June 6, 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 29 through June 4, 2023*

Construction activities performed during this reporting period did not involve excavation of soils within the HWPW Site.

Dust Control and Air Monitoring

Since no soil excavation activities were performed during this reporting period within the Site, Dust Control and Air Monitoring was not conducted during this reporting period. Real time results for the period between **May 22 through May 28, 2023** can be found in **Attachment A**.

Soil Management

No soil excavation activities were performed during this reporting period within the Site.

Stormwater/Hydro-Vac Water Management

There was no rainfall during this reporting period that resulted in management of stormwater within the Site.

Planned Construction Activities for the period between **June 5 through June 11, 2023** for the Site include the installation of an additional 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

Eric Matzner, P.G.
Vice President, Director Hydrogeologist

ATTACHMENT A

Weekly Report of Air Monitoring

Industrial Hygiene and
Safety Technology, Inc.

2235 Keller Way
Carrollton, TX 75006
Phone: (972) 478-7415
Fax: (972) 478-7615

http://www.ihst.com

Leaders in
Quality, Service
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 2023-05-22 to 2023-05-28

Contents

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/m3, and 150 ug/m3 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. The station location located on the north central side of the capped area, near the intersection of Liberty and Fontinot was inaccessible due to recent rains, and no station was deployed there.

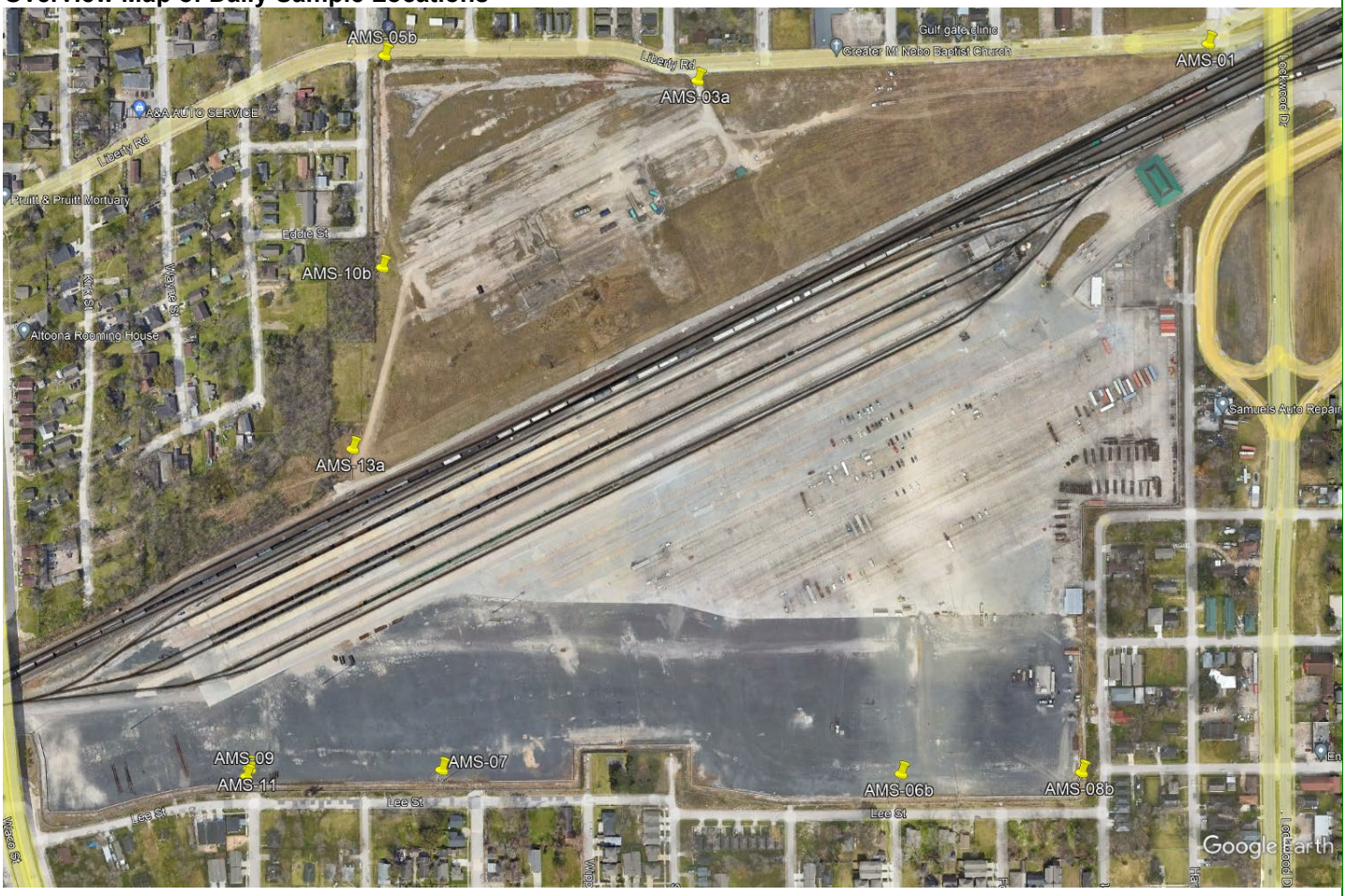
Notes:
Excavation-related activities took place in the capped area only on May 22, May 23 and May 25. Air monitoring data is provided for these days. Activities on May 25 were limited to a brief transfer of previously excavated soils to a roll-off container located near the center of the capped area. A limited number of stations (one upwind and two downwind) were deployed in the immediate vicinity for the duration of this activity.

PM 2.5 and PM 10 Daily Summary Results

Sample Date
May 22, 2023

Description of Work Performed
UPRR and Capital Technologies crews worked in and around the capped area, digging and hydro vacuuming on both the south and north side of the tracks near to the Lockwood St. overpass. Excavated and hydro-vacuumed soils were transferred into roll-off containers located in the soil cap area. Work hours were from approximately 08:00 – 16:50.

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	08:55	17:13	29.78763	-95.31657	29.6 ug/m3	73.6 ug/m3
AMS-03a	HWPW - Solo North	08:28	16:56	29.78735	-95.32104	29.1 ug/m3	76.2 ug/m3
AMS-05b	HWPW - Kashmere and Liberty	08:33	16:59	29.78754	-95.32378	28.1 ug/m3	69.3 ug/m3
AMS-06b	IMY SE - Clementine	07:50	17:24	29.78208	-95.31926	27.5 ug/m3	73.4 ug/m3
AMS-07	IMY South - Yates	07:52	17:27	29.78211	-95.32328	28.7 ug/m3	77.6 ug/m3
AMS-08b	IMY SE - Fontinot	07:48	17:22	29.78209	-95.31768	29.5 ug/m3	78.8 ug/m3
AMS-09	IMY South - Waco and Lee	07:53	10:19	29.78206	-95.32499	1 ug/m3	1 ug/m3
AMS-10b	HWPW - Eddie and Amboy	08:42	17:04	29.78593	-95.3238	25.1 ug/m3	63.4 ug/m3
AMS-11	IMY South - Waco and Lee	10:29	17:29	29.78212	-95.32496	28.4 ug/m3	73.2 ug/m3
AMS-13a	HWPW - Quitman East	08:48	17:08	29.78455	-95.32406	31.6 ug/m3	77.4 ug/m3

Note: Dust sensor on AMS-09 failed and was replaced with station AMS-11 at approximately 10:29. Results reported by station AMS-09 are biased low and unreliable.

PM 2.5 and PM 10 Daily Summary Results

Sample Date	Description of Work Performed
May 23, 2023	UPRR and Capital Technologies crews worked in and around the capped area, digging and hydro vacuuming on both the south and north side of the tracks near to the Lockwood St. overpass. Excavated and hydro-vacuumed soils were transferred into roll-off containers located in the soil cap area. Work hours were from approximately 08:00 – 17:50.

Overview Map of Daily Sample Locations

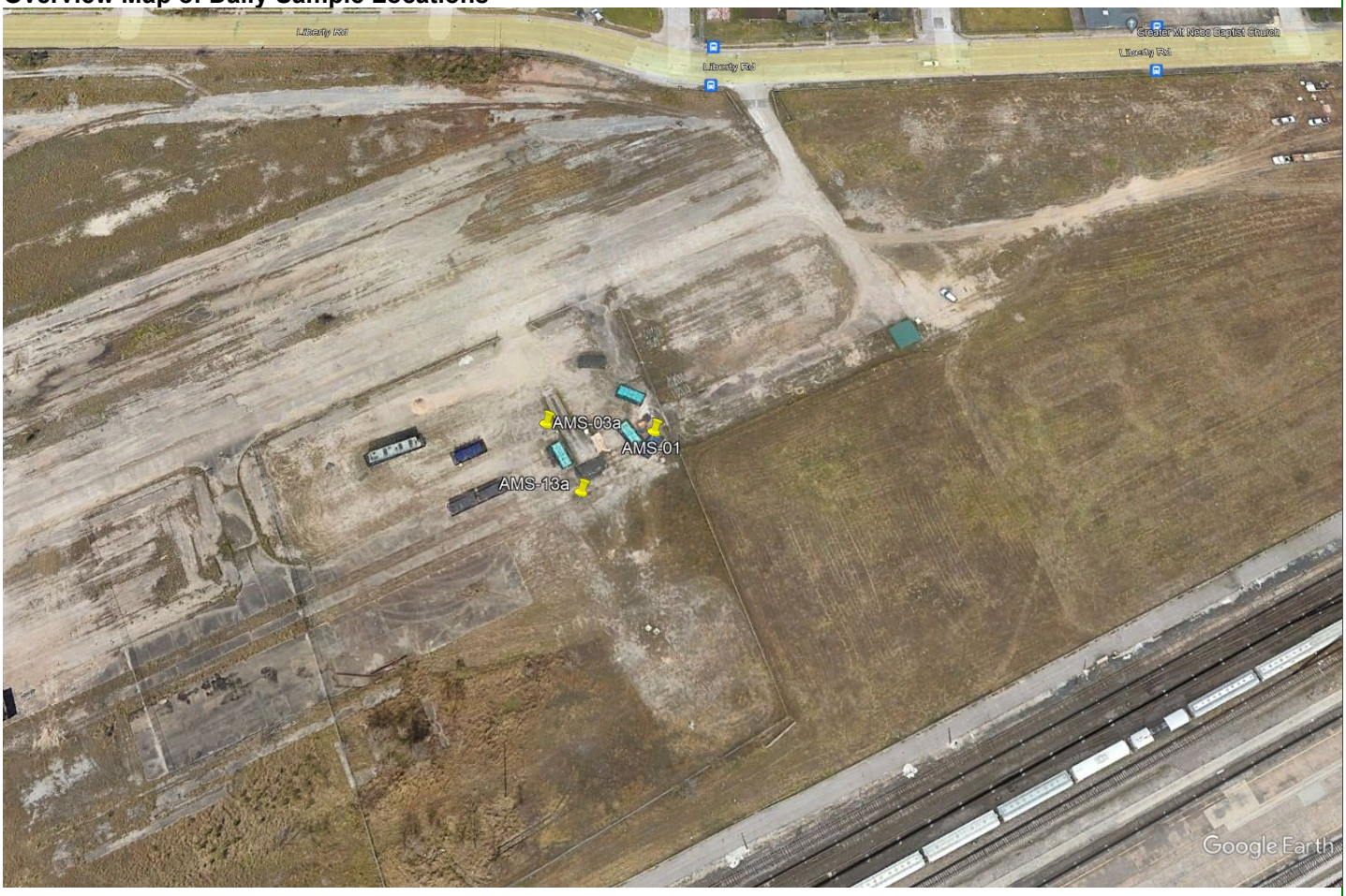
Station ID	Location Description	Start	Stop	Latitude	Longitude	Overall Average PM 2.5	Overall Average PM 10
AMS-01	HWPW - Solo North	09:10	18:12	29.78733	-95.32105	28.2 ug/m3	68.5 ug/m3
AMS-03a	HWPW - Erastus	08:51	18:09	29.78750	-95.31658	28 ug/m3	72.1 ug/m3
AMS-05b	HWPW - Kashmere and Liberty	08:56	18:04	29.78754	-95.32378	26.7 ug/m3	65 ug/m3
AMS-06b	IMY SE - Clementine	08:22	18:26	29.78202	-95.31926	24.1 ug/m3	64.2 ug/m3
AMS-07	IMY South - Yates	08:25	18:27	29.78212	-95.32322	26.7 ug/m3	70.1 ug/m3
AMS-08b	IMY SE - Fontinot	08:19	18:25	29.7821	-95.31764	28.7 ug/m3	72.7 ug/m3
AMS-10b	HWPW - Eddie and Amboy	09:00	18:03	29.78585	-95.32376	21.9 ug/m3	54.6 ug/m3
AMS-11	IMY South - Waco and Lee	08:27	18:29	29.78209	-95.32496	26.6 ug/m3	68.5 ug/m3
AMS-13a	HWPW - Kashmere and Liberty	09:06	18:00	29.78756	-95.32375	28 ug/m3	67.3 ug/m3

PM 2.5 and PM 10 Daily Summary Results

Sample Date
May 25, 2023

Description of Work Performed
The only excavation-related activity that took place in the capped area on this day was transfer of a load of excavated / hydro-vacuumed soil from previous days' work into a roll-off container located near the center of the capped area. Two air monitoring stations (AMS-03a and AMS13a) were placed downwind of the unloading operation and one upwind (AMS-01). Monitoring stations remained in place for the duration of the unloading operation, from approximately 08:00 – 11:45.

Overview Map of Daily Sample Locations



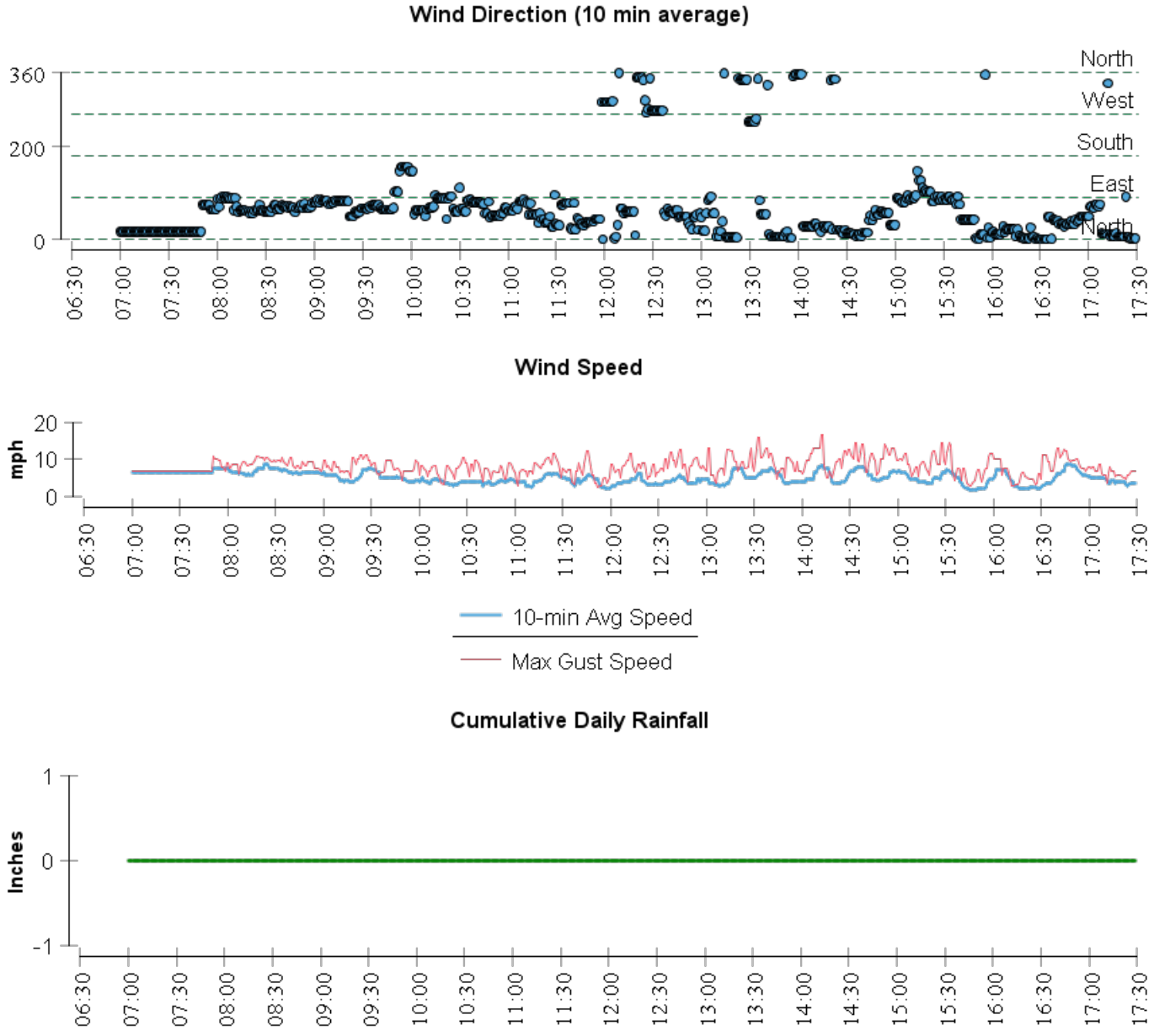
Station ID	Location Description	Start	Stop	Latitude	Longitude	Overall Average PM 2.5	Overall Average PM 10
AMS-01	HWPW - Wipprecht South	08:06	11:50	29.78645	-95.32134	20.9 ug/m3	52.3 ug/m3
AMS-03a	HWPW - Wipprecht South	08:03	11:47	29.78647	-95.32163	18.1 ug/m3	48.1 ug/m3
AMS-13a	HWPW - Wipprecht South	08:03	11:45	29.7863	-95.32153	19.6 ug/m3	48.7 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.

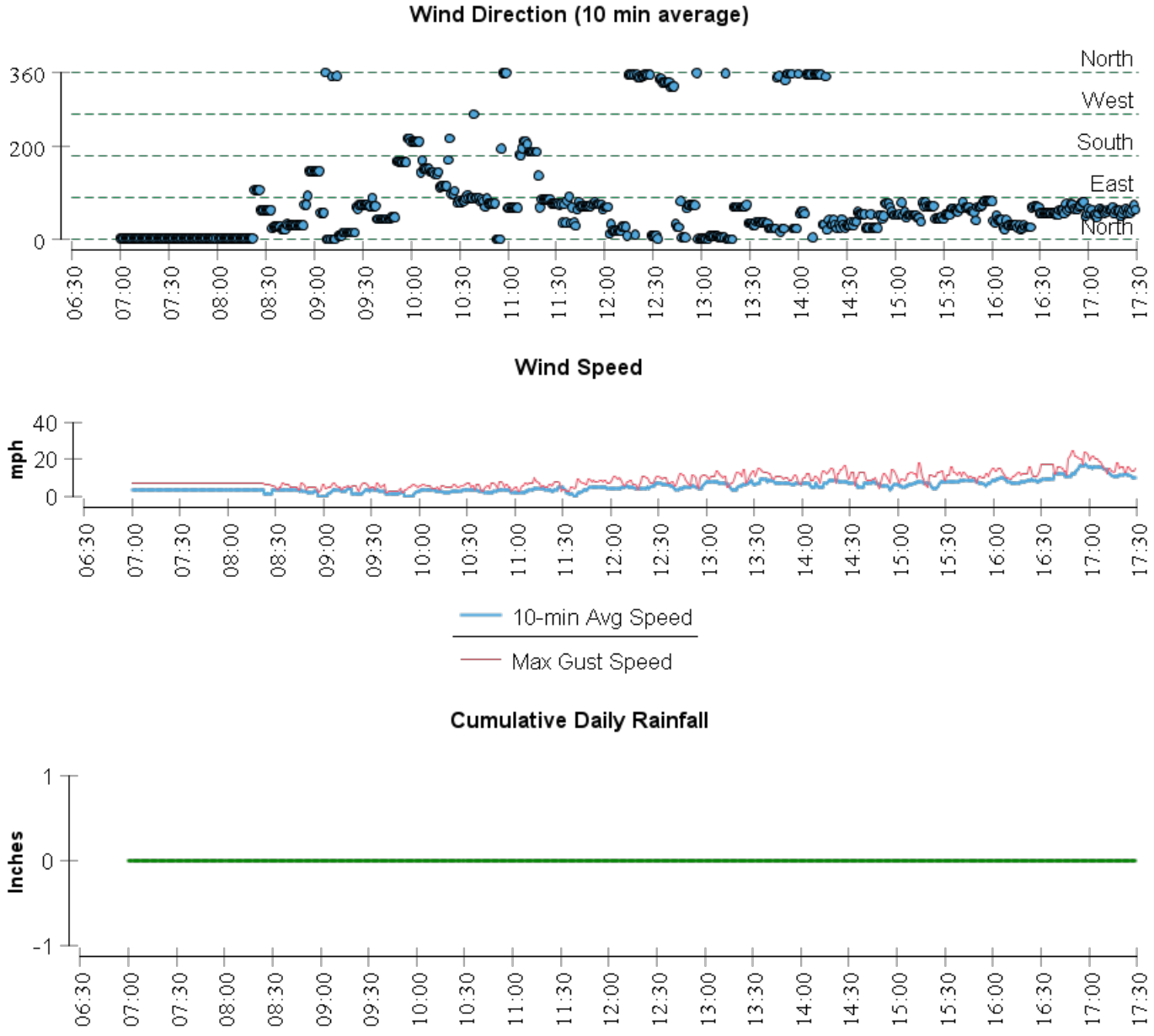
Weather Time History Data

Sample Date **May 22, 2023**



Weather Time History Data

Sample Date **May 23, 2023**



Weather Time History Data

Sample Date **May 25, 2023**

Note: Weather station did not come online during the unloading event on this day. Weather Underground reported wind directions of E and E-NE at speeds from 7 – 8 mph, with no precipitation before or during the unloading period.

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.

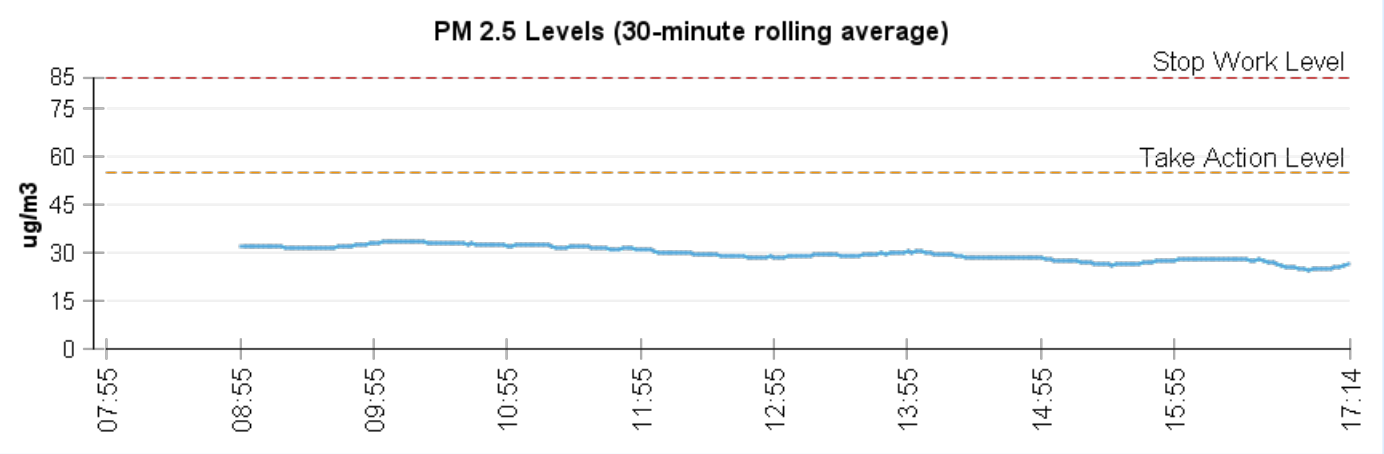
Union Pacific Railroad (UPRR) has established control levels for airborne particulates to help ensure that construction-related dust levels are adequately controlled. These levels are explained as follows:

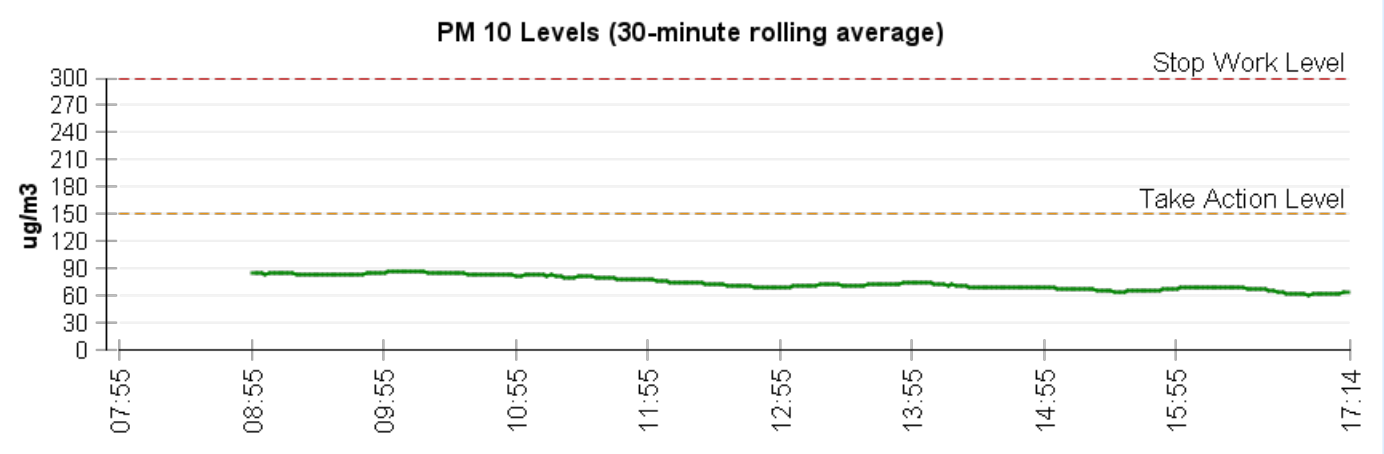
- Take-Action Level - 30-minute average dust concentrations >55 ug/m3 (PM 2.5) or >150 ug/m3 (PM 10) Additional dust control measures, as outlined in the site dust control plan, will be promptly implemented to reduce levels below the Take-Action Level.
- Stop-Work Level - 30-minute average dust concentrations >85 ug/m3 (PM 2.5) or >300 ug/m3 (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

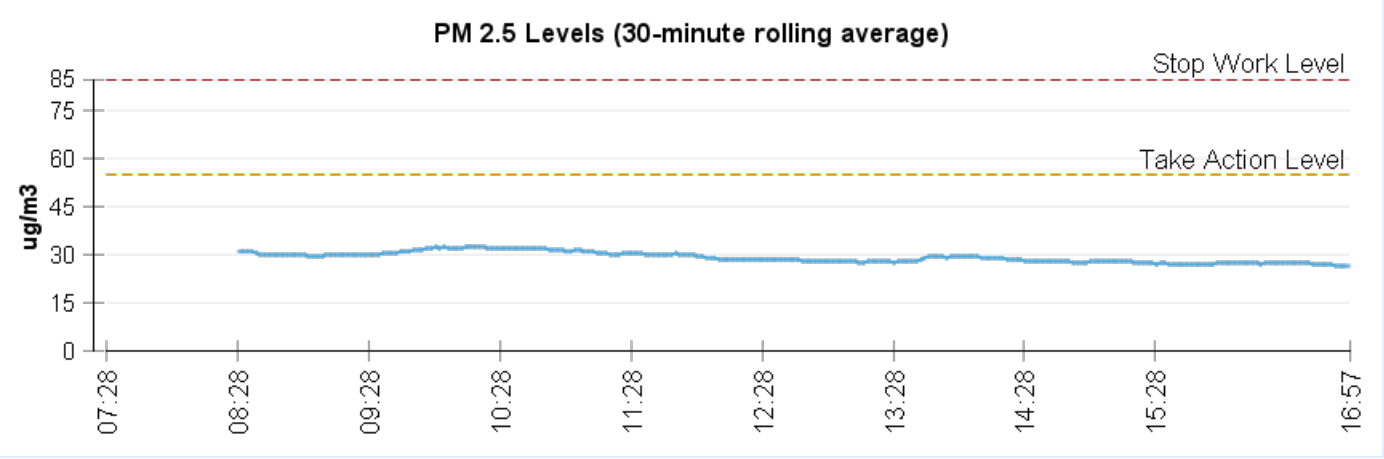
Sample Date	May 22, 2023
Station ID AMS-01	**Location Description** 29.78763, -95.31657 - HWPW - Erastus

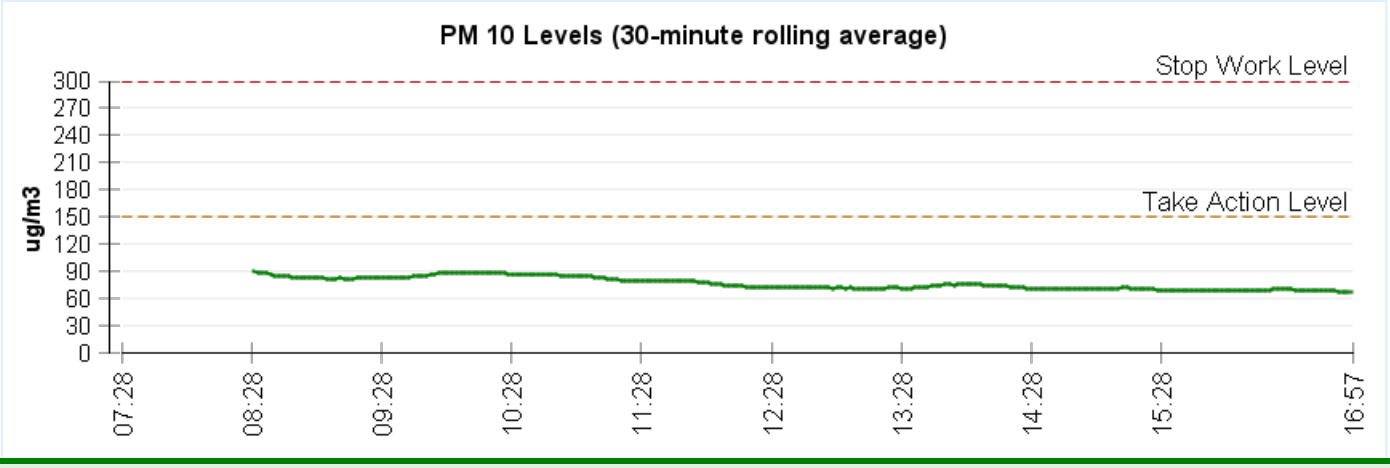




PM 2.5 and PM 10 Time History Data

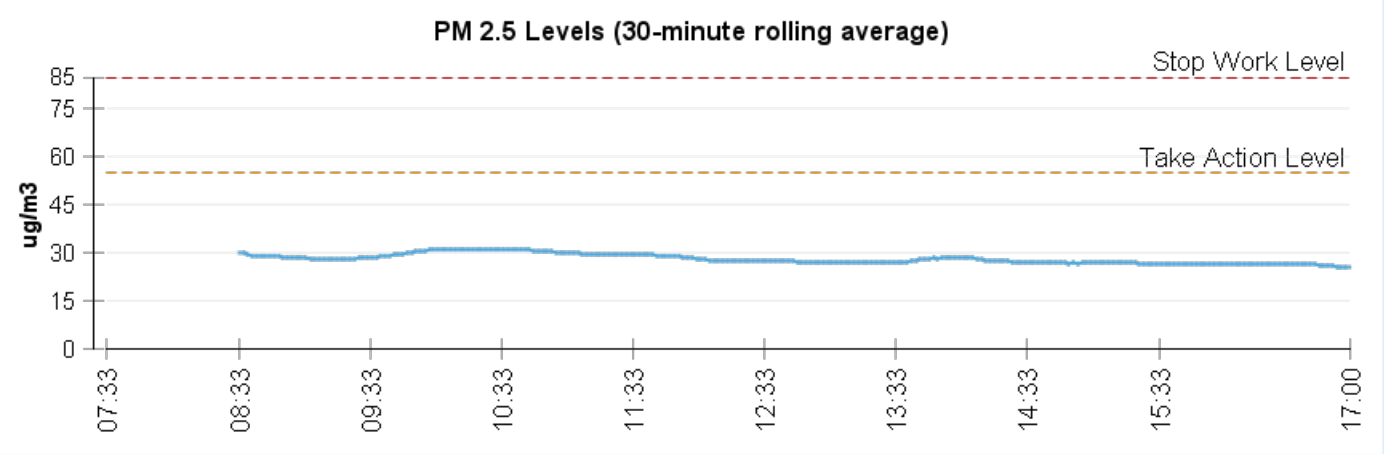
Sample Date	May 22, 2023
Station ID AMS-03a	**Location Description** 29.78735, -95.32104 - HWPW - Solo North

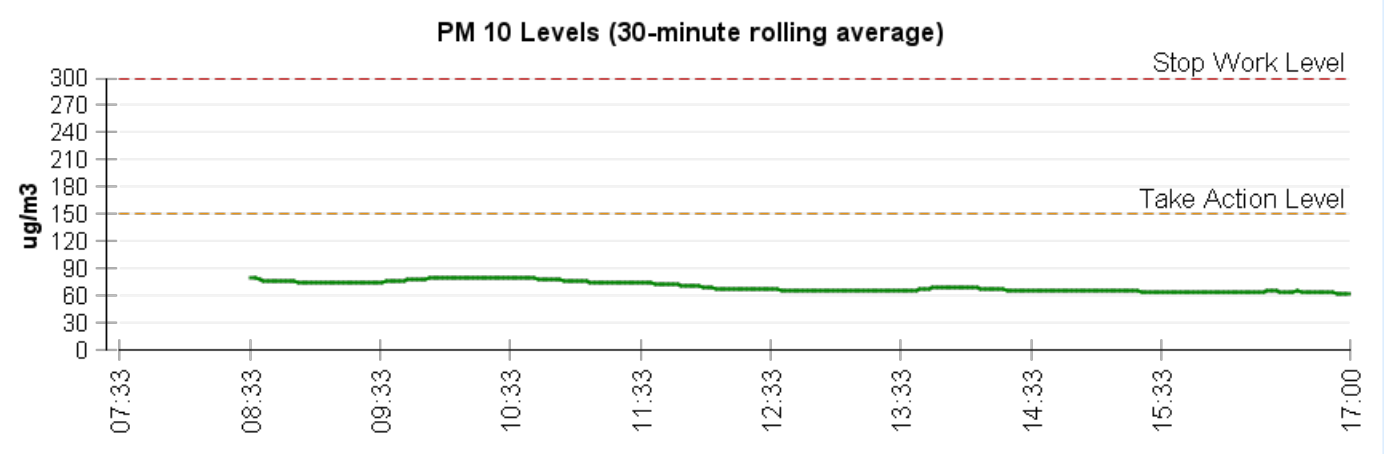




PM 2.5 and PM 10 Time History Data

Sample Date	May 22, 2023
Station ID AMS-05b	**Location Description** 29.78754, -95.32378 - HWPW - Kashmere and Liberty

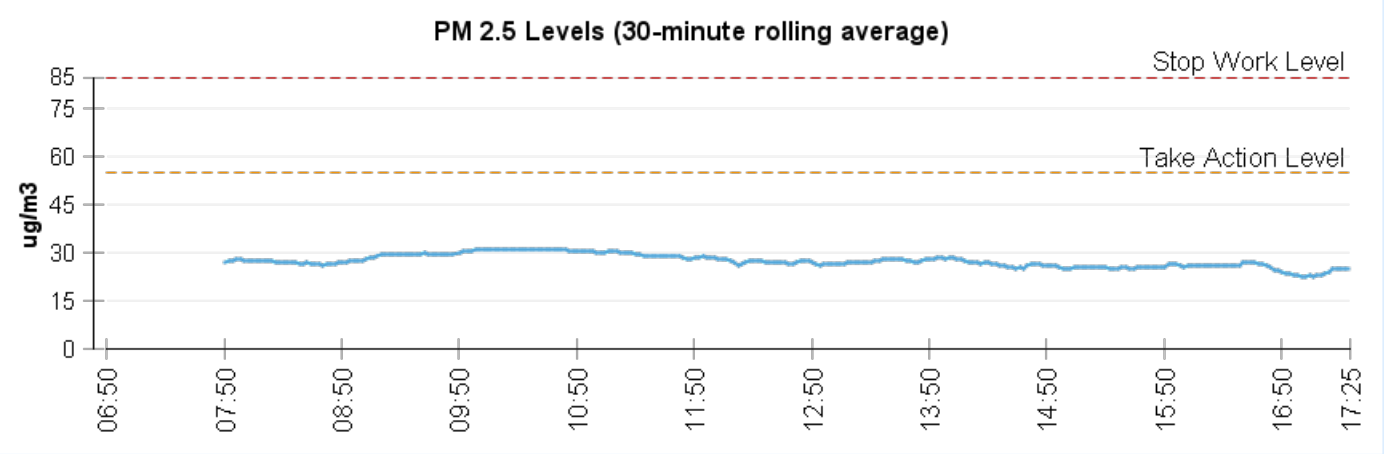


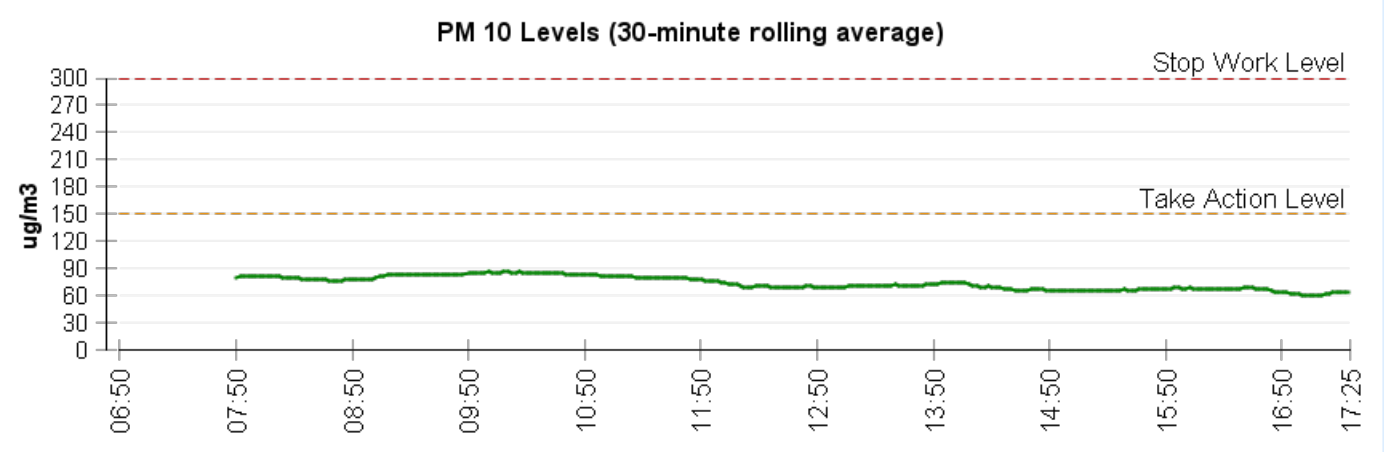


PM 2.5 and PM 10 Time History Data

Sample Date	May 22, 2023

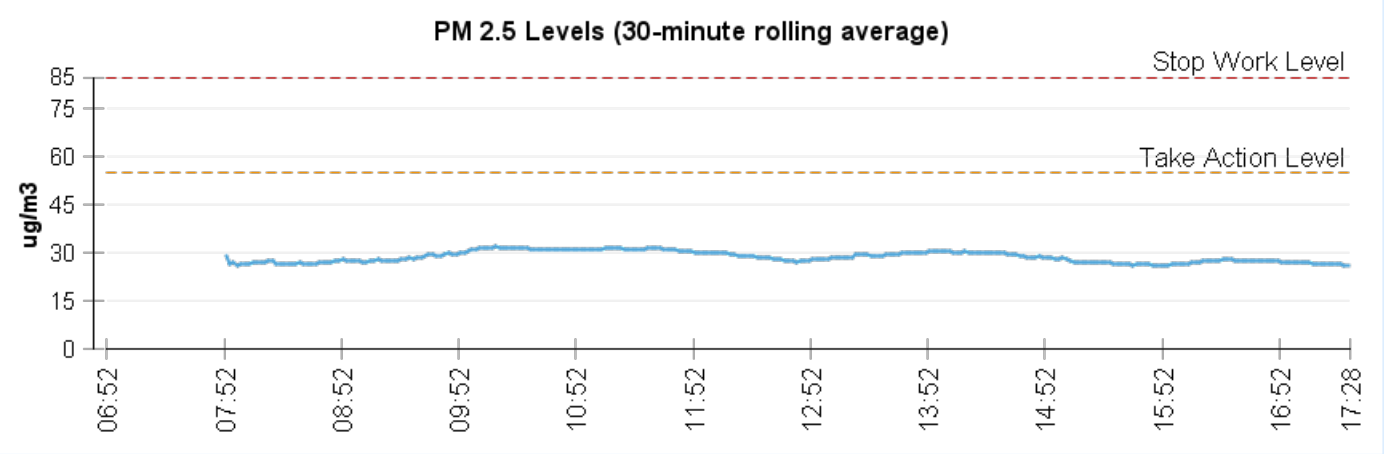
Station ID	Location Description
AMS-06b	29.78208, -95.31926 - IMY SE - Clementine

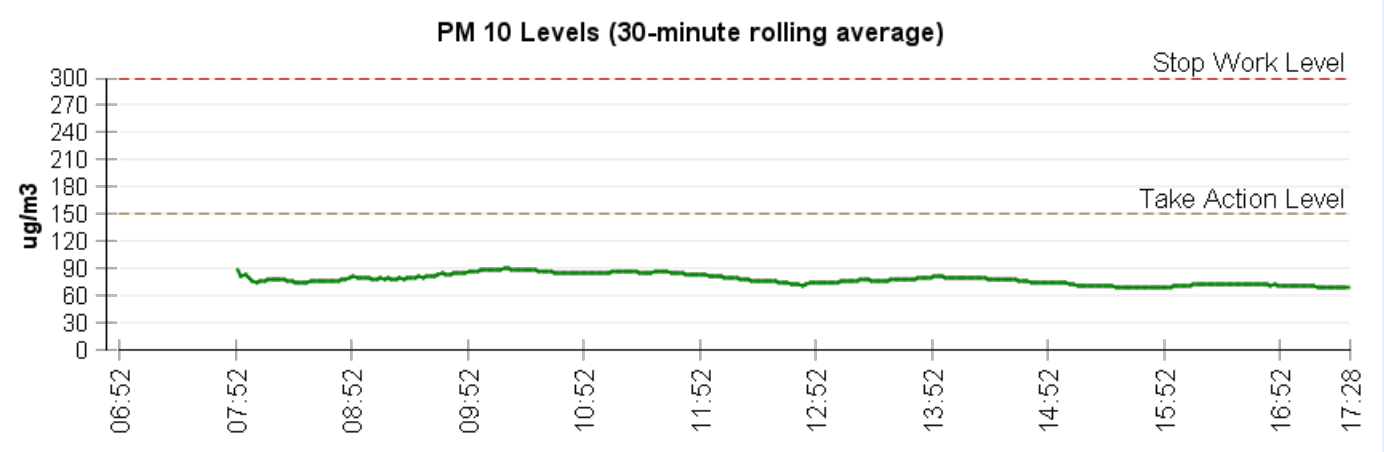




PM 2.5 and PM 10 Time History Data

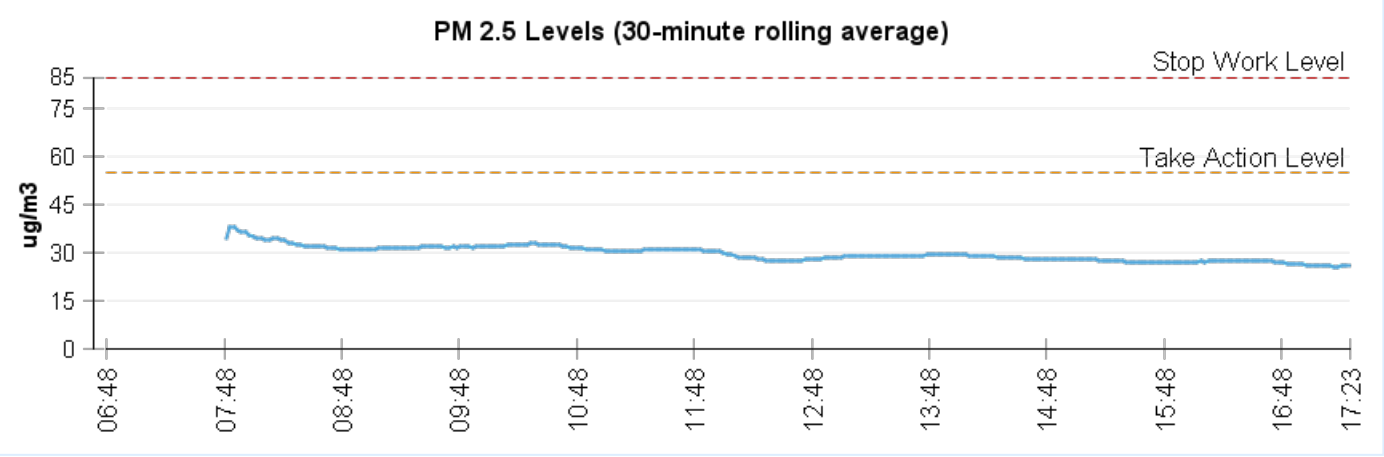
Sample Date	May 22, 2023
Station ID AMS-07	**Location Description** 29.78211, -95.32328 - IMY South - Yates

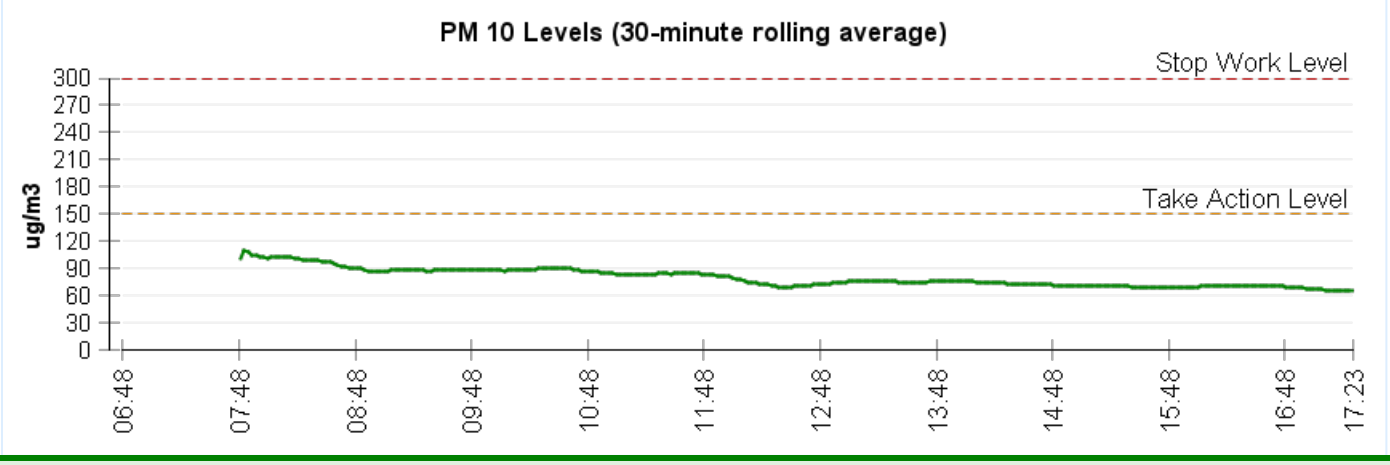




PM 2.5 and PM 10 Time History Data

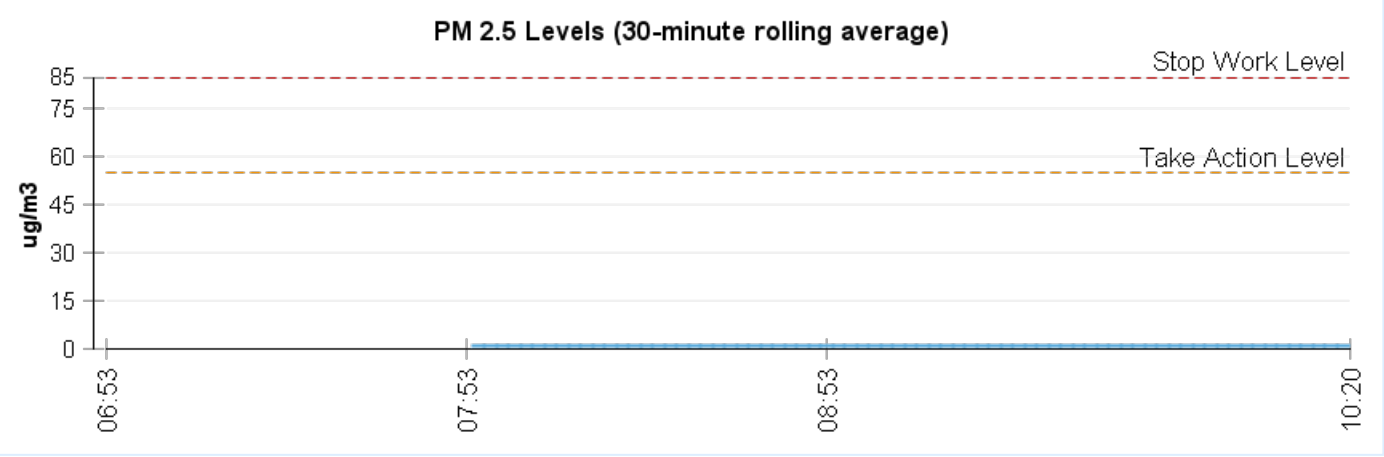
Sample Date	May 22, 2023
Station ID AMS-08b	**Location Description** 29.78209, -95.31768 - IMY SE - Fontinot

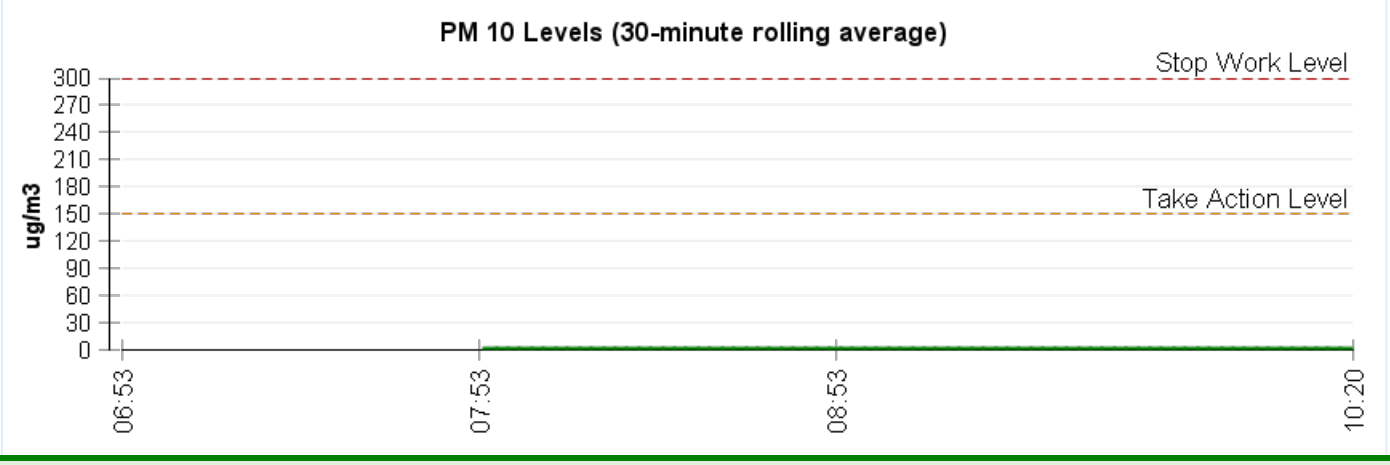




PM 2.5 and PM 10 Time History Data

Sample Date	May 22, 2023
Station ID AMS-09	**Location Description** 29.78206, -95.32499 - IMY South - Waco and Lee

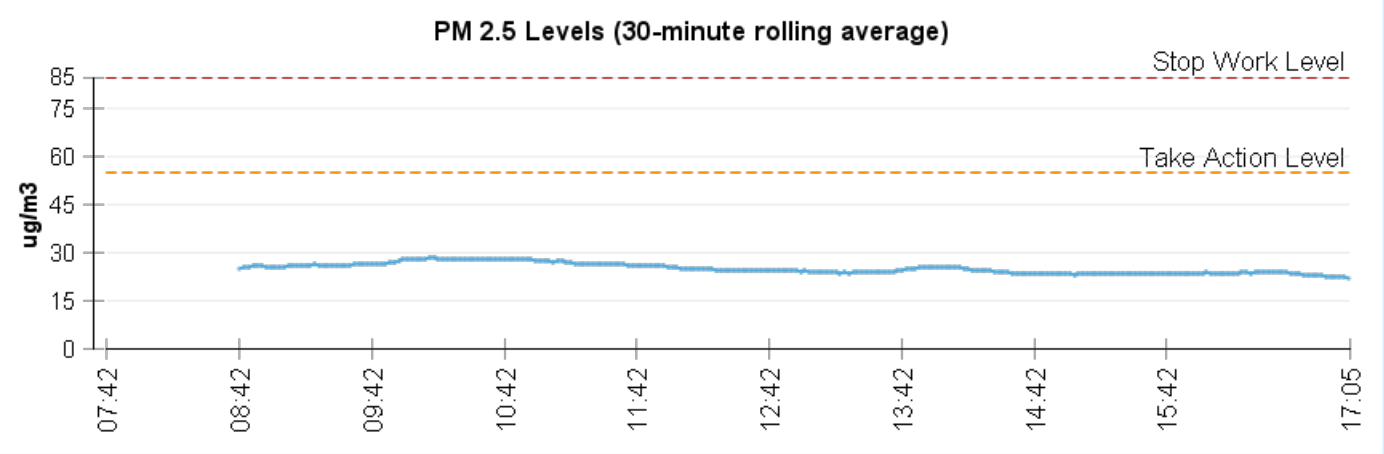


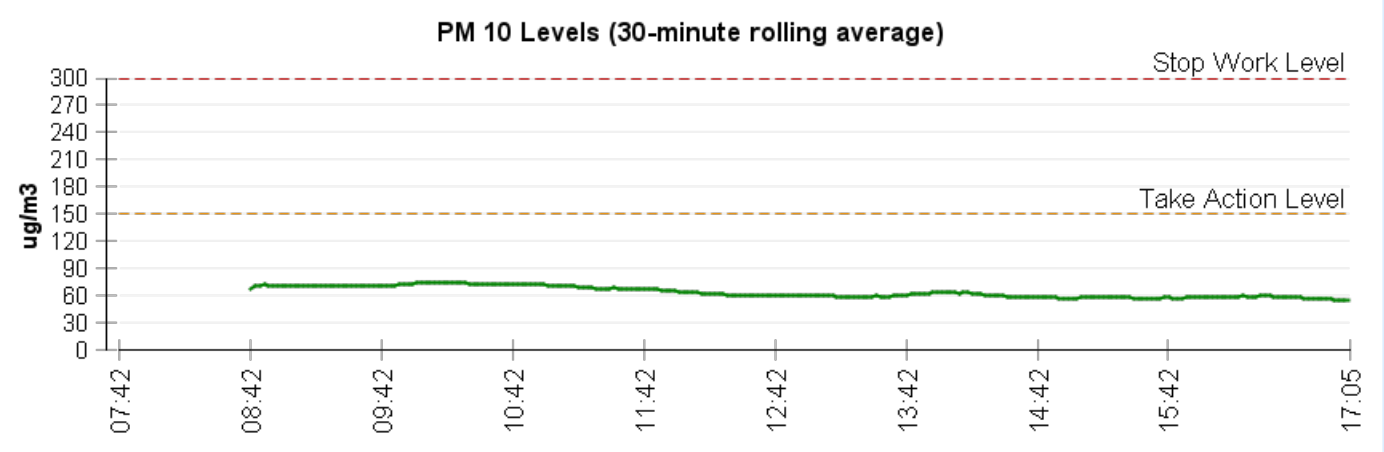


Note: Dust sensor on AMS-09 failed. Station was replaced by AMS-11 at approximately 10:29. Results for AMS-09 on this day are biased low and are not reliable.

PM 2.5 and PM 10 Time History Data

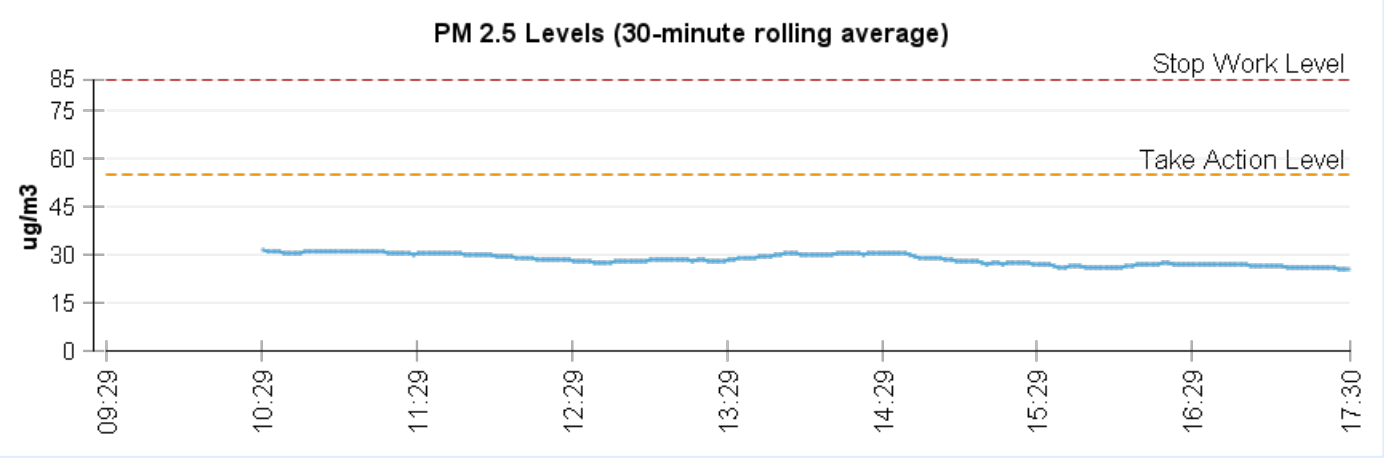
Sample Date	May 22, 2023
Station ID AMS-10b	**Location Description** 29.78593, -95.3238 - HWPW - Eddie and Amboy

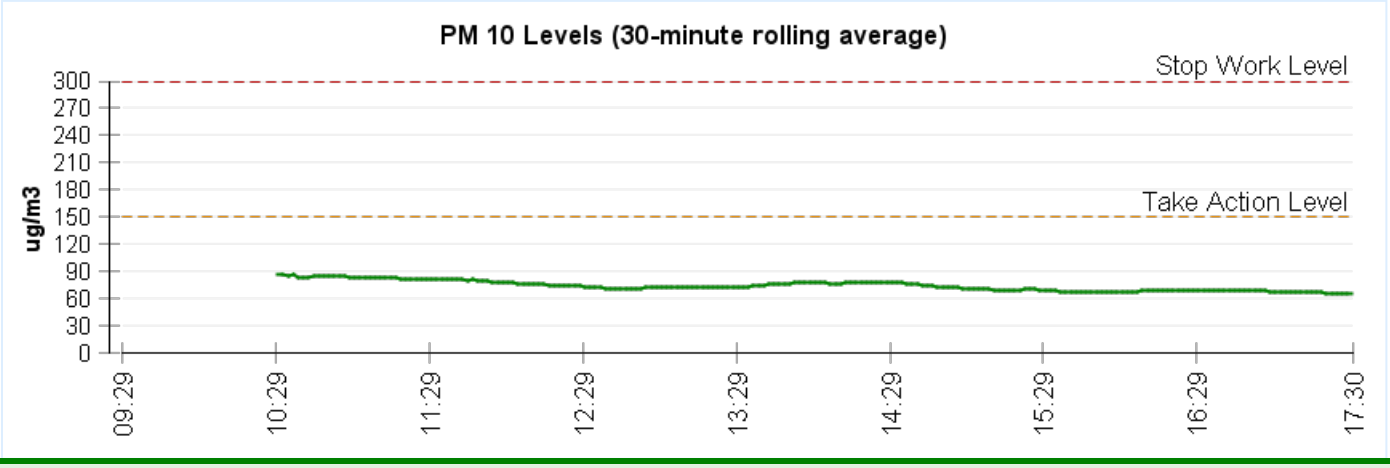




PM 2.5 and PM 10 Time History Data

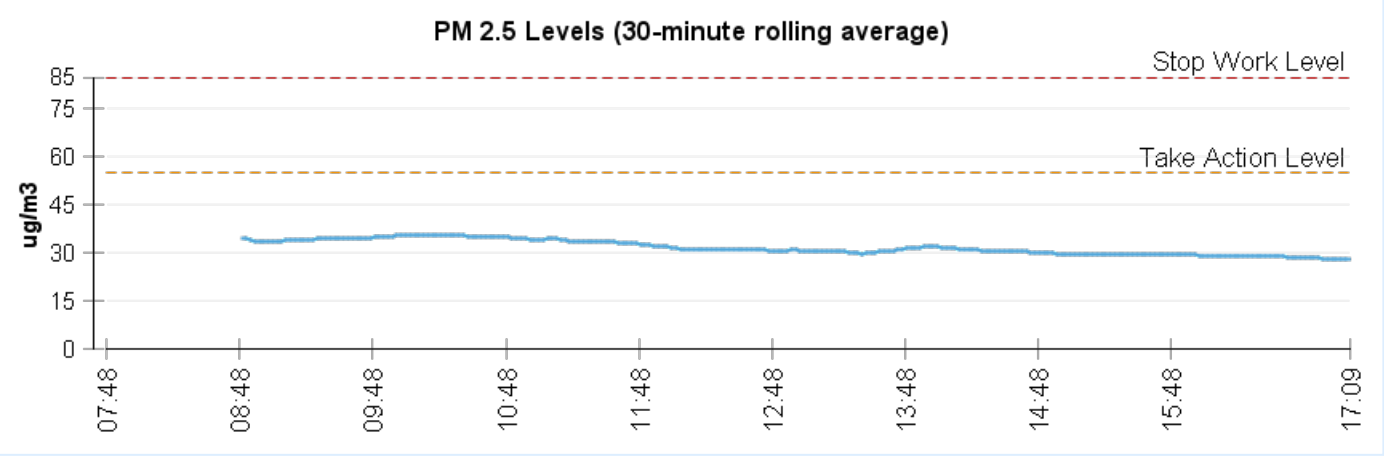
Sample Date	May 22, 2023
Station ID AMS-11	**Location Description** 29.78212, -95.32496 - IMY South - Waco and Lee

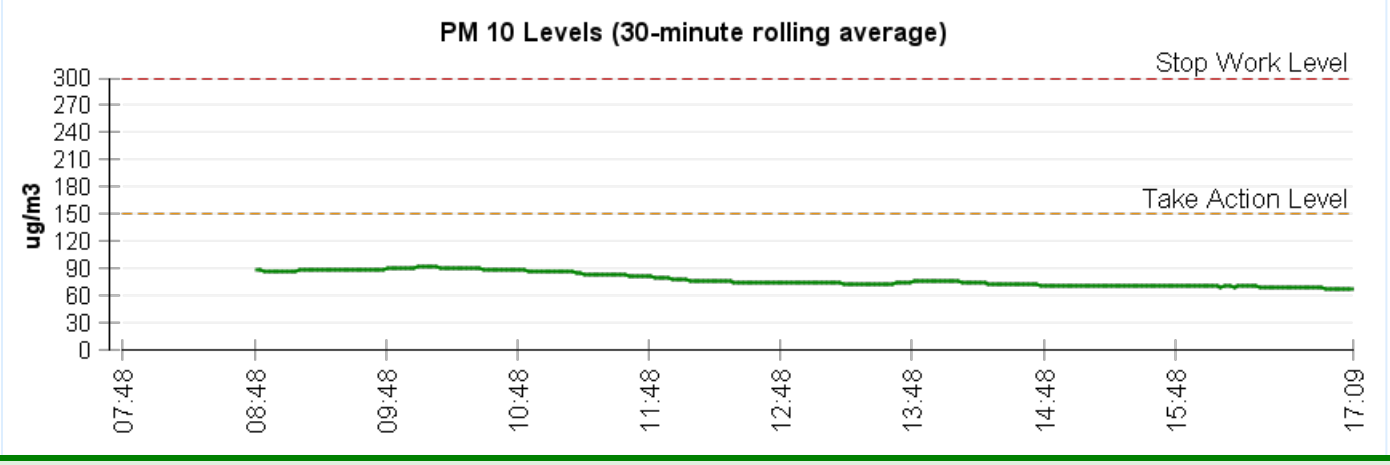




PM 2.5 and PM 10 Time History Data

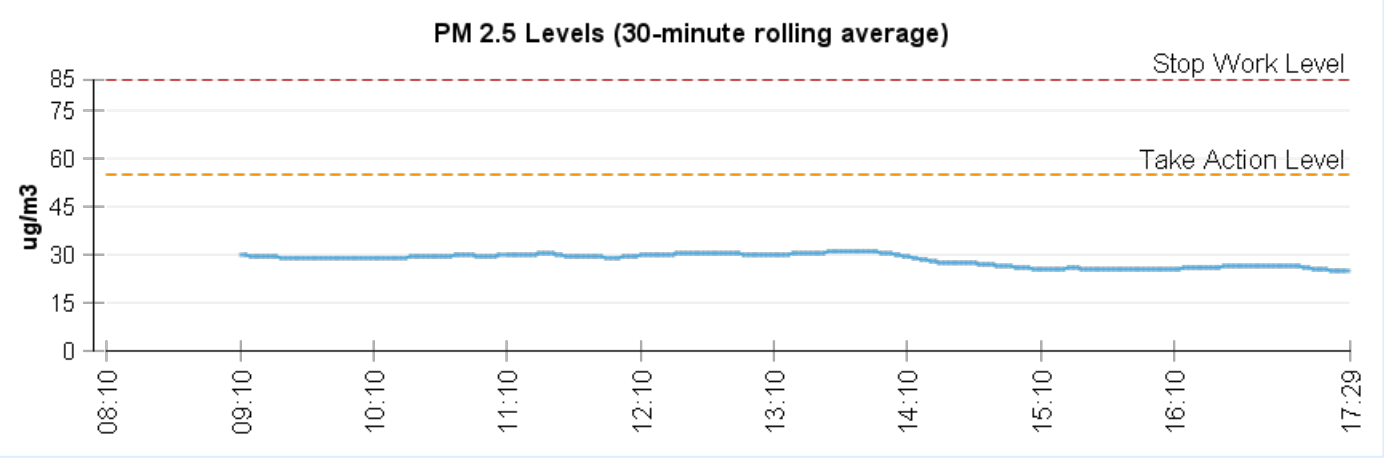
Sample Date	May 22, 2023
Station ID AMS-13a	**Location Description** 29.78455, -95.32406 - HWPW - Quitman East

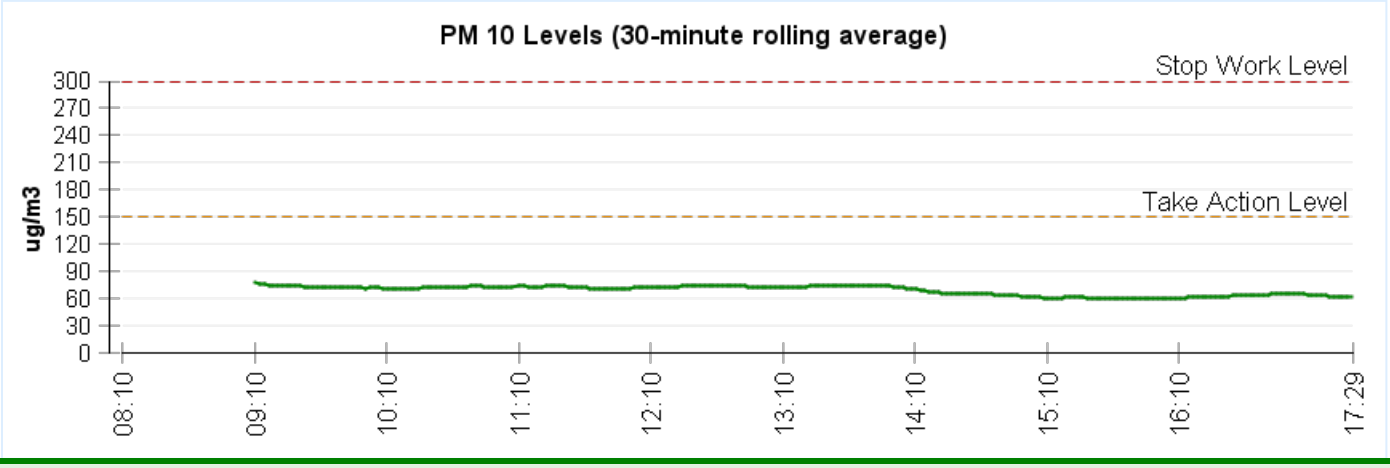




PM 2.5 and PM 10 Time History Data

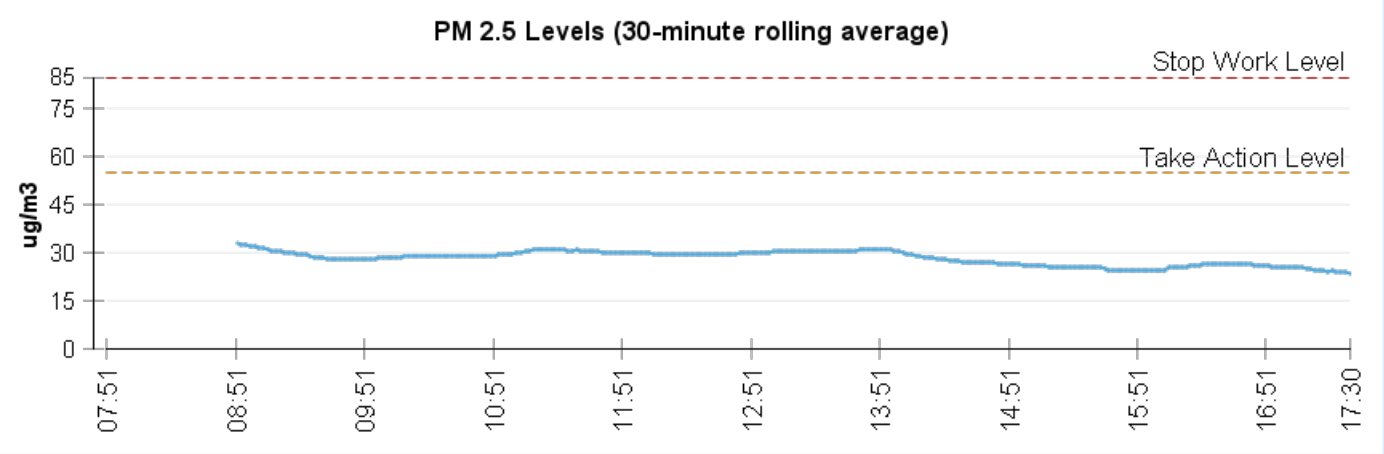
Sample Date	May 23, 2023
Station ID AMS-01	**Location Description** 29.78733, -95.32105 - HWPW - Solo North

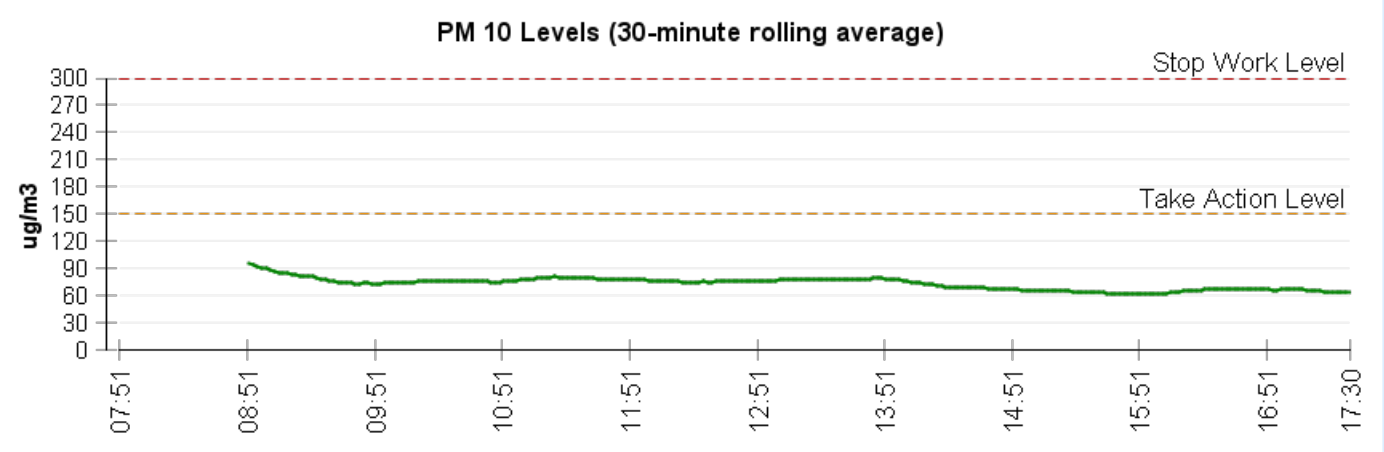




PM 2.5 and PM 10 Time History Data

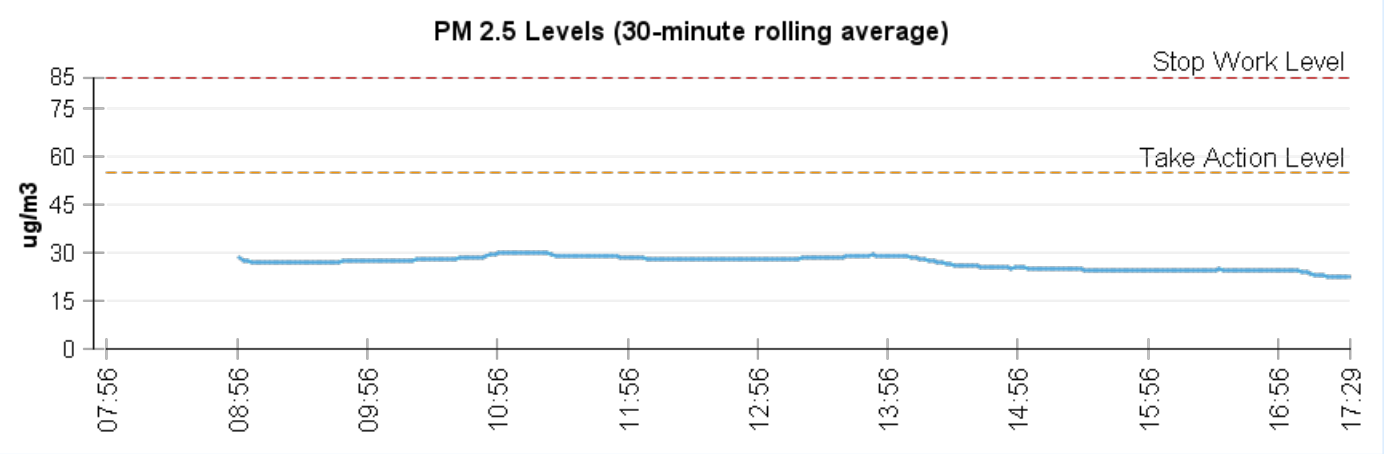
Sample Date	May 23, 2023
Station ID AMS-03a	**Location Description** 29.78750, -95.31658 – HWPW - Erastus

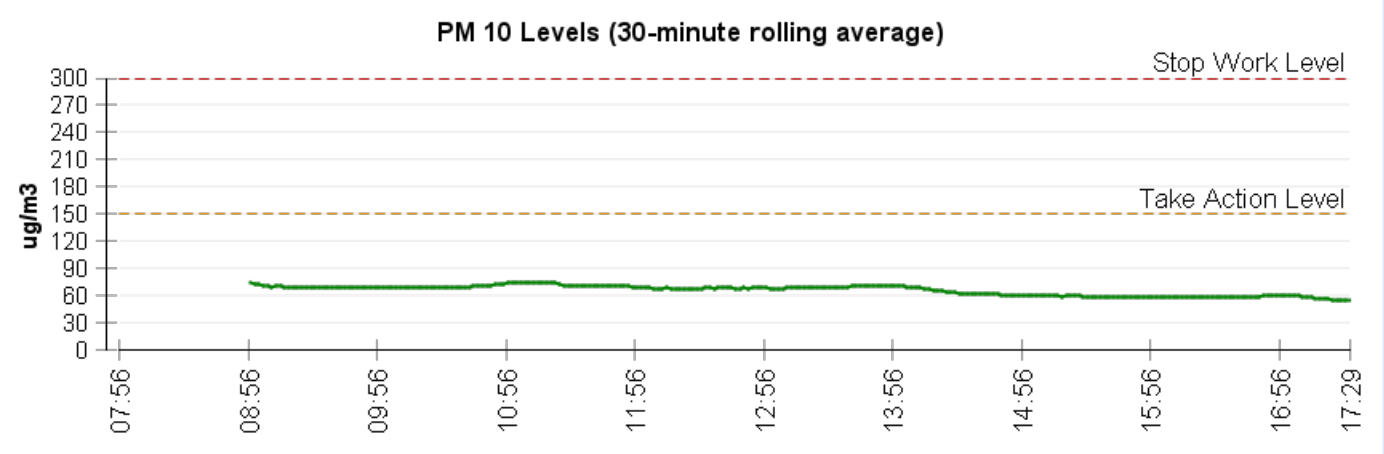




PM 2.5 and PM 10 Time History Data

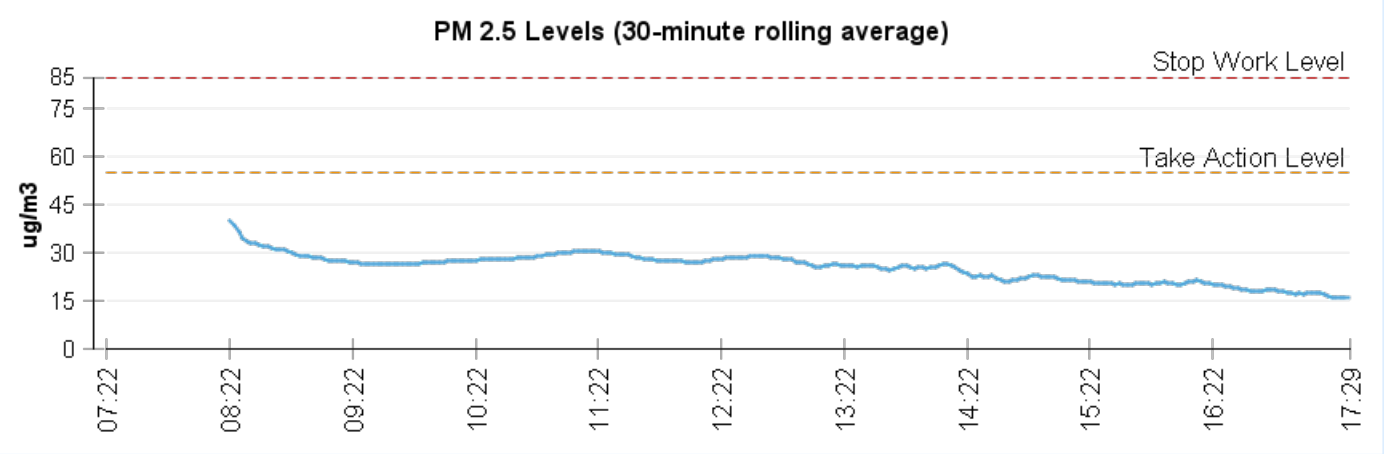
Sample Date	May 23, 2023
Station ID AMS-05b	**Location Description** 29.78754, -95.32378 - HWPW - Kashmere and Liberty

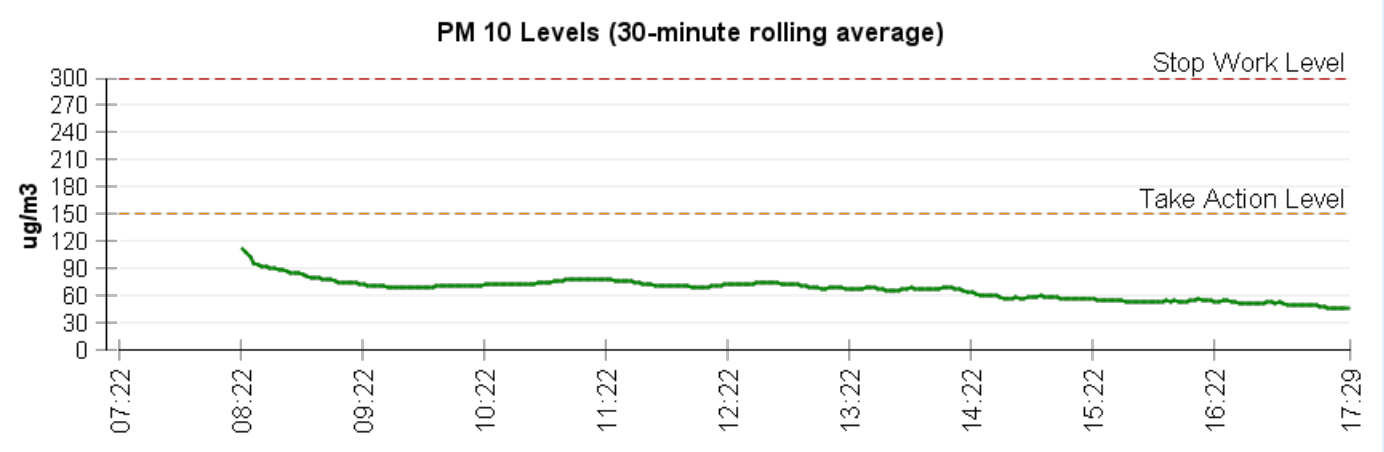




PM 2.5 and PM 10 Time History Data

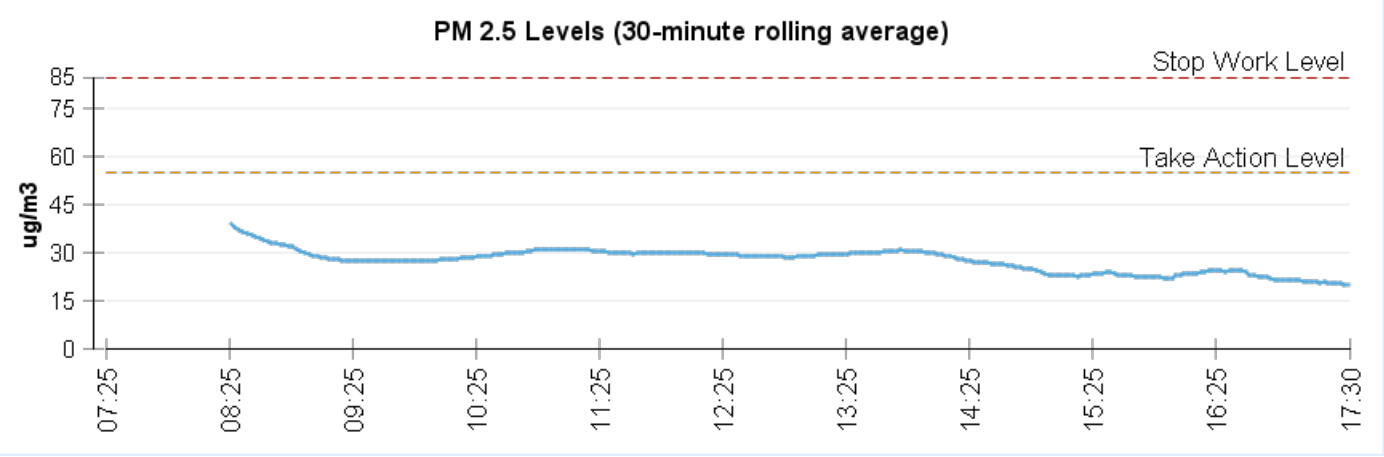
Sample Date	May 23, 2023
Station ID AMS-06b	**Location Description** 29.78202, -95.31926 - IMY SE - Clementine

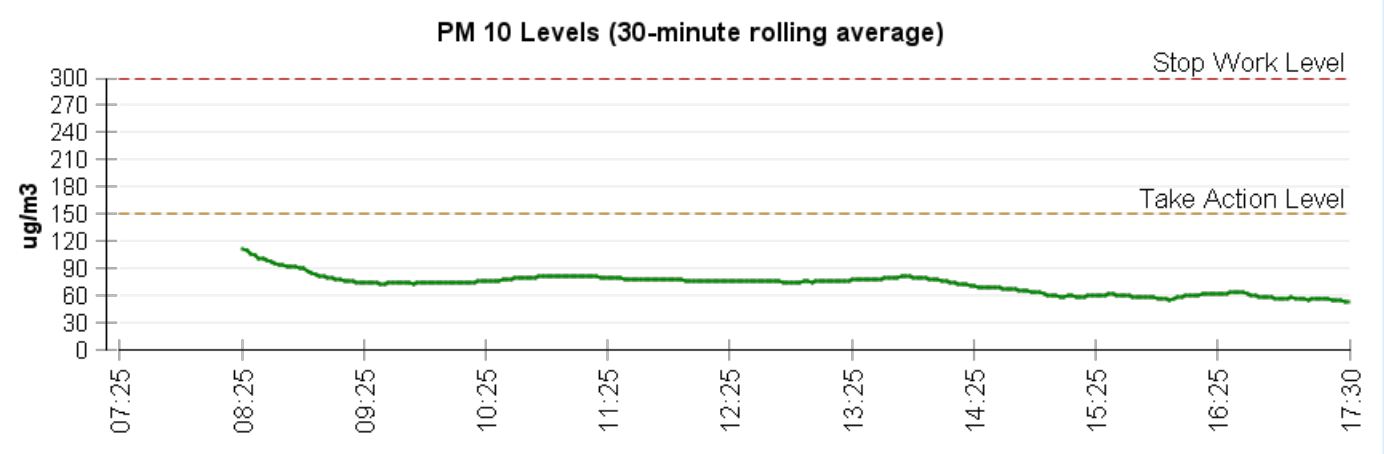




PM 2.5 and PM 10 Time History Data

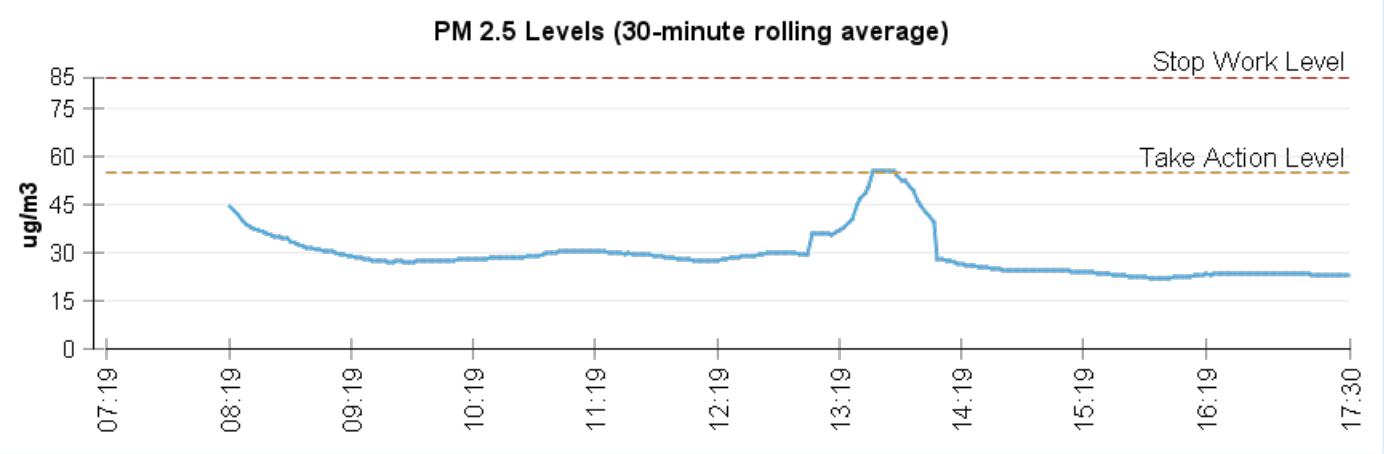
Sample Date	May 23, 2023
Station ID AMS-07	**Location Description** 29.78212, -95.32322 - IMY South - Yates

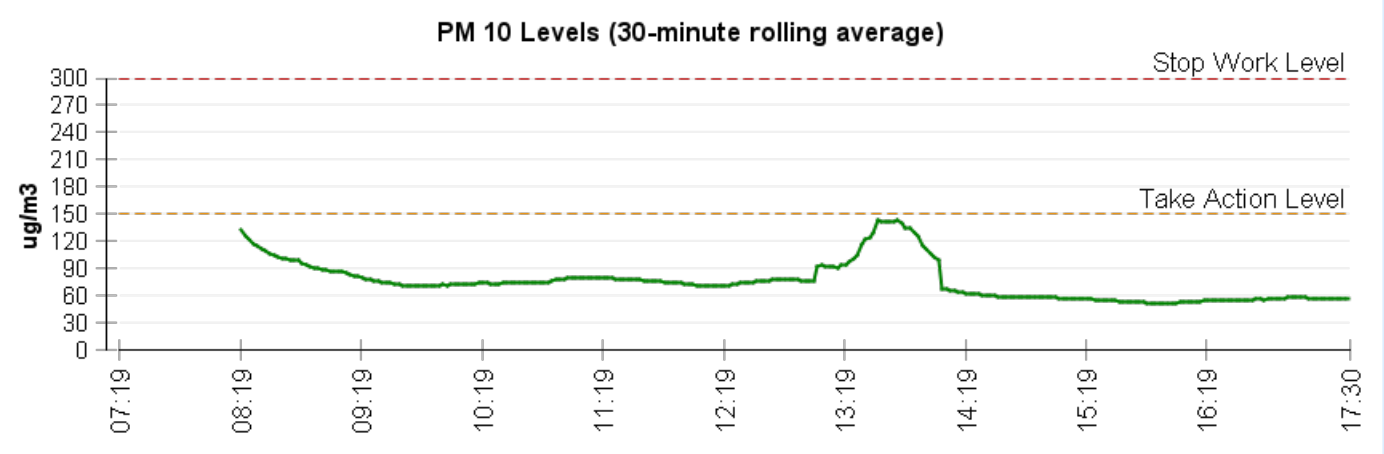




PM 2.5 and PM 10 Time History Data

Sample Date	May 23, 2023
Station ID AMS-08b	**Location Description** 29.7821, -95.31764 - IMY SE - Fontinot

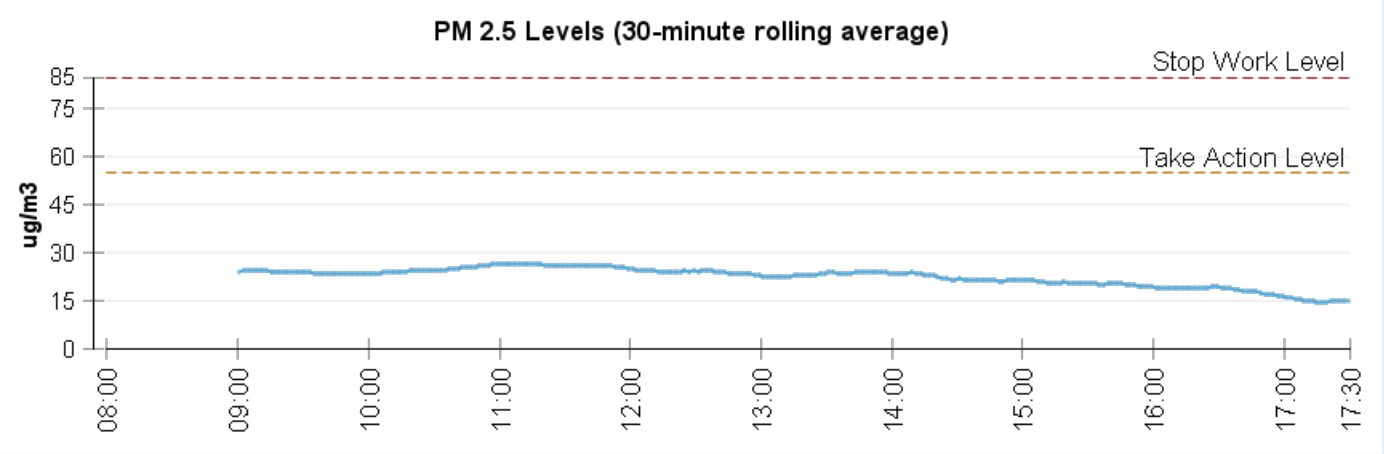


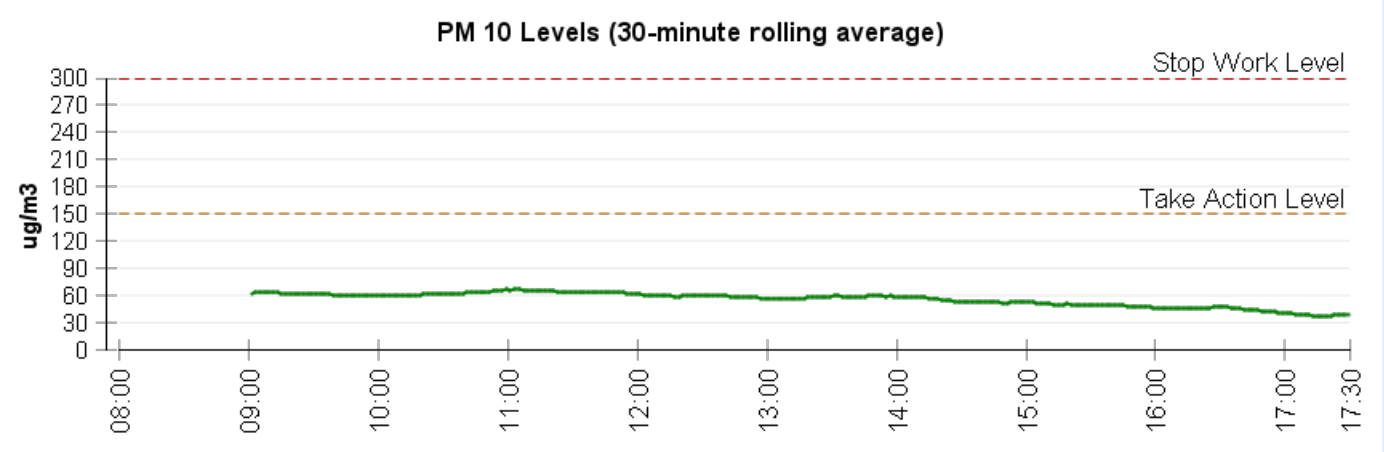


Note: Between 13:36 and 13:48, PM 2.5 levels slightly exceeded the Take Action level of 50 ug/m3. Investigation by the field IH indicated no dust-generating activities were occurring in the capped area, and no source of the brief elevation was evident. Only this station recorded such an event. Brief elevation does not appear to have resulted from excavation or soil transfer activities in the capped area, and was localized to the immediate area of the air monitoring station (AMS-11) located at the southeast corner of the intermodal yard.

PM 2.5 and PM 10 Time History Data

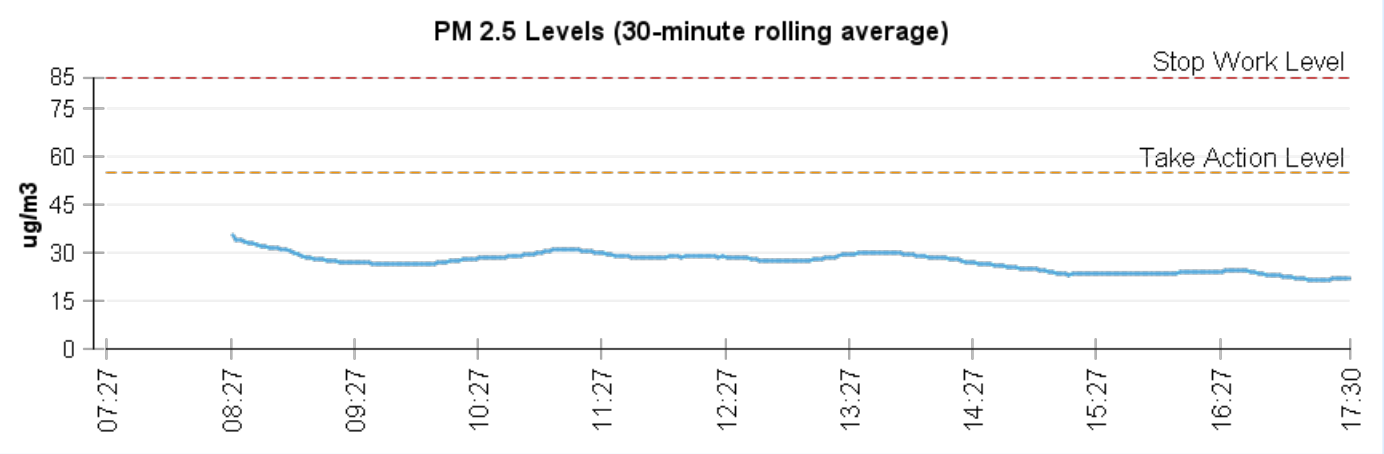
Sample Date	May 23, 2023
Station ID AMS-10b	**Location Description** 29.78585, -95.32376 - HWPW - Eddie and Amboy

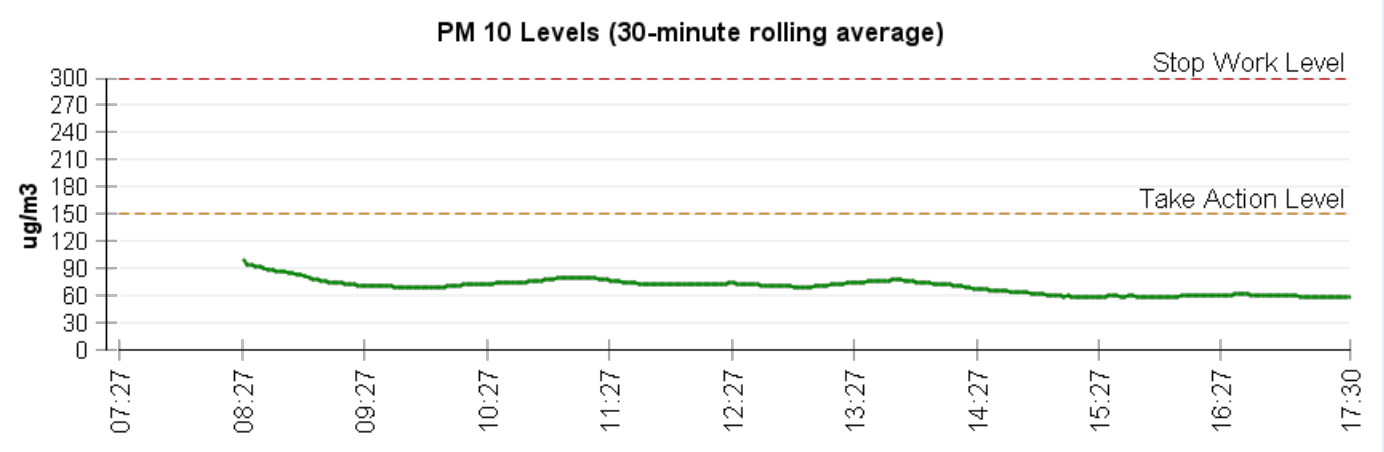




PM 2.5 and PM 10 Time History Data

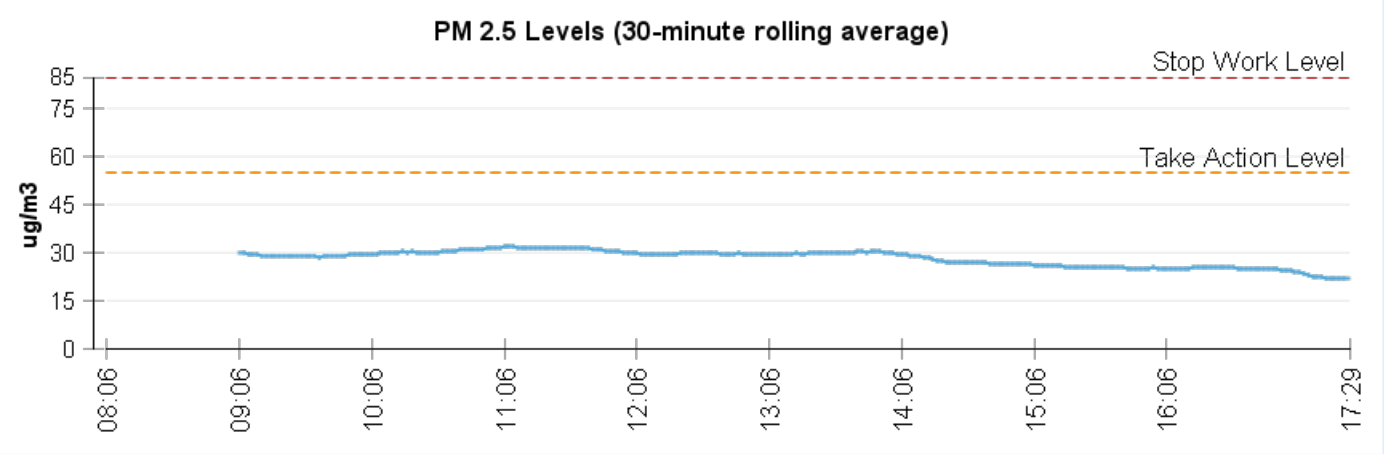
Sample Date	May 23, 2023
Station ID AMS-11	**Location Description** 29.78209, -95.32496 - IMY South - Waco and Lee

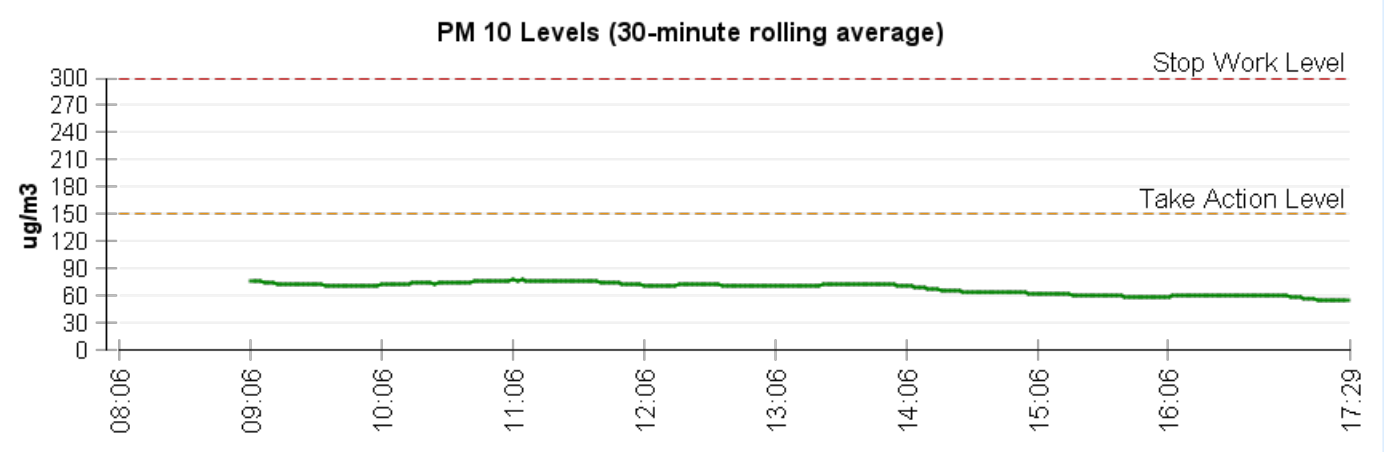




PM 2.5 and PM 10 Time History Data

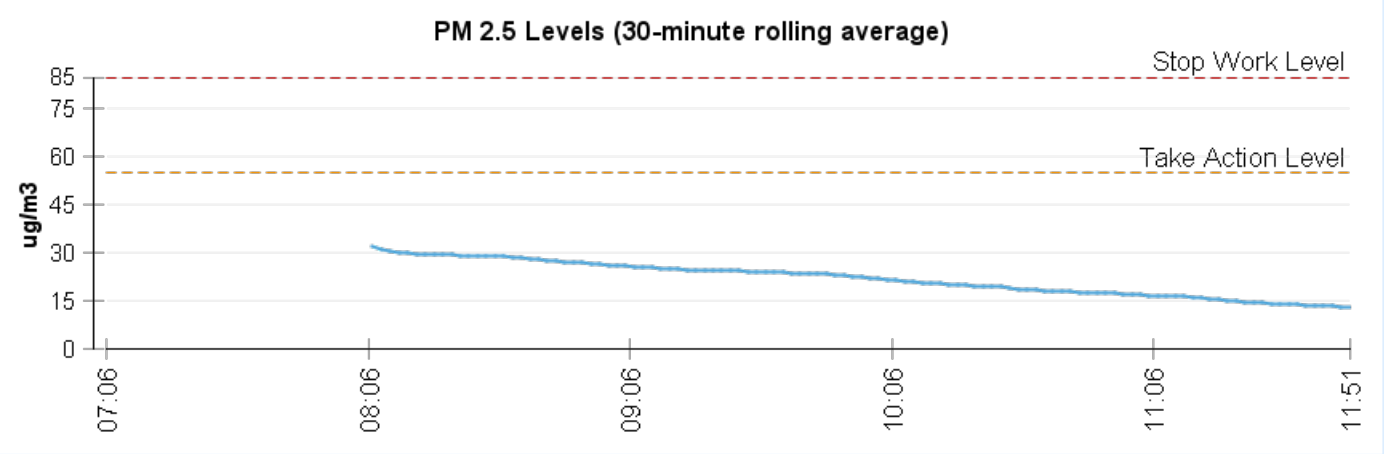
Sample Date	May 23, 2023
Station ID AMS-13a	**Location Description** 29.78756, -95.32375 - HWPW - Kashmere and Liberty

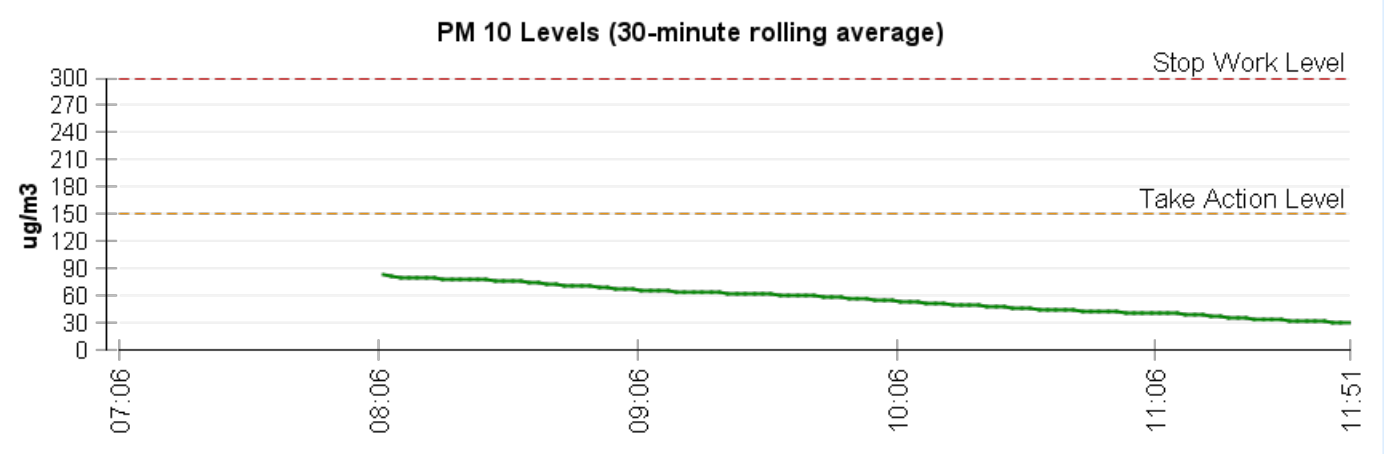




PM 2.5 and PM 10 Time History Data

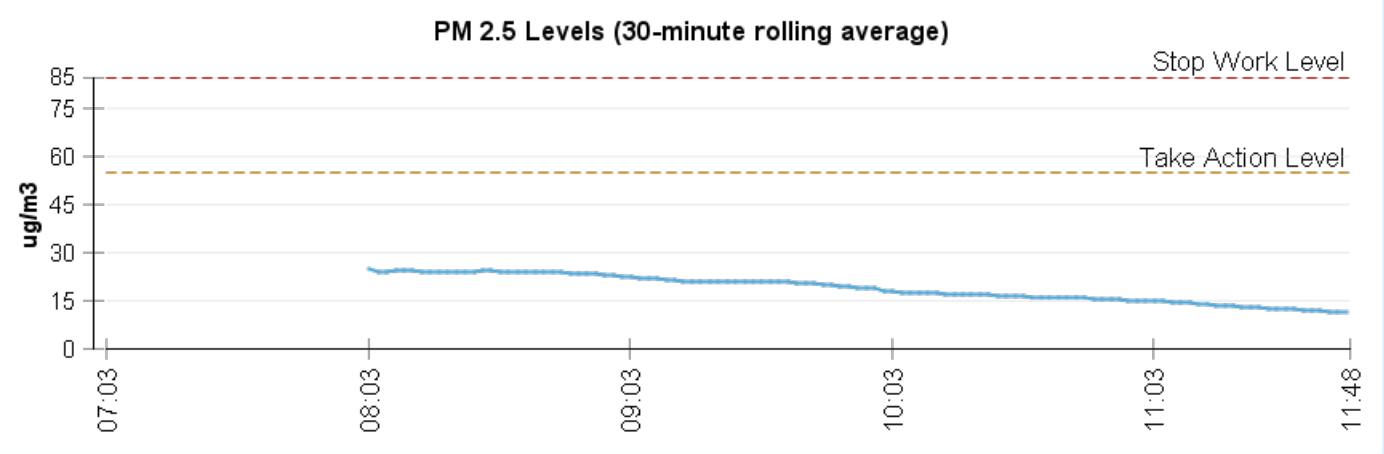
Sample Date	May 25, 2023
Station ID AMS-01	**Location Description** 29.78645, -95.32134 - HWPW - Wipprecht South

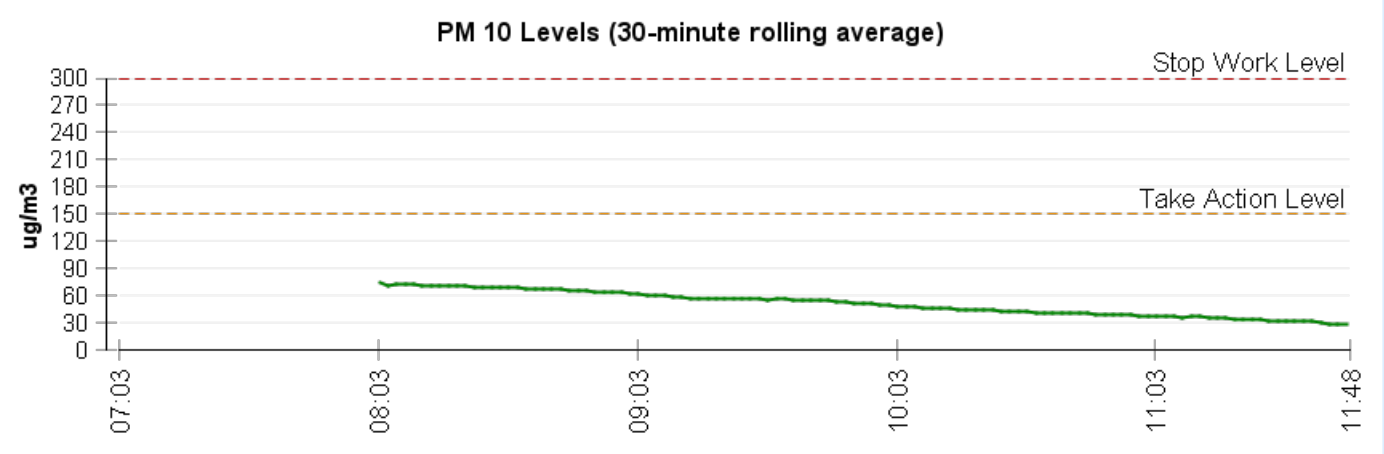




PM 2.5 and PM 10 Time History Data

Sample Date	May 25, 2023
Station ID AMS-03a	**Location Description** 29.78647, -95.32163 - HWPW - Wipprecht South





PM 2.5 and PM 10 Time History Data

Sample Date	May 25, 2023
Station ID AMS-13a	**Location Description** 29.7863, -95.32153 - HWPW - Wipprecht South