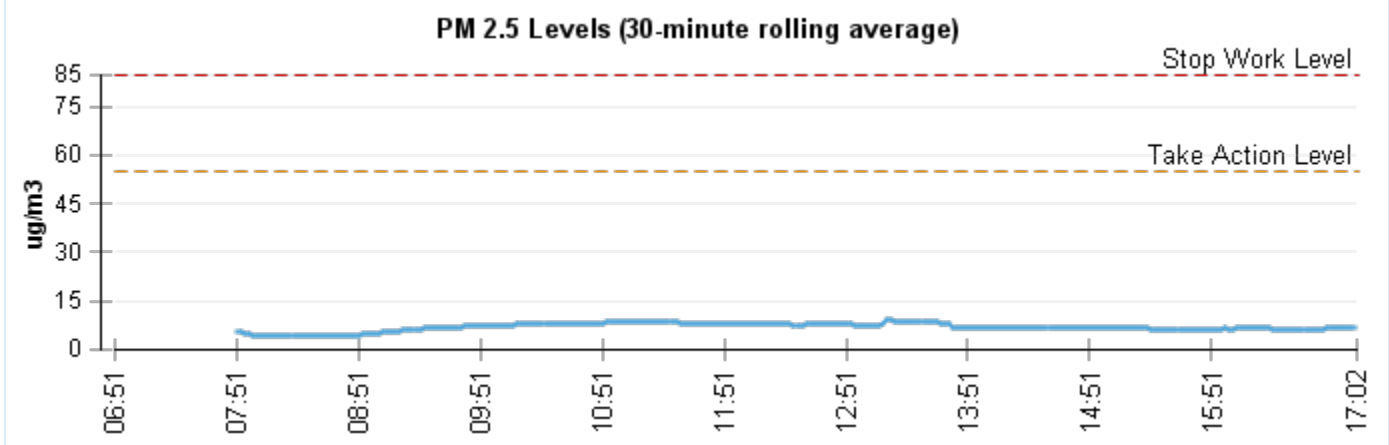
**Station ID**                              **Location Description**  
 AMS-08b                                  29.78208, -95.31772 - IMY SE - Fontinot



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

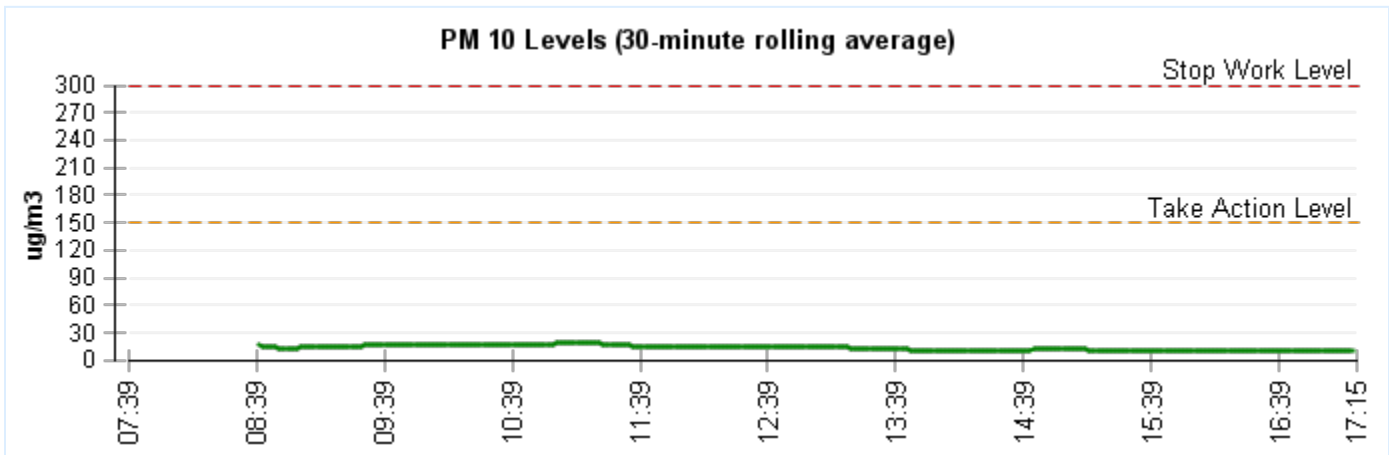
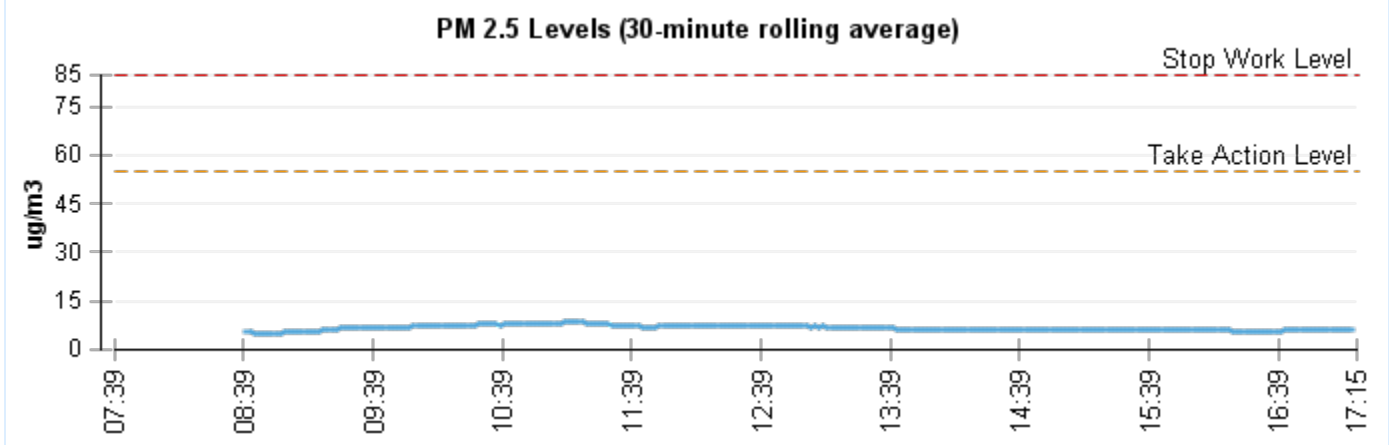
**Station ID**                              **Location Description**  
 AMS-09                                      29.78207, -95.325 - IMY South - Waco and Lee



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

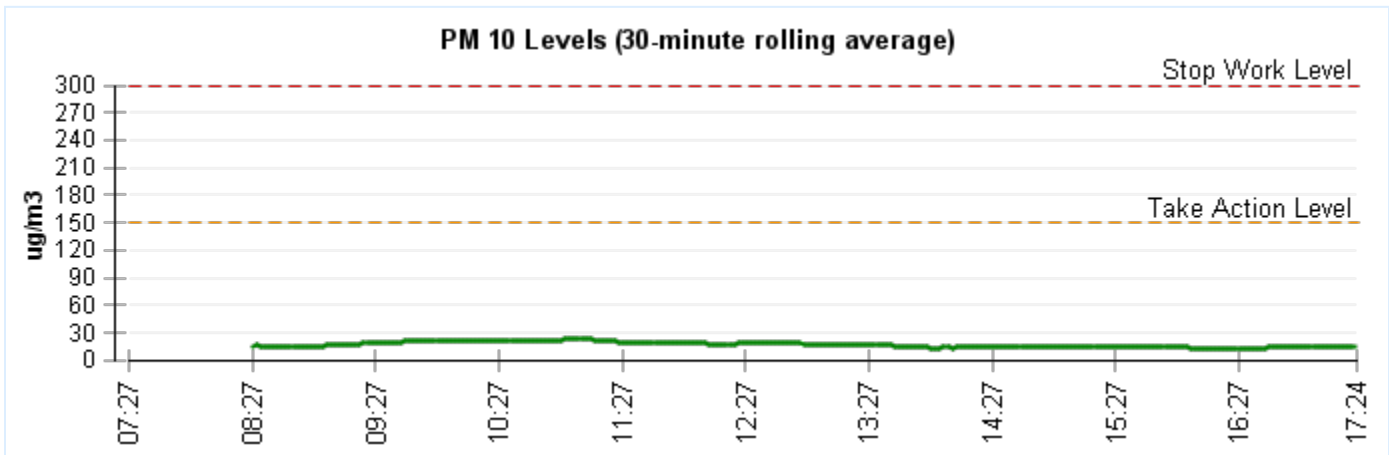
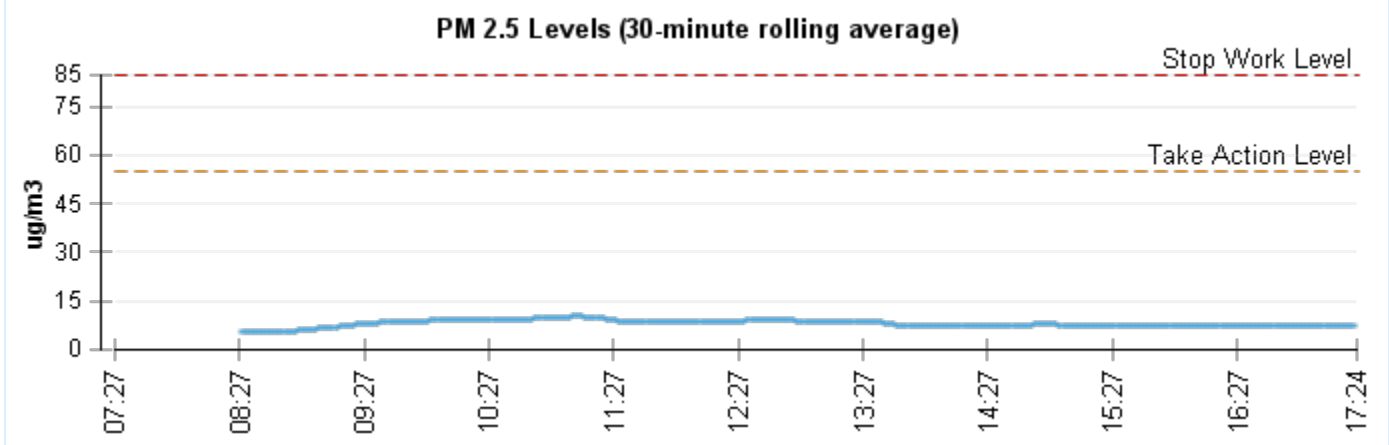
**Station ID**                              **Location Description**  
 AMS-10b                                  29.78479, -95.32397 - HWPW - Quitman East



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 17, 2023**

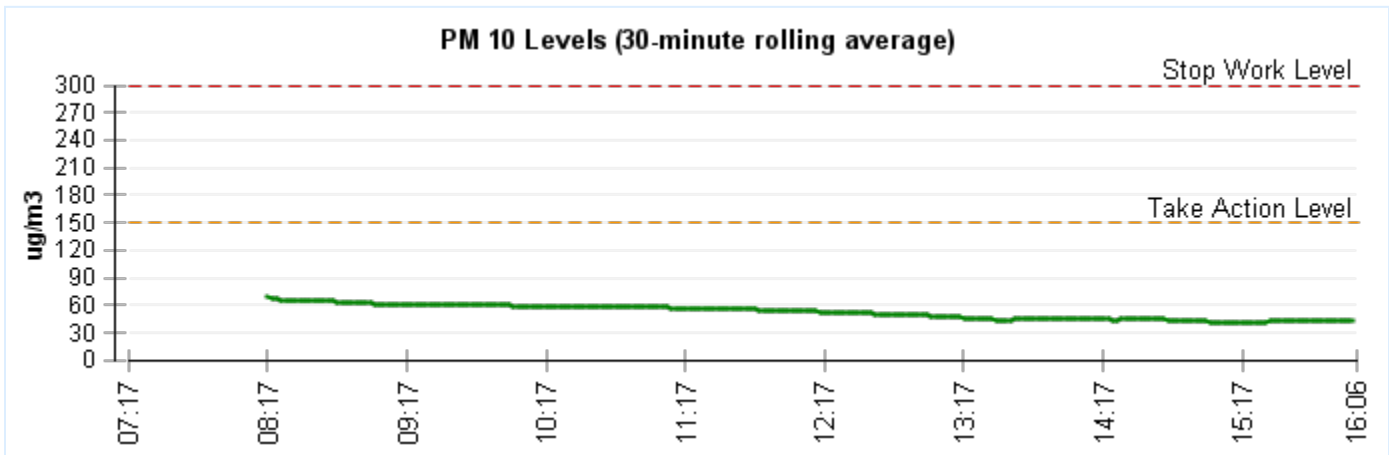
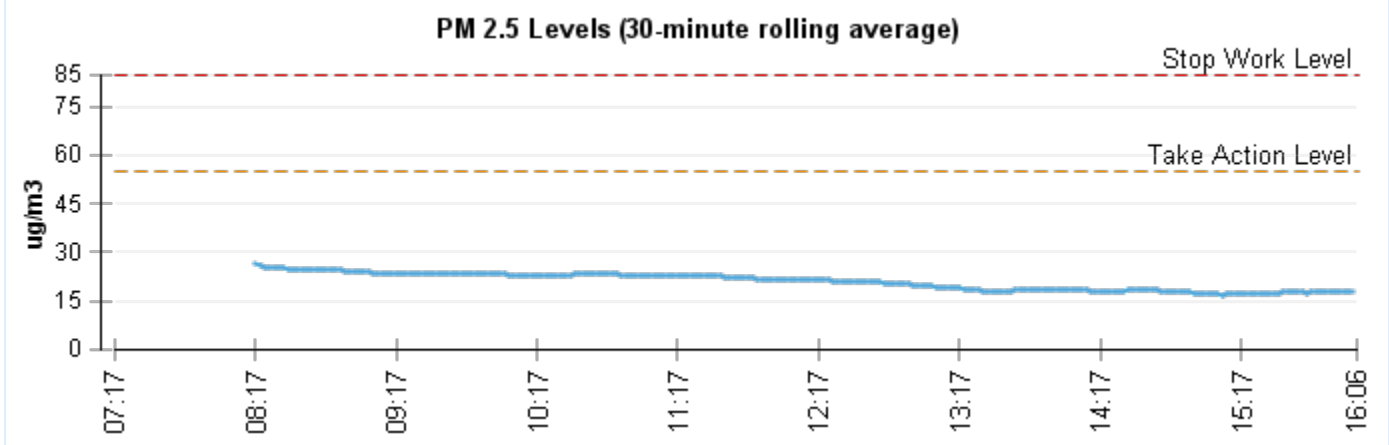
**Station ID**                              **Location Description**  
 AMS-13a                                  29.78756, -95.32384 - HWPW - Kashmere and Liberty



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

**Station ID**                              **Location Description**  
 AMS-01                                      29.78757, -95.31666 - HWPW - Erastus

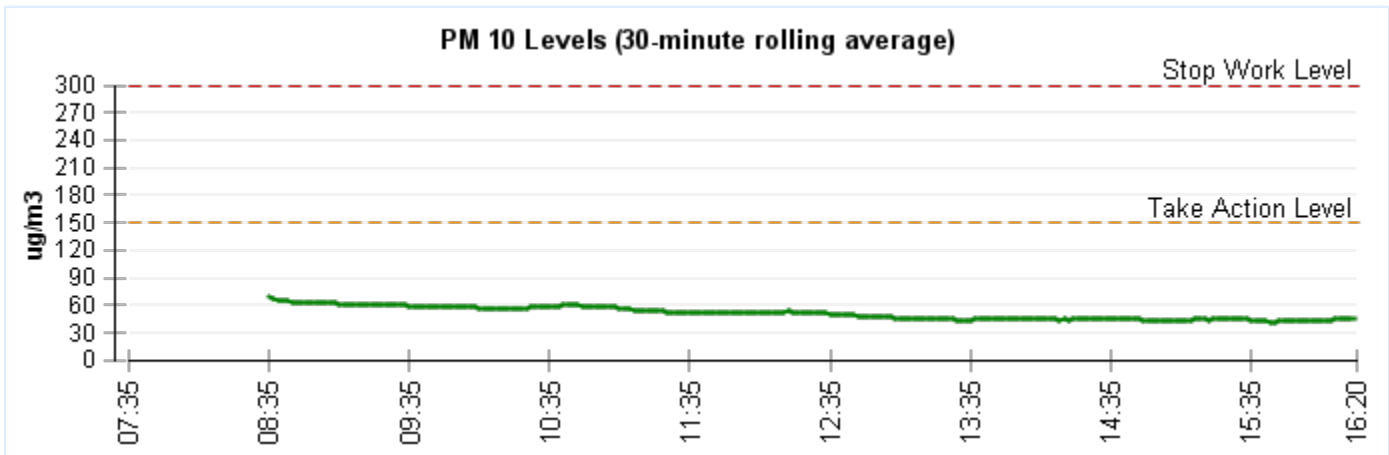
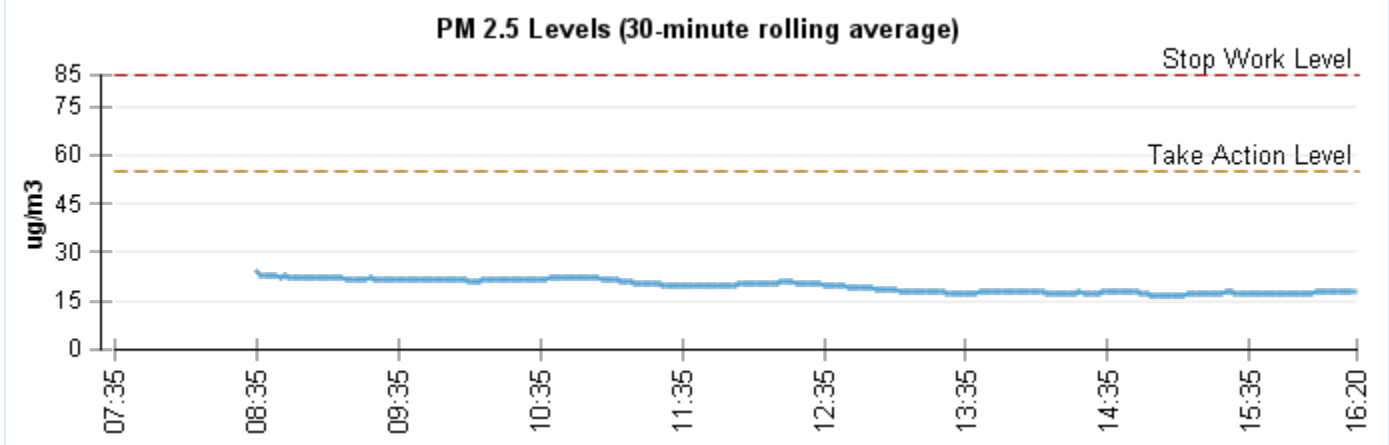




### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

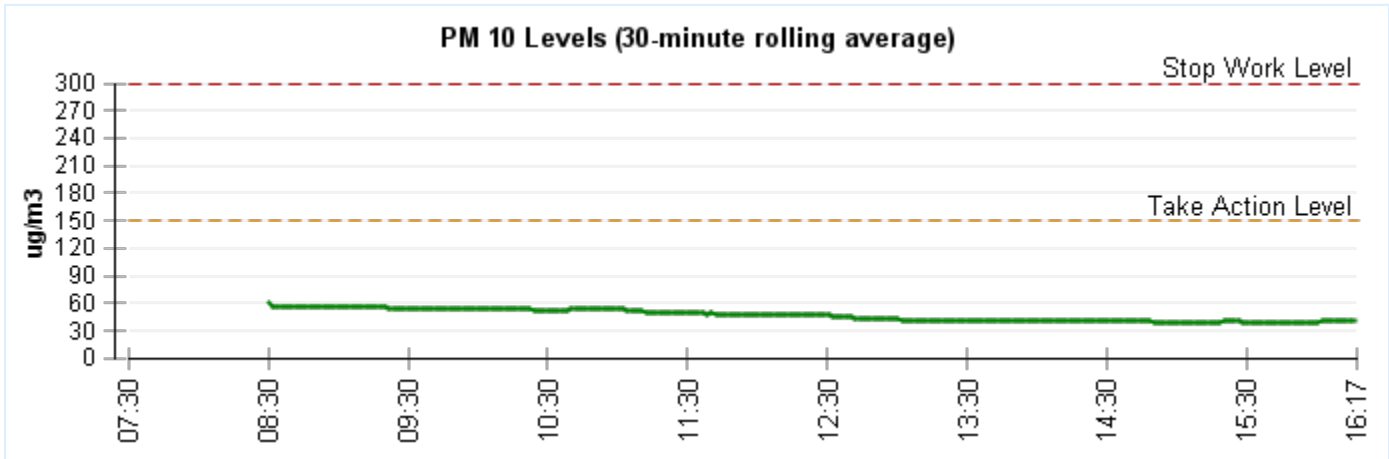
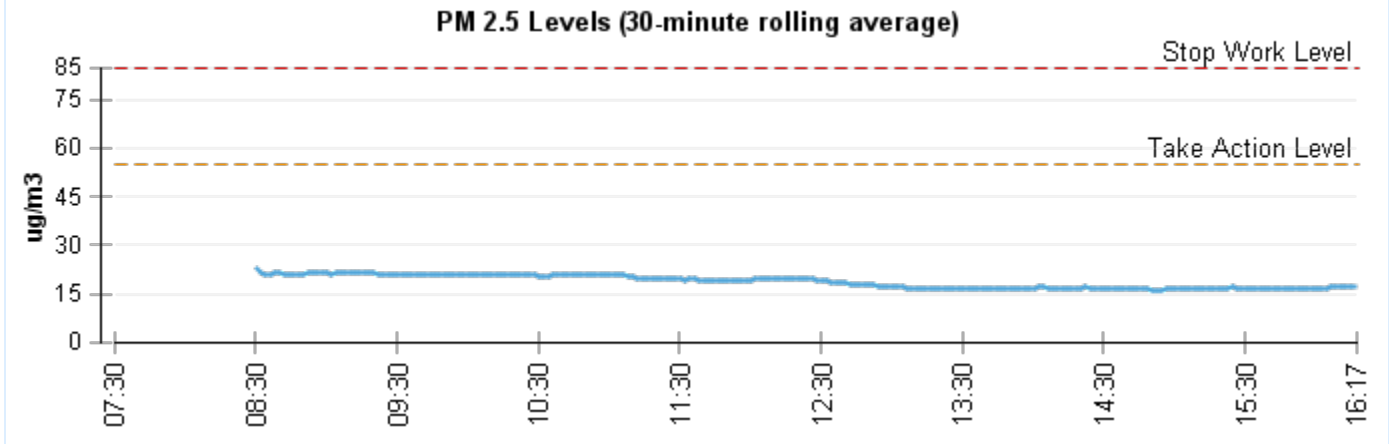
**Station ID**                              **Location Description**  
 AMS-03a                                  29.78731, -95.32101 - HWPW - Solo North



### PM 2.5 and PM 10 Time History Data

**Sample Date** May 21, 2023

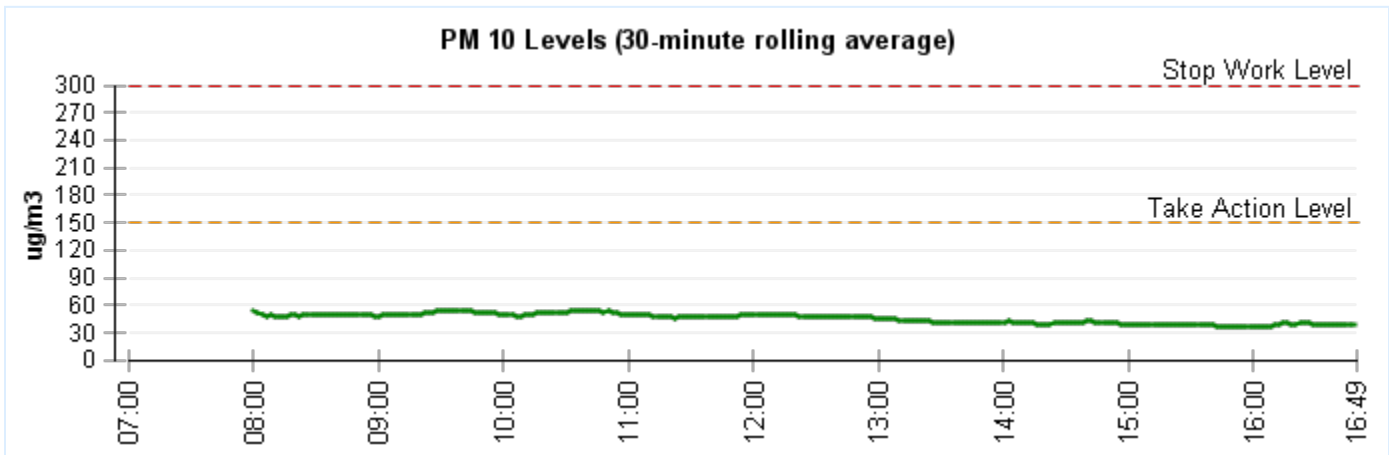
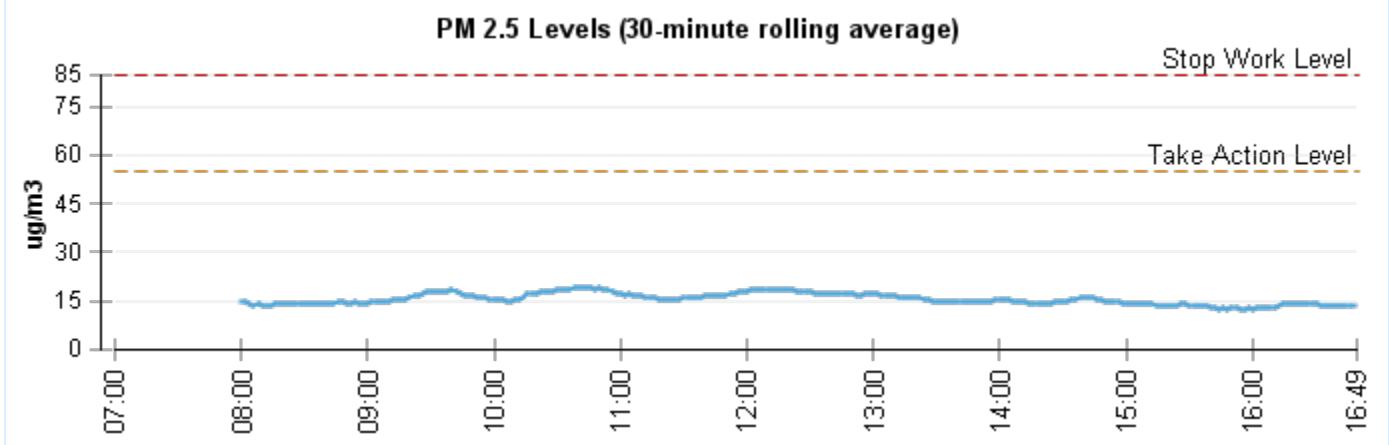
**Station ID** AMS-05b  
**Location Description** 29.78751, -95.32383 - HWPW - Kashmere and Liberty



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

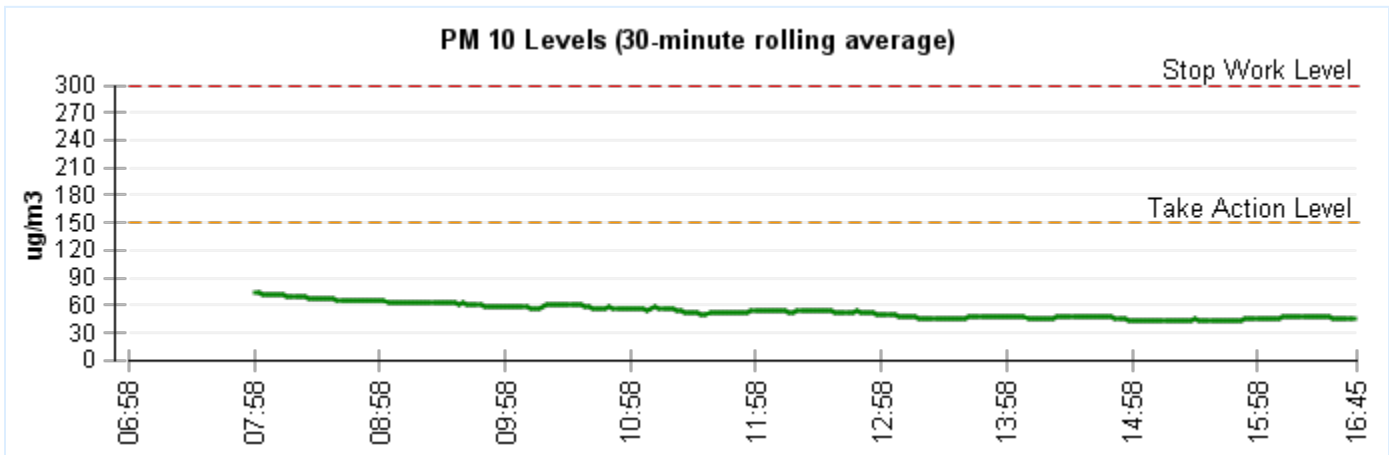
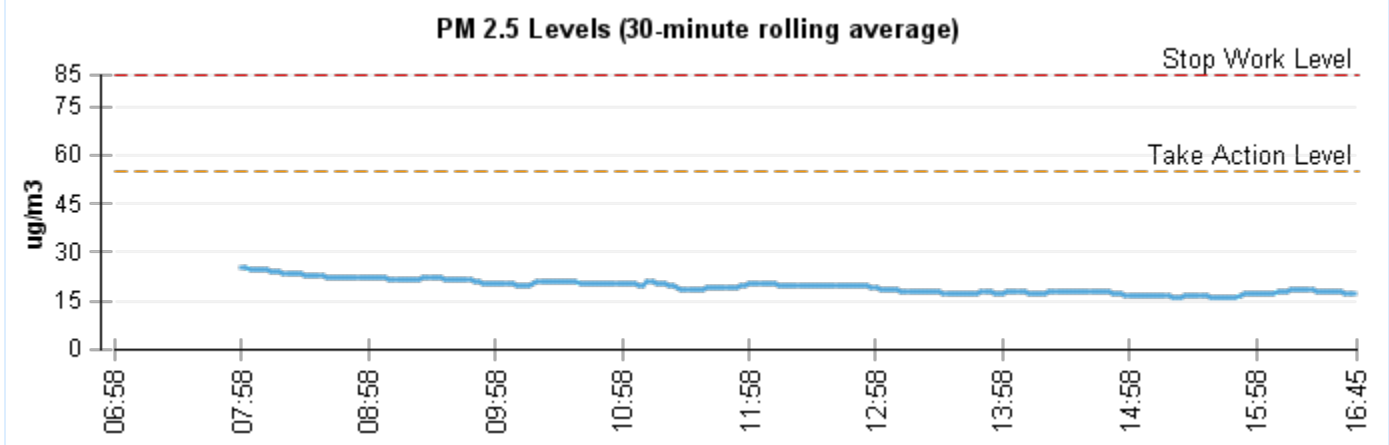
**Station ID**                              **Location Description**  
 AMS-06b                                  29.78206, -95.31927 - IMY SE - Clementine



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

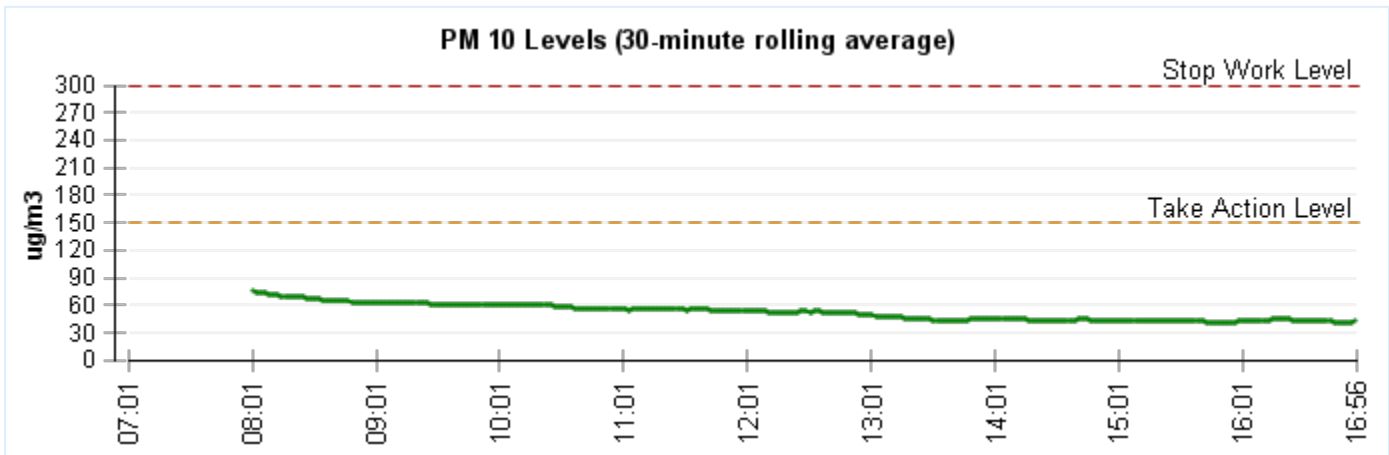
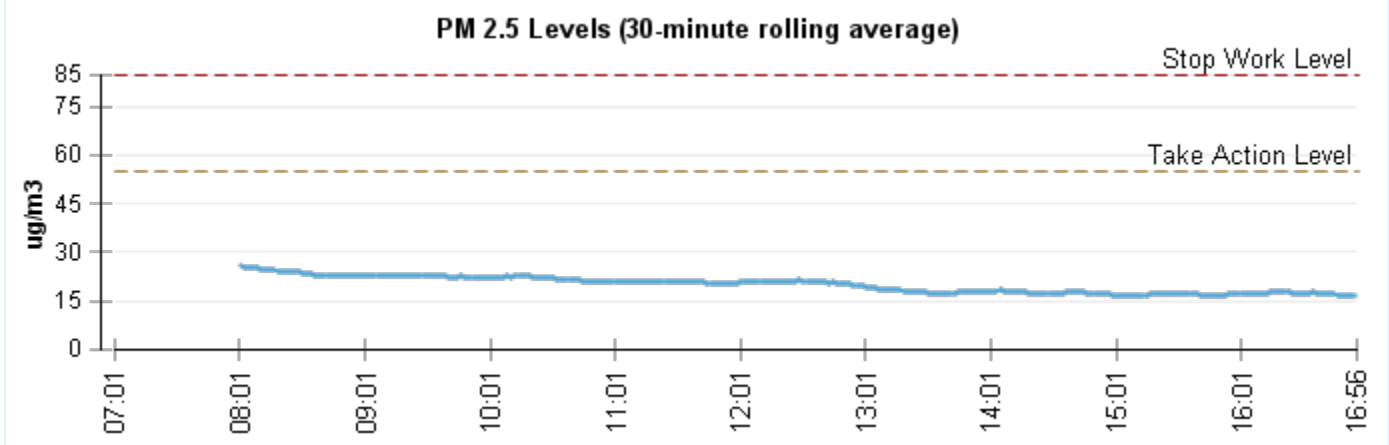
**Station ID**                              **Location Description**  
 AMS-07                                      29.78212, -95.32325 - IMY South - Yates



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

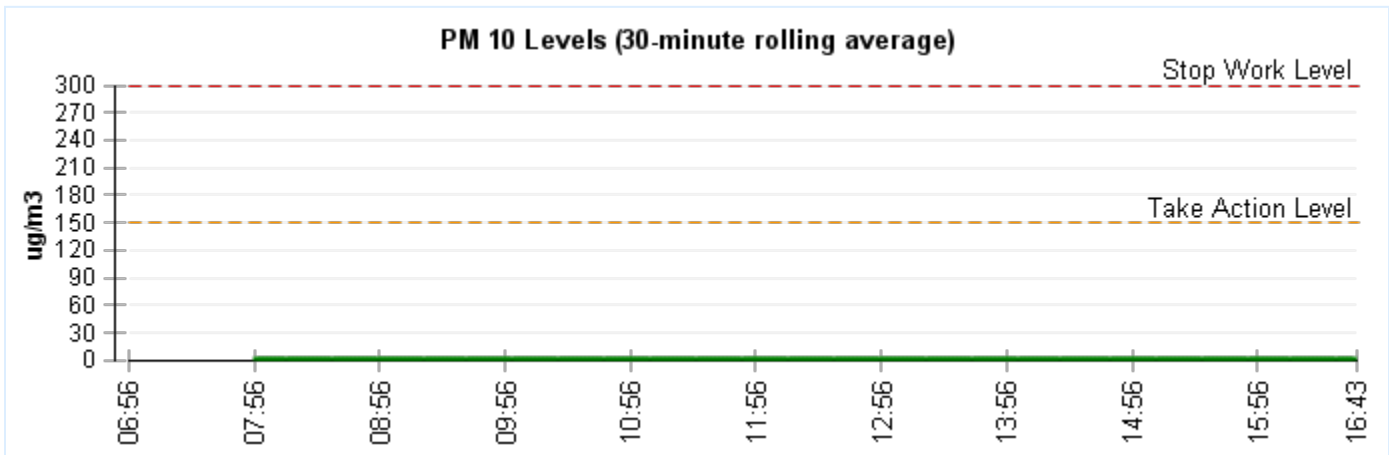
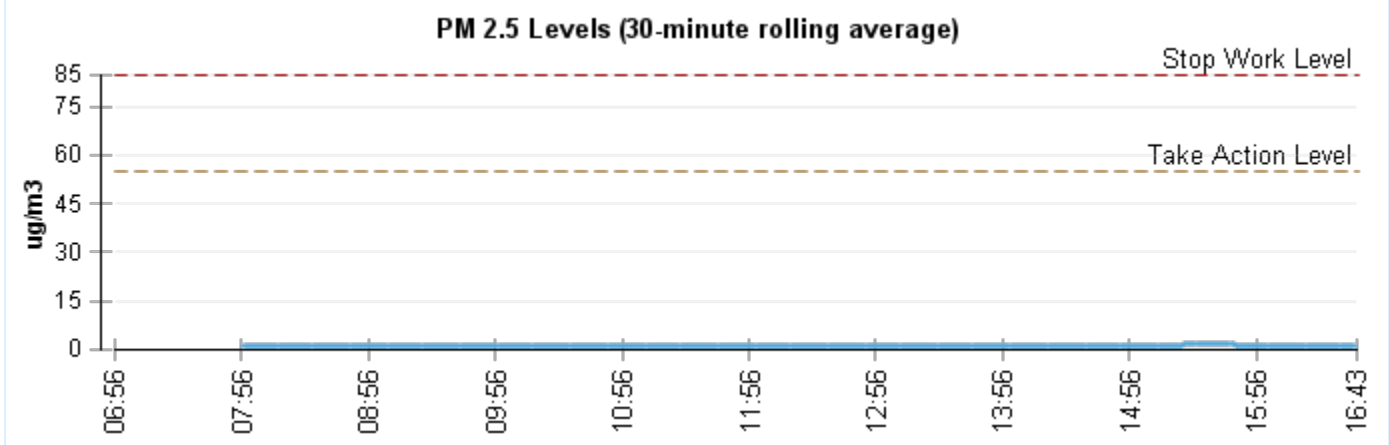
**Station ID**                              **Location Description**  
 AMS-08b                                  29.78206, -95.31768 - IMY SE - Fontinot



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

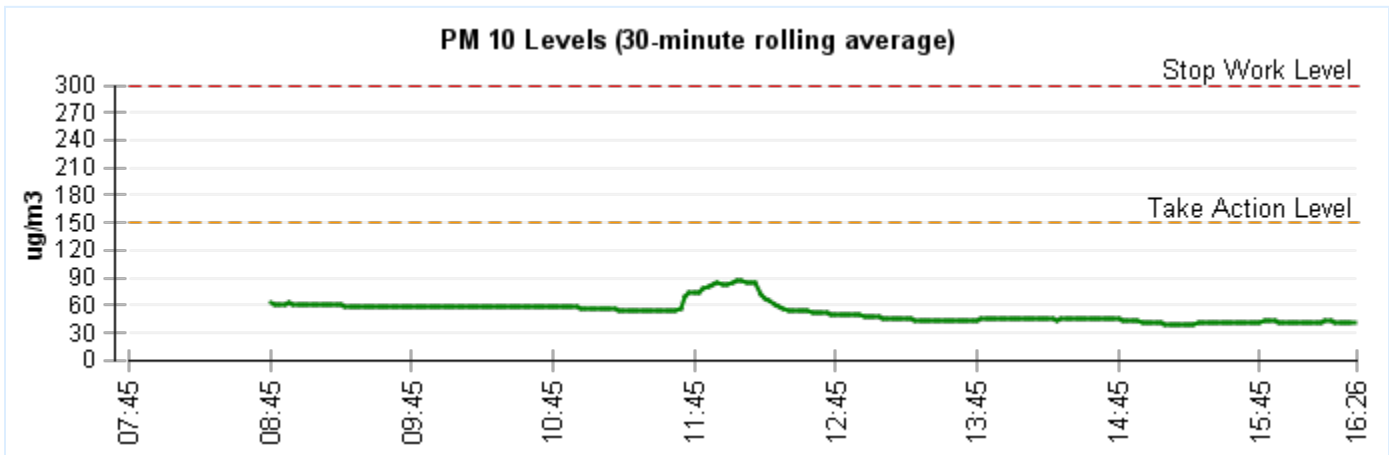
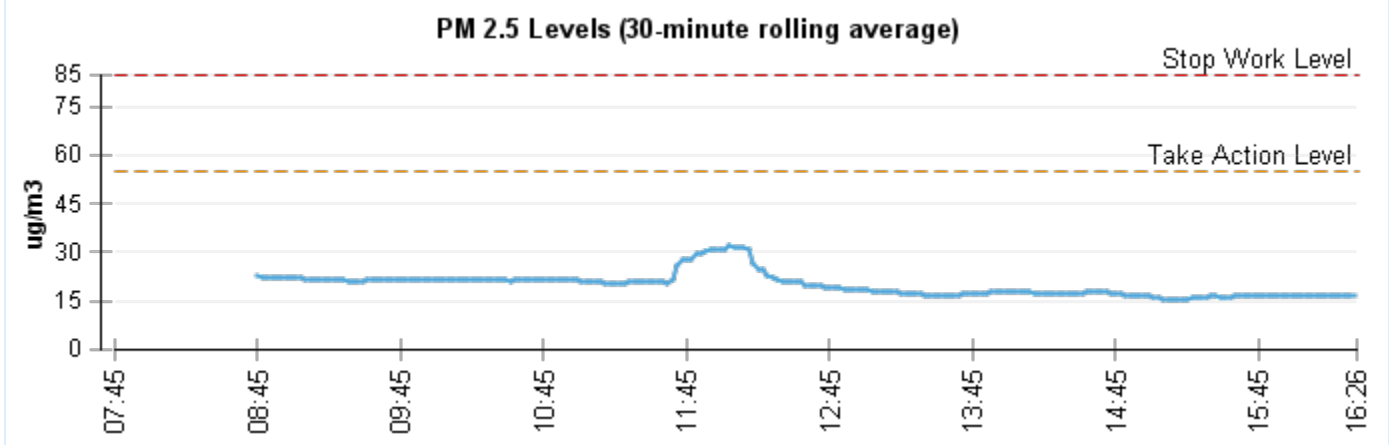
**Station ID**                              **Location Description**  
 AMS-09                                      29.78213, -95.32496 - IMY South - Waco and Lee



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

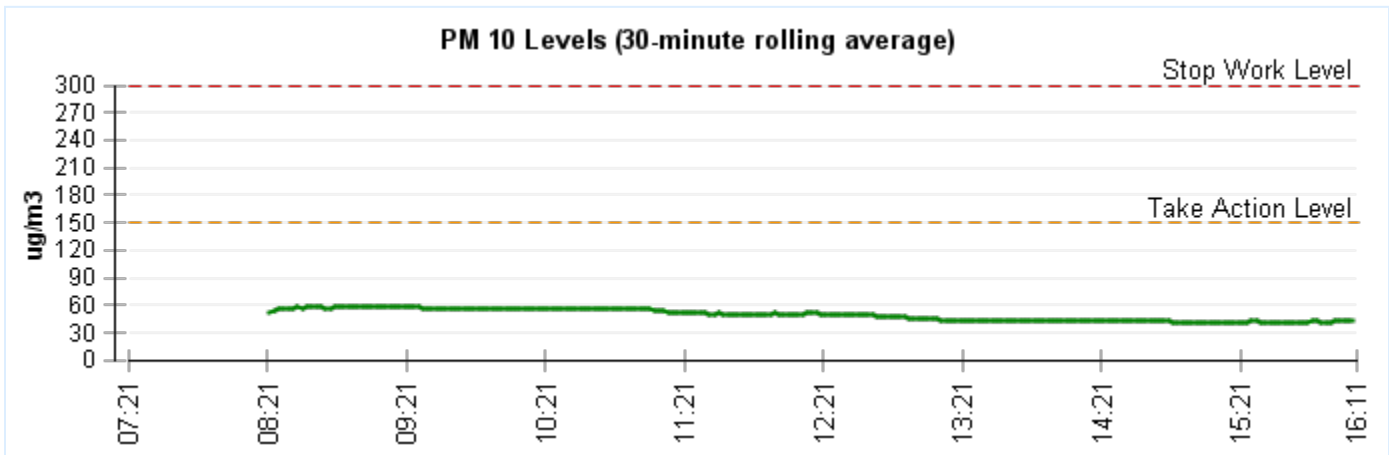
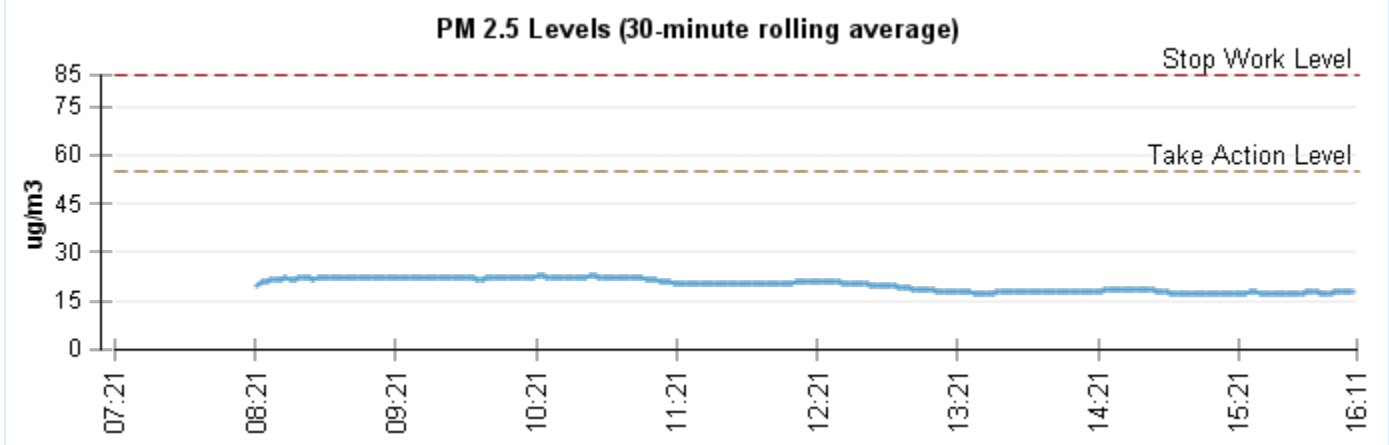
**Station ID**                              **Location Description**  
 AMS-11                                      29.78755, -95.31895 - HWPW - Clementine North



### PM 2.5 and PM 10 Time History Data

**Sample Date**                      **May 21, 2023**

**Station ID**                              **Location Description**  
 AMS-13a                                  29.78488, -95.32393 - HWPW - Quitman East





*Patricia Mandy*

Tom Reid