



May 3, 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: *April 24 through April 30, 2023*

Construction activities performed during this reporting period involved utility potholing within the HWPW Site using hydro-vac methods to locate utilities near the Signal Bridge Foundations.

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**. As indicated in the IHST Weekly Report (**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 24 cubic yards (CY) of soil classified as hazardous waste (F034/K001) were generated during the hydro-vac activities within the HWPW Asphalt Cap and Railroad Ballast Cap area. The hydro-vac soils generated from the HWPW Asphalt Cap and Railroad Ballast Cap Area were initially contained in a truck-mounted hydro-vac tank and then placed into lined roll-off containers with secondary containment. The roll-offs are located in the HWPW Container Storage Area (CSA) pending transportation to the US Ecology Facility in Robstown, TX for disposal.

Approximately 30 CY of soil classified as Class 2 non-hazardous waste were generated during hydro-vac activities within the Railroad Ballast Cap Area and were initial contained in a truck-mounted hydro-

vac tank and deposited into lined roll-off containers with secondary containment. The roll-offs are located in the HWPW Container Storage Area (CSA) pending transportation to Republic Services McCarty Road Landfill in Houston, TX.

Stormwater/Hydro-Vac Water Management

Approximately 1,050 gallons of stormwater and hydro-vac water from potholing activities within Asphalt Cap and northern portion of the Railroad Ballast Cap Area were generated. Stormwater and hydro-vac water were contained into a 4,800-gallon stormwater container with secondary containment located in the HWPW CSA pending transportation and disposal at the US Ecology Facility in Robstown, TX as containing listed hazardous waste (F034/K001).

Approximately 2,100 gallons of stormwater and hydro-vac water were contained during potholing activities within the southern portion of the Railroad Ballast Cap Area. Stormwater and hydro-vac water were pumped into another 4,800-gallon stormwater container with secondary containment located in the HWPW CSA pending sampling to characterize the water for disposal.

Planned Construction Activities for the period between **May 1 through 7, 2023** for the Site include continuing the installation of the Signal Bridge foundations and trenching for the signal line housing within 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

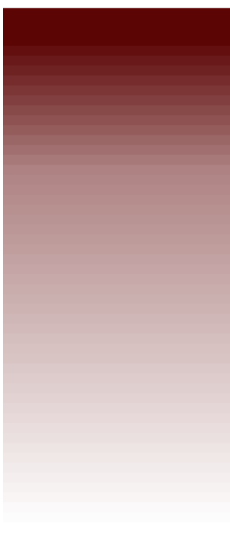


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Weekly Report of Air Monitoring

Union Pacific Railroad North Bypass Construction Project

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

For Period from 2023-04-24 to 2023-04-30

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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. No excavation or other dust-generating activities have taken place to date in the vicinity of this location.

Excavation activities on the capped area were performed only on Tuesday, April 25, 2023 through Wednesday, April 27, 2023. Air monitoring was conducted only during these periods when excavation on the capped area took place.

PM 2.5 and PM 10 Daily Summary Results

Sample Date
Apr 25, 2023

Description of Work Performed

Work in the capped area of the former Houston Wood Preserving Works site was associated with installation of signal towers. Discrete areas of asphalt and surface soil along the North Bypass Service Road were excavated to accommodate signal tower footings. Pilot holes were drilled and metal signal tower anchors inserted into those holes. Visible dust production during these activities was minimal. Work hours were from approximately 08:30 – 16:00.

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	08:24	16:26	29.78762	-95.31663	9.4 ug/m3	22.8 ug/m3
AMS-04b	HWPW - Eddie and Amboy	09:22	16:10	29.78619	-95.32353	2.8 ug/m3	10.8 ug/m3
AMS-06b	IMY SE - Clementine	08:07	16:39	29.78202	-95.31926	7.4 ug/m3	17.7 ug/m3
AMS-07	HWPW - Solo North	08:59	16:13	29.78724	-95.32101	8.4 ug/m3	21.8 ug/m3
AMS-08b	IMY SE - Fontinot	08:09	23:59	29.78207	-95.31766	10.4 ug/m3	26.6 ug/m3
AMS-09	IMY South - Waco and Lee	08:16	16:42	29.78213	-95.32499	7.7 ug/m3	17.6 ug/m3
AMS-10b	HWPW - Kashmere and Liberty	09:05	16:19	29.7874	-95.32373	7.9 ug/m3	18.6 ug/m3
AMS-11	IMY South - Yates	08:03	16:41	29.78215	-95.32325	8 ug/m3	19.7 ug/m3
AMS-12	HWPW - Fontinot North	08:28	16:31	29.78757	-95.31837	7.9 ug/m3	19.4 ug/m3
AMS-13a	HWPW - Quitman East	09:09	16:06	29.78486	-95.32386	9.4 ug/m3	22.5 ug/m3

PM 2.5 and PM 10 Daily Summary Results

Sample Date
Apr 26, 2023

Description of Work Performed

Work in the capped area of the former Houston Wood Preserving Works site was associated with installation of signal towers. Discrete areas of asphalt and surface soil along the North Bypass Service Road were excavated to accommodate signal tower footings. Pilot holes were drilled and metal signal tower anchors inserted into those holes. Visible dust production during these activities was minimal. Start of excavation activities did not occur immediately at the beginning of the work day. Work hours were from approximately 10:30 – 16:20.

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 - Kashmere and Liberty	08:46	17:06	29.78754	-95.32377	7.7 ug/m3	20 ug/m3
AMS-02b	HWPW - Quitman East	08:50	17:09	29.78489	-95.32397	8 ug/m3	22.9 ug/m3
AMS-06b	IMY SE - Clementine	10:23	16:27	29.78208	-95.31927	6.5 ug/m3	16.5 ug/m3
AMS-08b	IMY SE - Fontinot	24:01	16:25	29.78207	-95.31766	10.3 ug/m3	27.8 ug/m3
AMS-09	IMY South - Waco and Lee	10:26	16:32	29.78213	-95.32497	6.4 ug/m3	14.7 ug/m3
AMS-10b	HWPW - Clementine North	08:32	16:55	29.78748	-95.31851	6.6 ug/m3	16.6 ug/m3
AMS-11	IMY South - Yates	10:25	16:29	29.78222	-95.32328	6.9 ug/m3	17.1 ug/m3
AMS-12	HWPW - Fontinot North	08:39	17:02	29.78757	-95.31837	8.8 ug/m3	24 ug/m3
AMS-13a	HWPW - Eddie and Amboy	10:09	17:09	29.78596	-95.32381	7.9 ug/m3	20.2 ug/m3

Note: The air monitoring station placed at the far northeastern corner of the capped area, near the intersection of Liberty and Erastus, did not come on line, and no data is available for this location.

PM 2.5 and PM 10 Daily Summary Results

Sample Date
Apr 27, 2023

Description of Work Performed

Work in the capped area of the former Houston Wood Preserving Works site was associated with installation of signal towers. Discrete areas of asphalt and surface soil along the North Bypass Service Road were excavated to accommodate signal tower footings. Pilot holes were drilled and metal signal tower anchors inserted into those holes. Visible dust production during these activities was minimal. Rain had fallen the previous night and continued into the early morning. Site conditions were very wet. Start of excavation activities did not occur immediately at the beginning of the work day. Work hours were from approximately 10:00 – 15:30.

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 - Quitman East	08:43	15:55	29.78489	-95.32394	9.8 ug/m3	23.6 ug/m3
AMS-02b	HWPW - Kashmere and Liberty	08:29	15:49	29.78751	-95.32379	8.4 ug/m3	21.2 ug/m3
AMS-03a	HWPW - Solo North	08:23	15:44	29.78734	-95.32102	9.3 ug/m3	25 ug/m3
AMS-06b	IMY South - Gagne	07:56	16:10	29.78204	-95.31929	8.6 ug/m3	22.2 ug/m3
AMS-08b	IMY SE - Fontinot	07:54	16:08	29.78208	-95.31771	8.3 ug/m3	21.1 ug/m3
AMS-09	IMY South - Waco and Lee	07:58	16:12	29.78209	-95.32496	9 ug/m3	22.3 ug/m3
AMS-10b	HWPW - Erastus	08:51	16:01	29.78763	-95.31669	8.5 ug/m3	21.1 ug/m3
AMS-11	IMY South - Yates	07:57	16:11	29.78215	-95.32325	10.6 ug/m3	28.1 ug/m3
AMS-12	HWPW - Clementine North	09:03	15:35	29.78754	-95.31853	7.5 ug/m3	20.9 ug/m3
AMS-13a	HWPW - Eddie and Amboy	08:38	15:52	29.78592	-95.32382	9.4 ug/m3	22.2 ug/m3

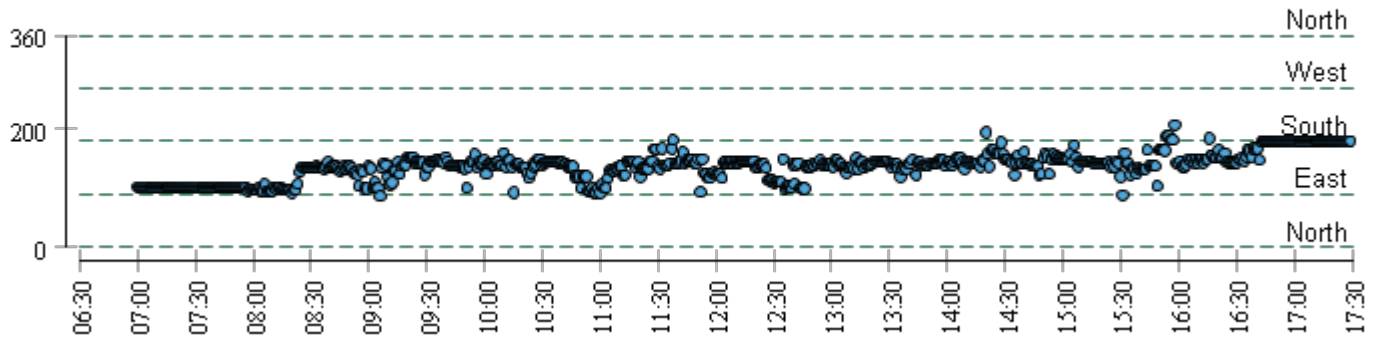
Summary Results of Daily Weather Conditions

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

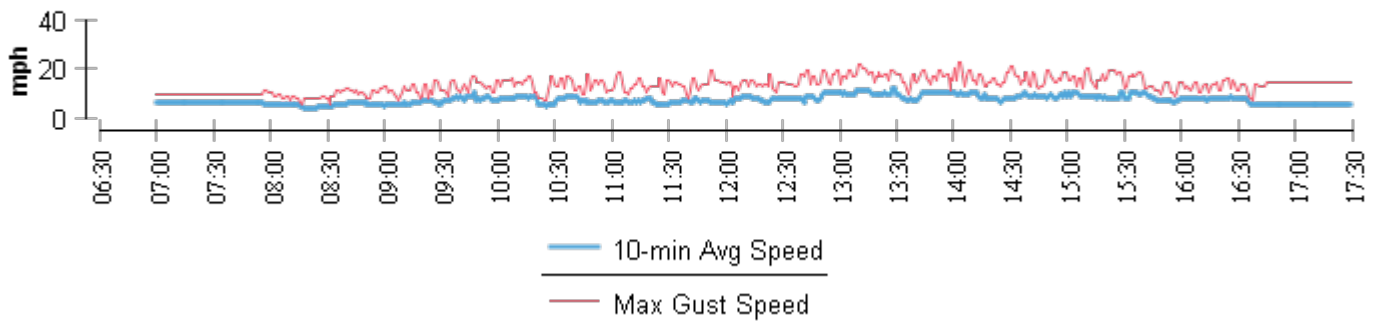
Weather Time History Data

Sample Date Apr 25, 2023

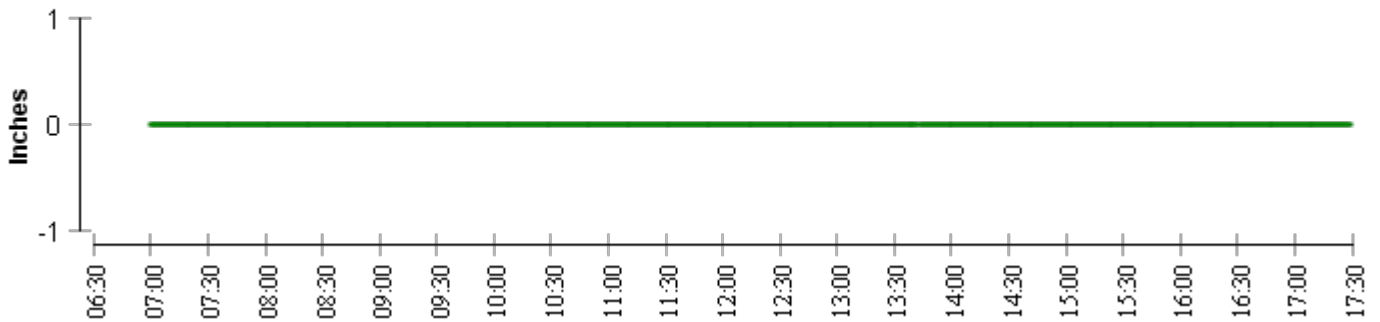
Wind Direction (10 min average)



Wind Speed



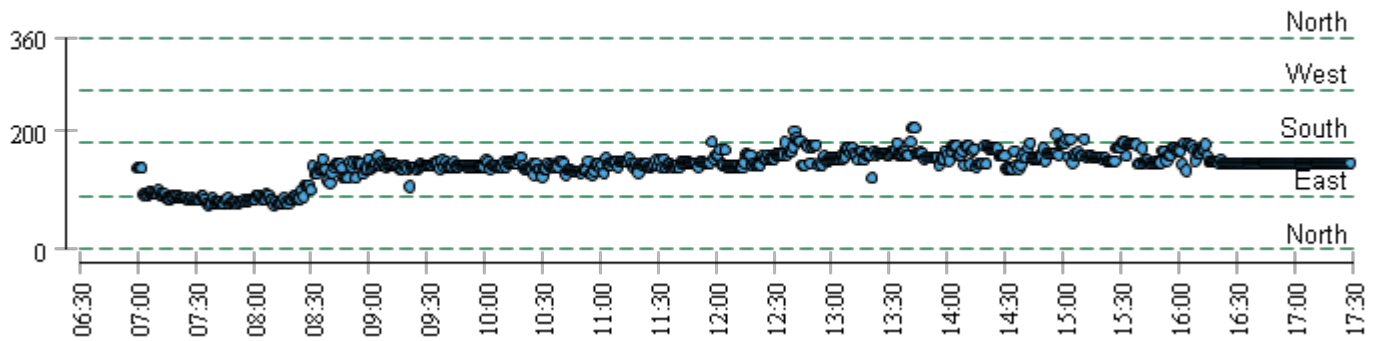
Cumulative Daily Rainfall



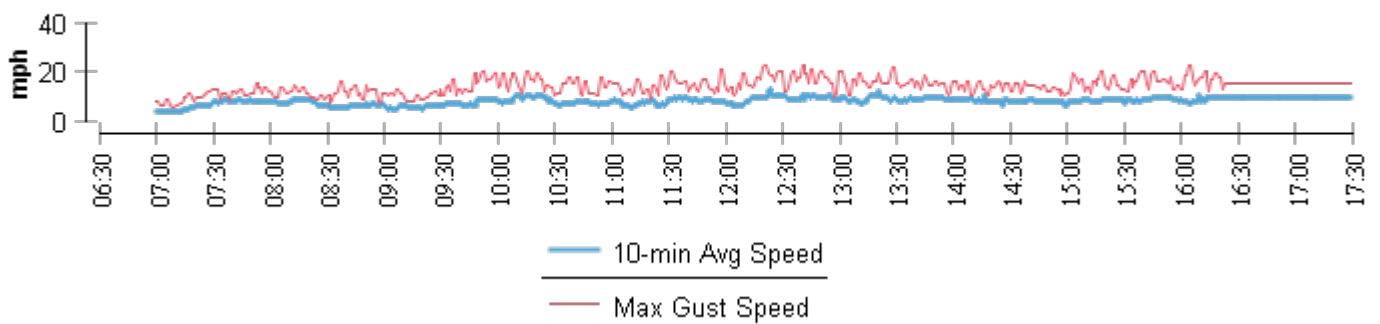
Weather Time History Data

Sample Date Apr 26, 2023

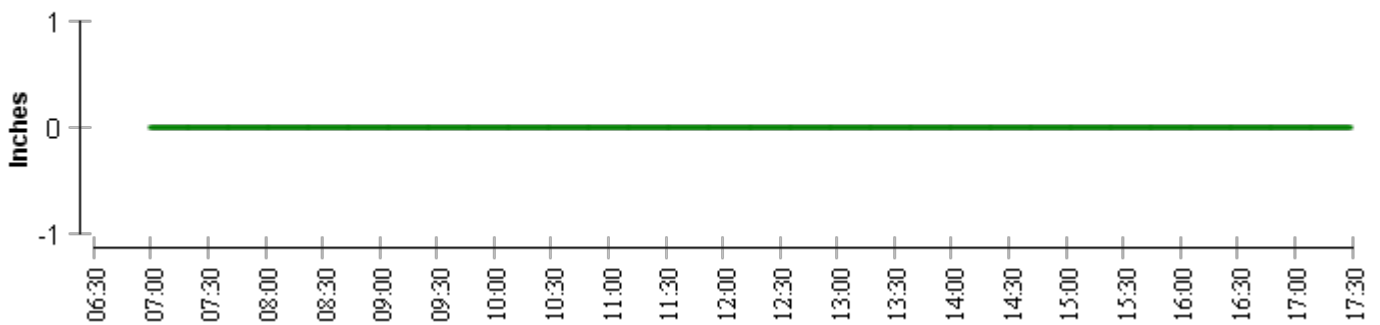
Wind Direction (10 min average)



Wind Speed



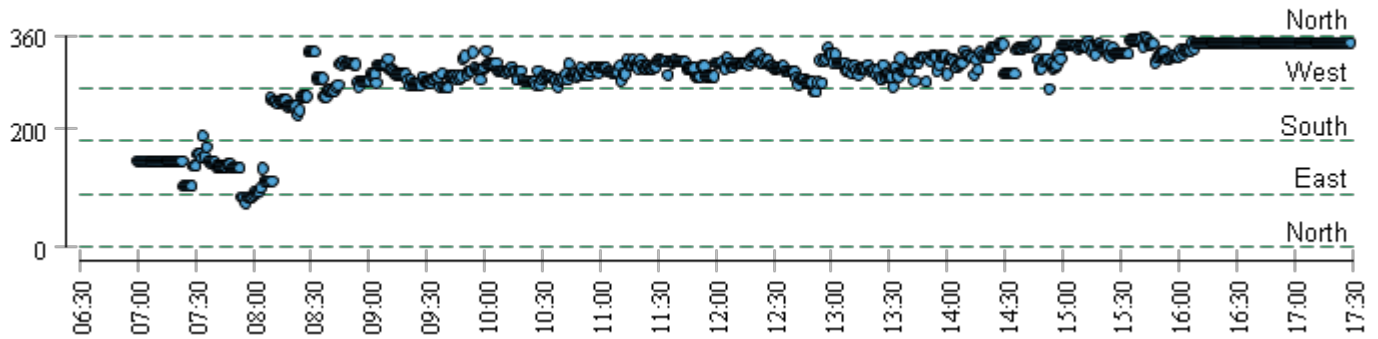
Cumulative Daily Rainfall



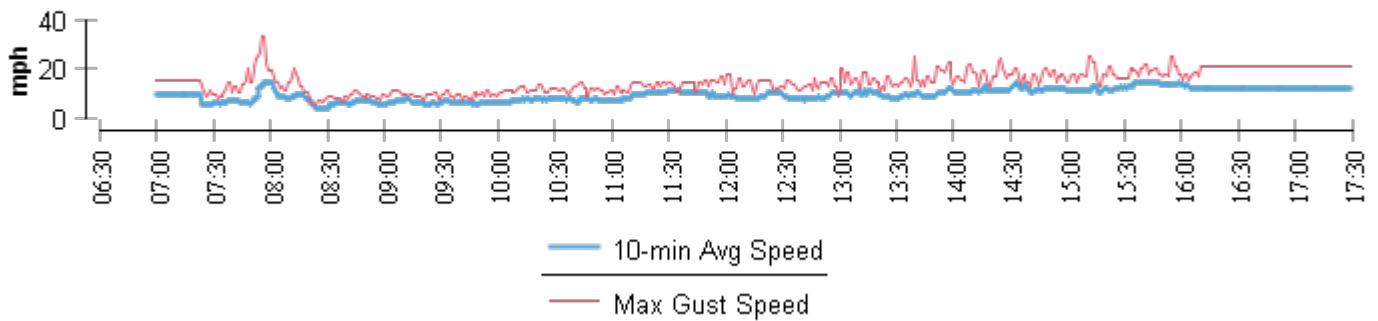
Weather Time History Data

Sample Date Apr 27, 2023

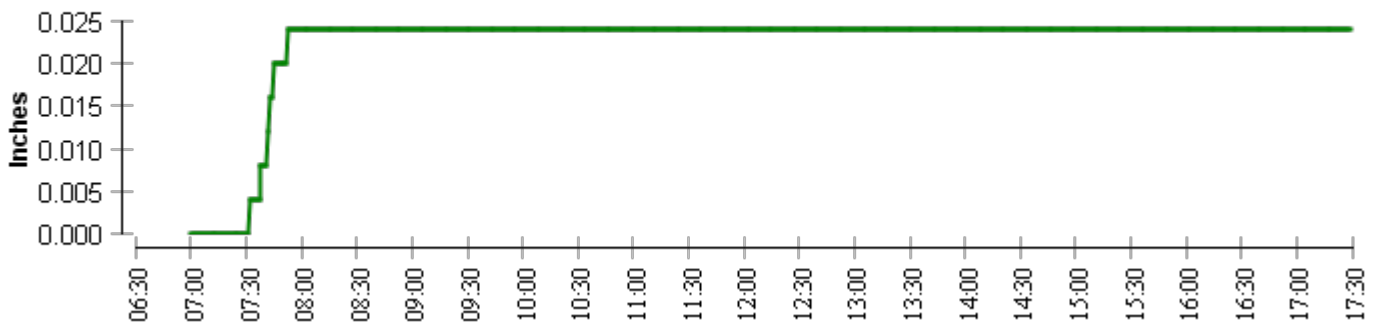
Wind Direction (10 min average)



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:

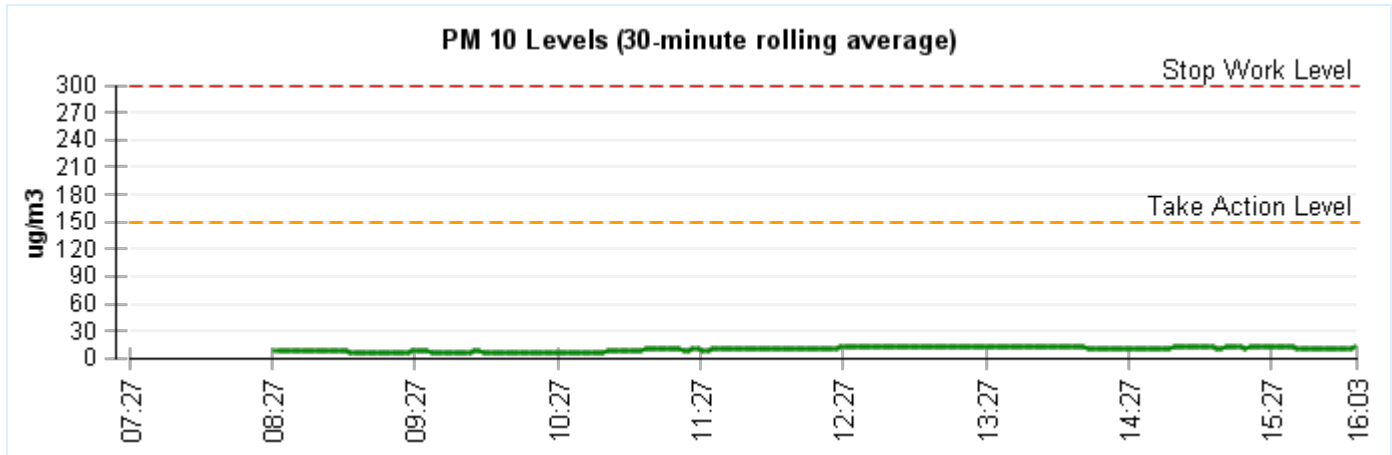
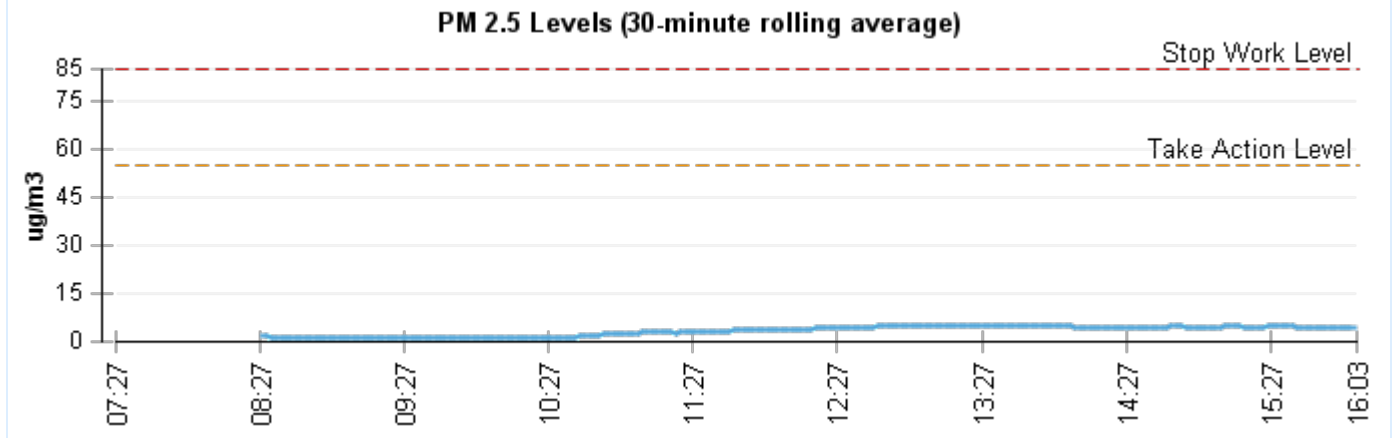
- Take-Action Level - 30-minute average dust concentrations $>55 \text{ ug/m}^3$ (PM 2.5) or $>150 \text{ ug/m}^3$ (PM 10)
Additional dust control measures, as outlined in the site dust control plan, will be promptly implemented to reduce levels below the Take-Action Level.
- Stop-Work Level - 30-minute 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 Apr 24, 2023

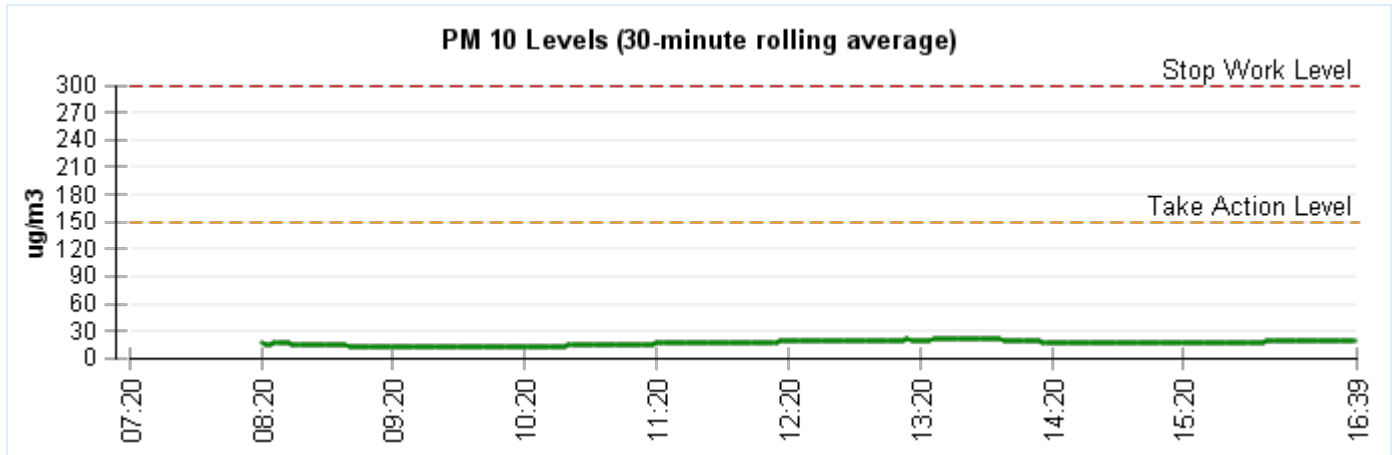
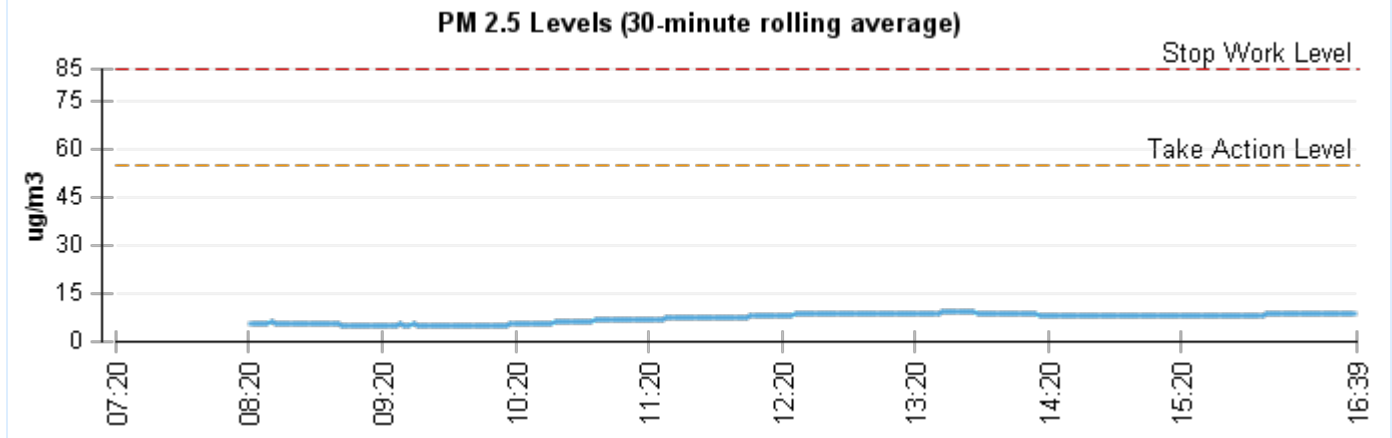
Station ID AMS-04b
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PM 2.5 and PM 10 Time History Data

Sample Date Apr 24, 2023

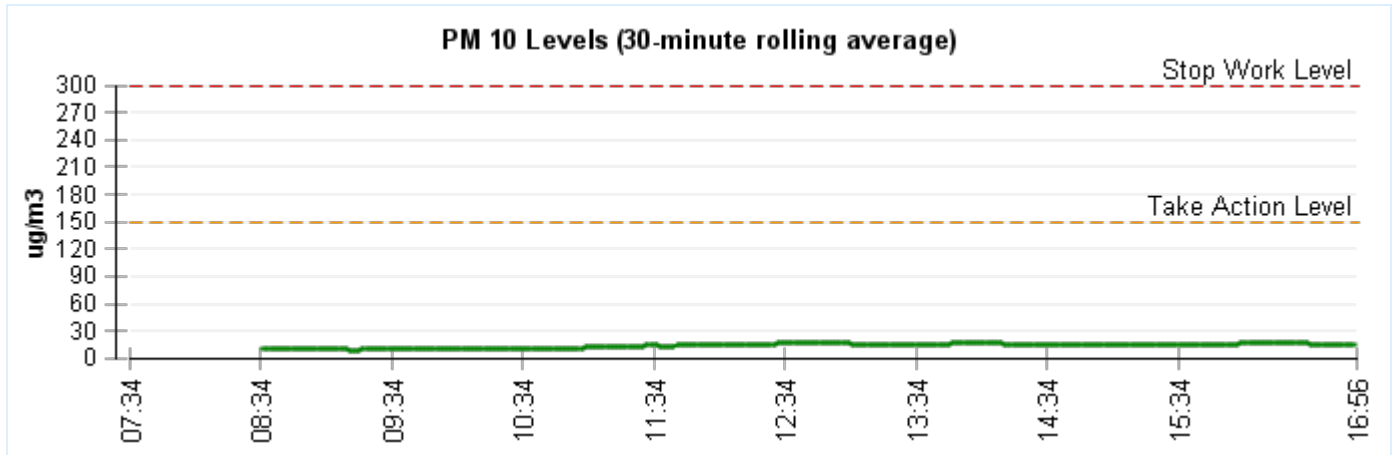
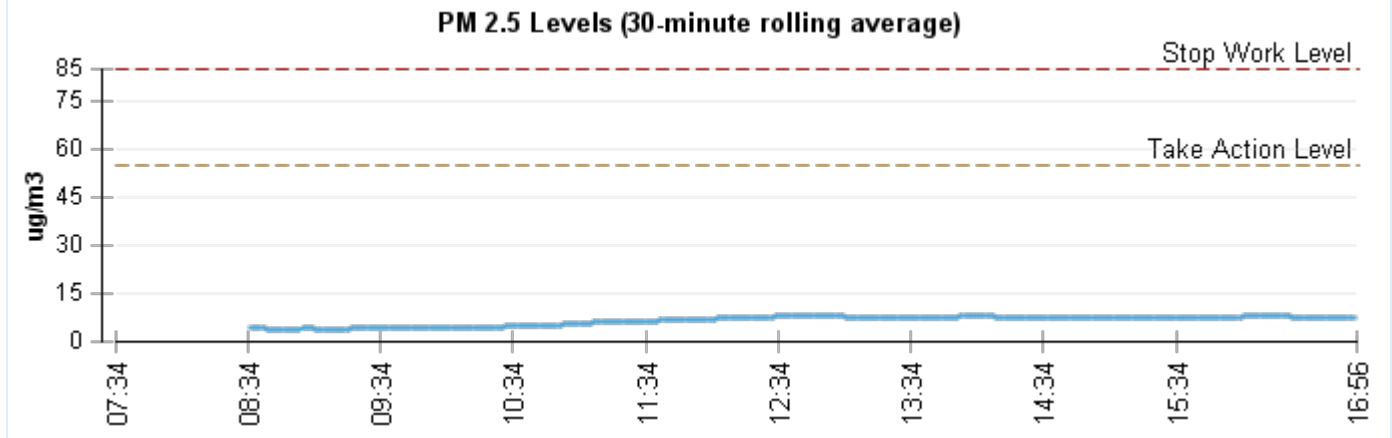
Station ID AMS-07 **Location Description** 29.77669, -95.34203 - West End - Stevens and Harrington (north side of track)



PM 2.5 and PM 10 Time History Data

Sample Date Apr 24, 2023

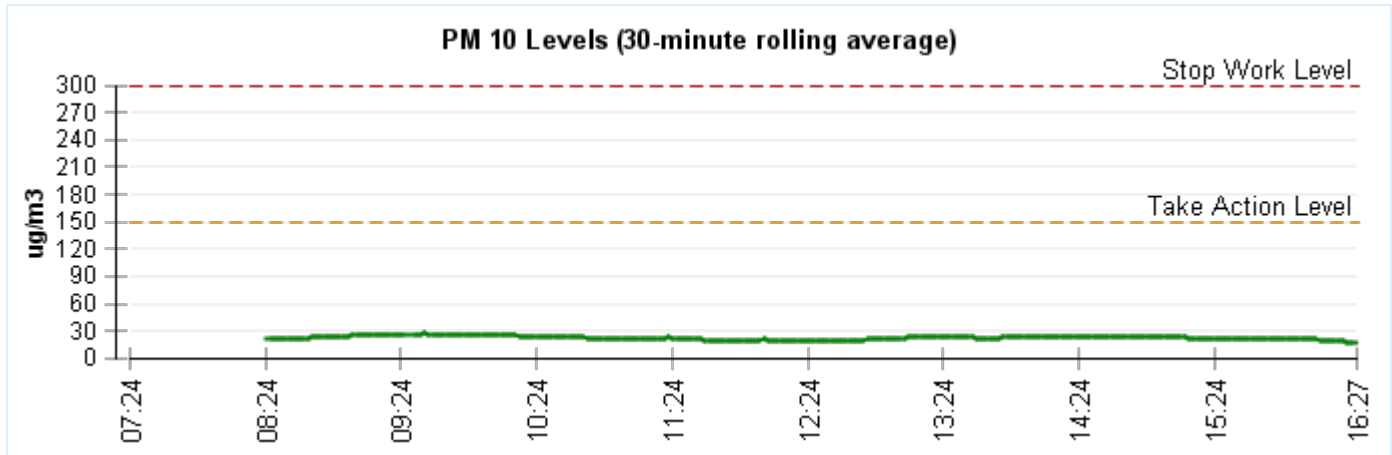
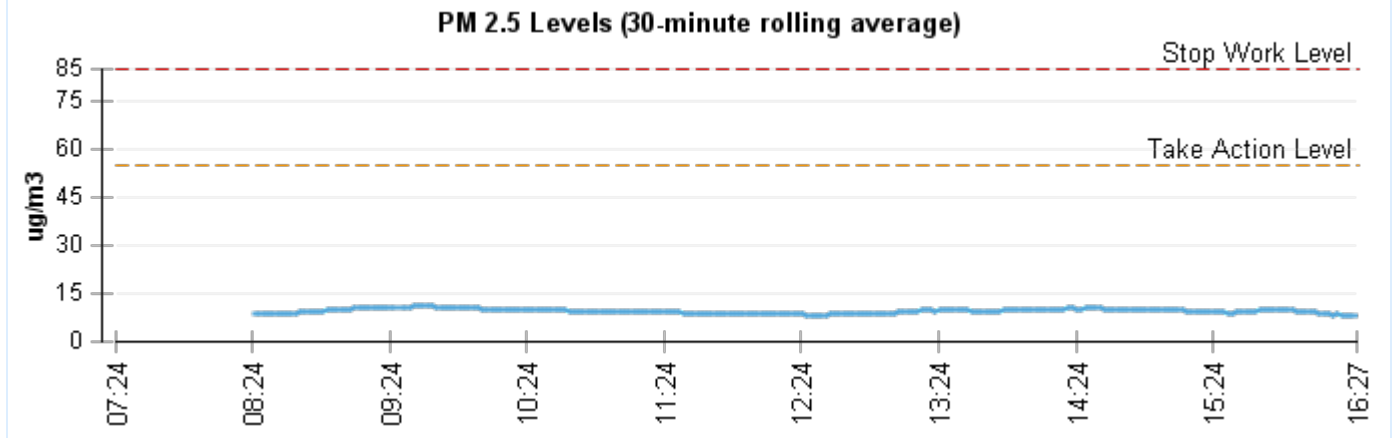
Station ID AMS-12
Location Description 29.77634, -95.34712 - null



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

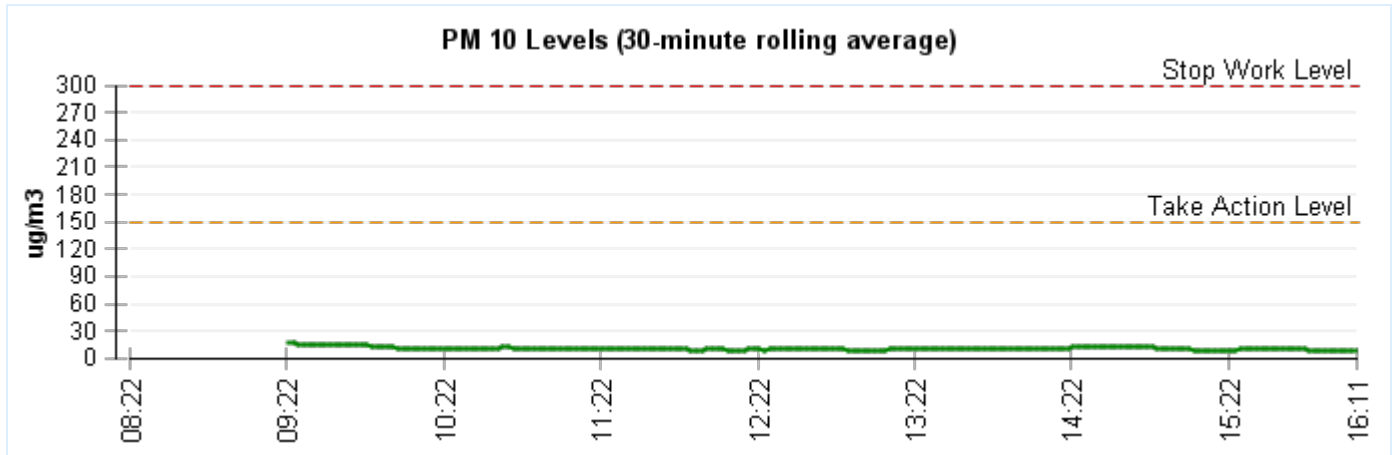
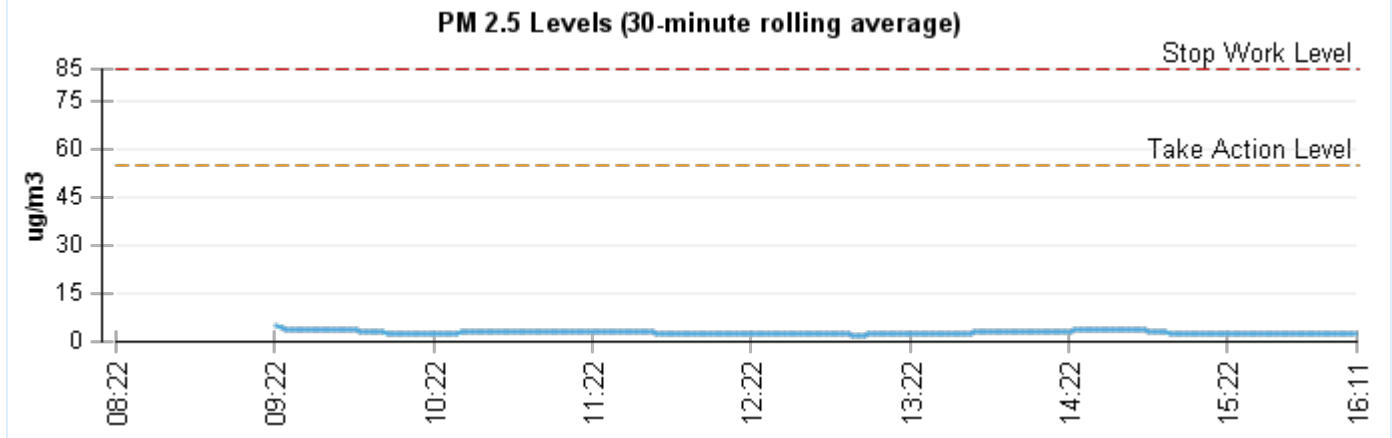
Station ID AMS-01
Location Description 29.78762, -95.31663 - HWPW - Erastus



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

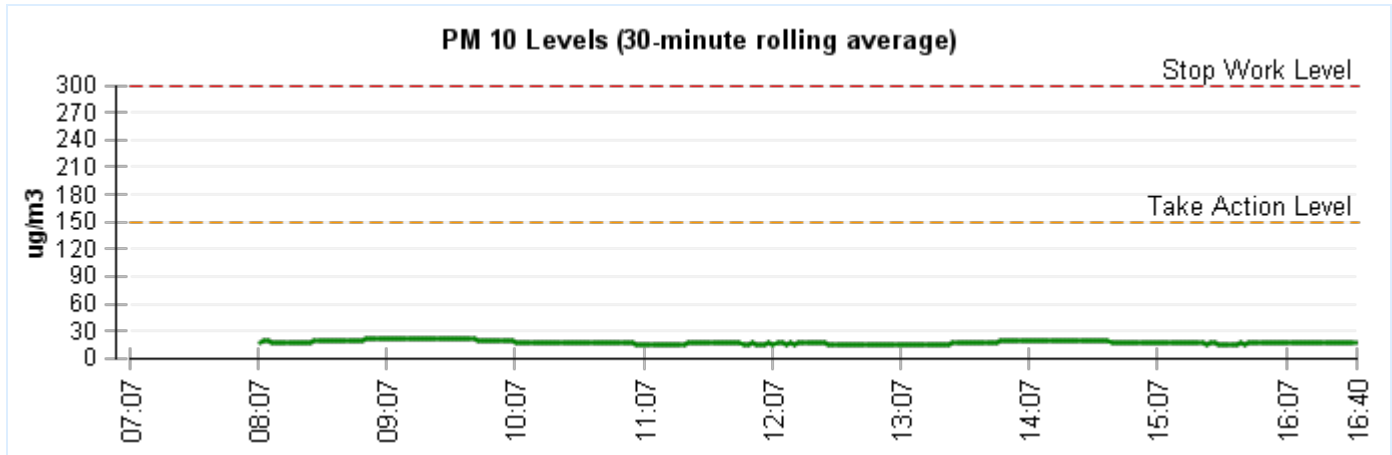
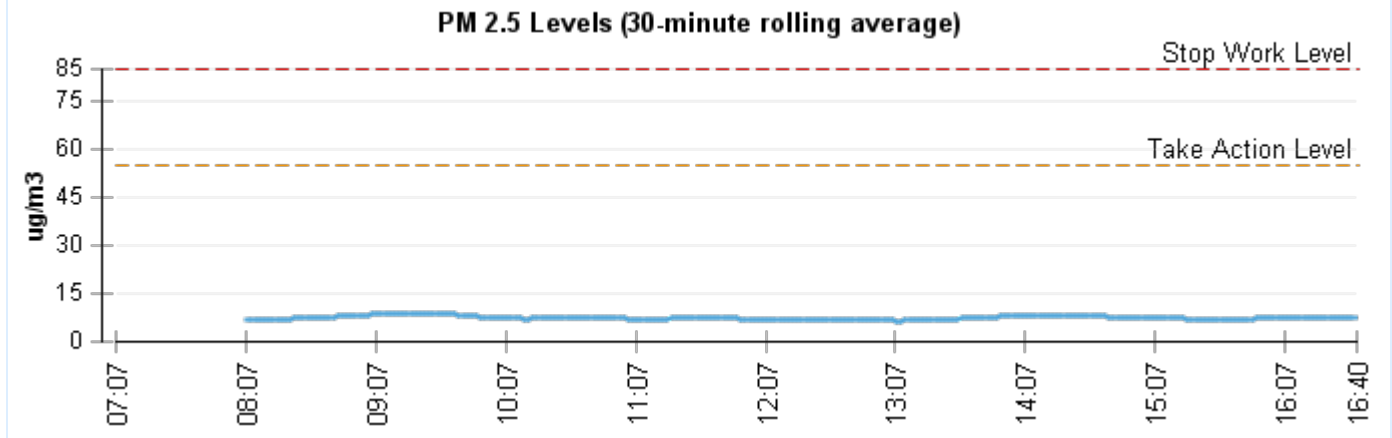
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Location Description 29.78619, -95.32353 - HWPW - Eddie and Amboy



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

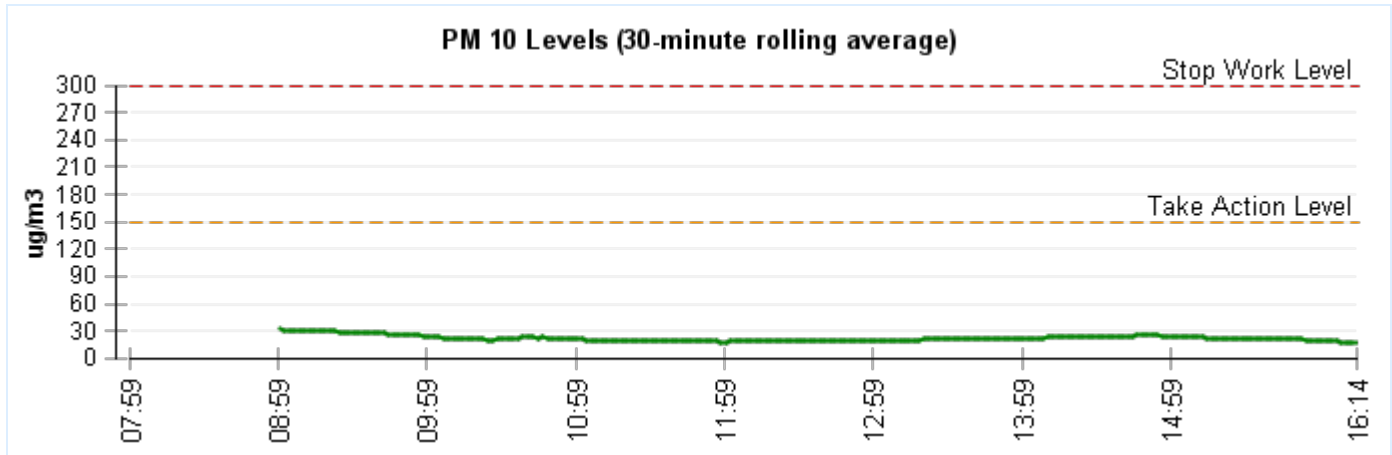
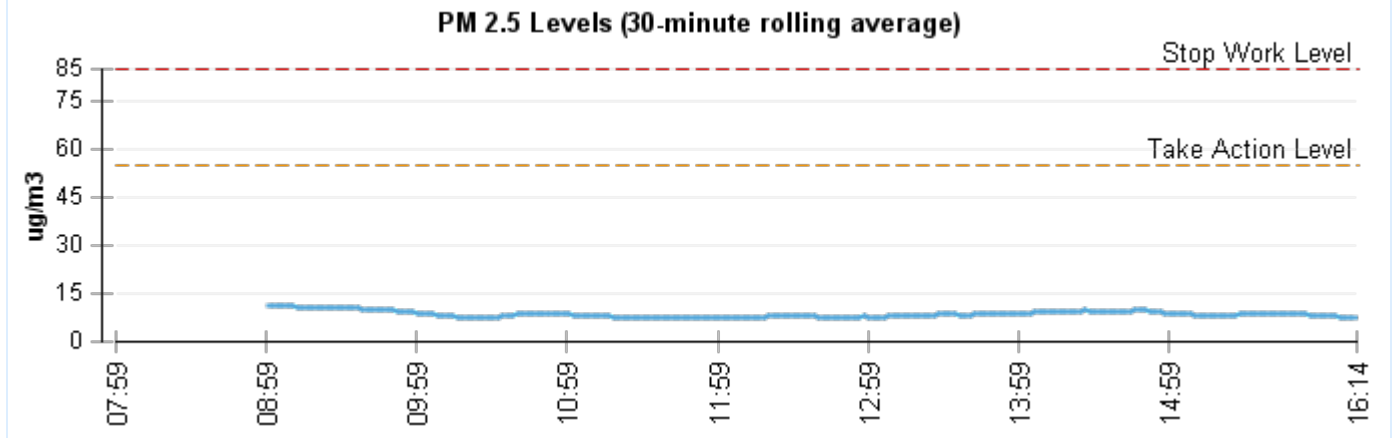
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Location Description 29.78202, -95.31926 - IMY SE - Clementine



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

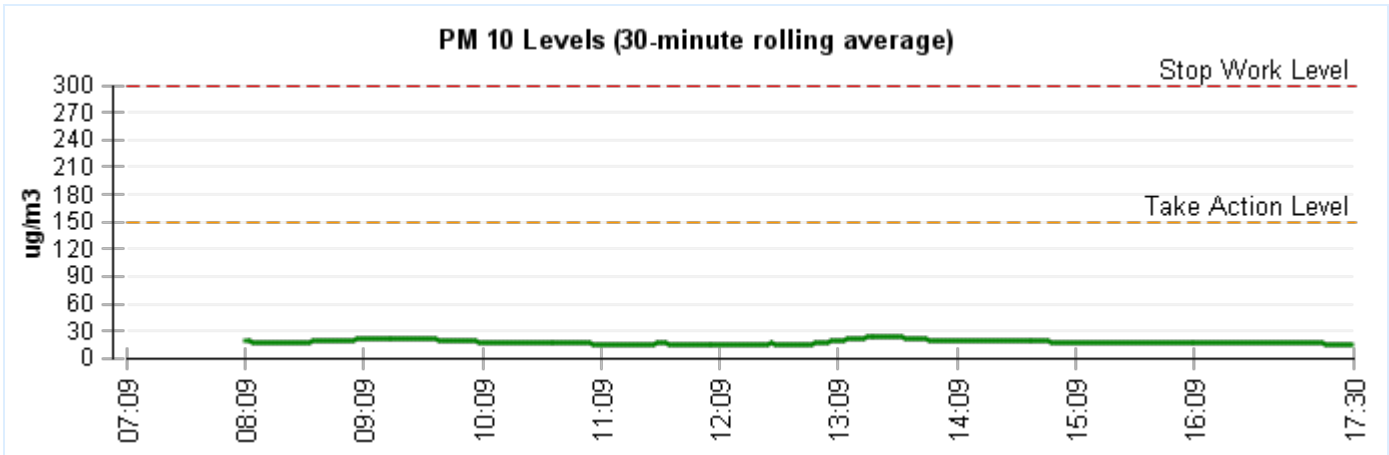
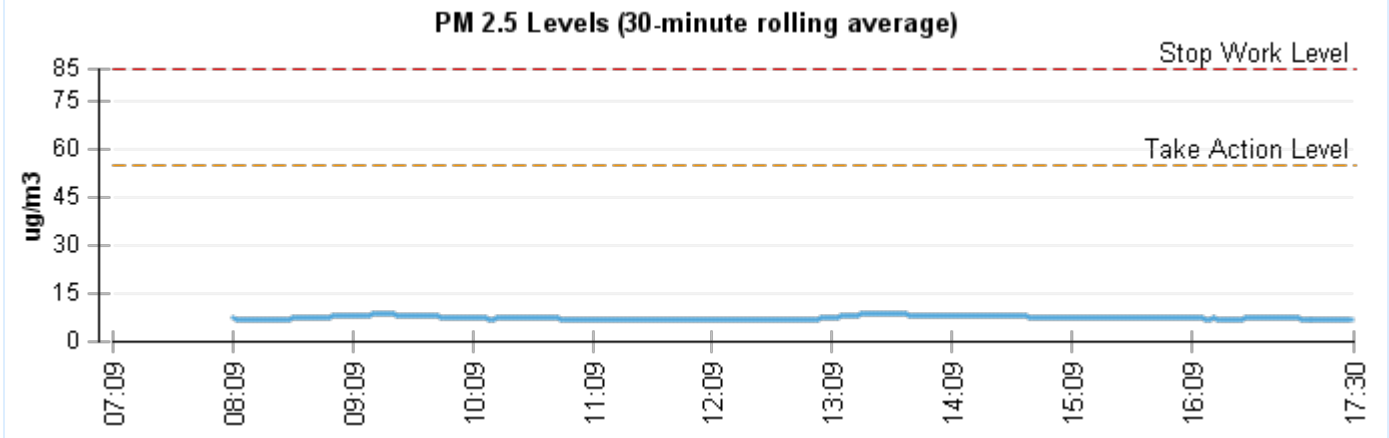
Station ID AMS-07
Location Description 29.78724, -95.32101 - HWPW - Solo North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

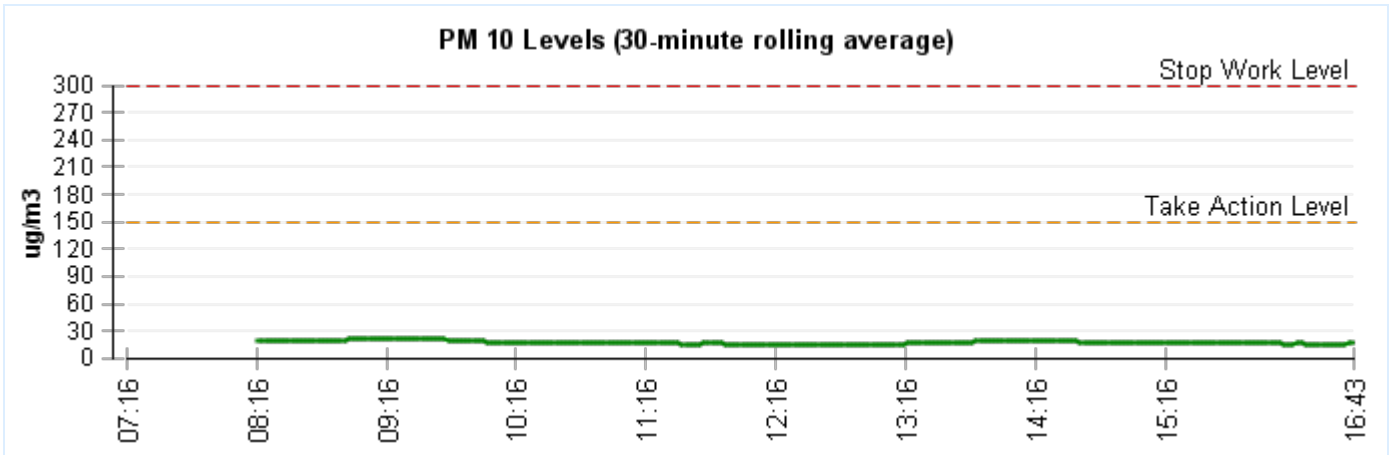
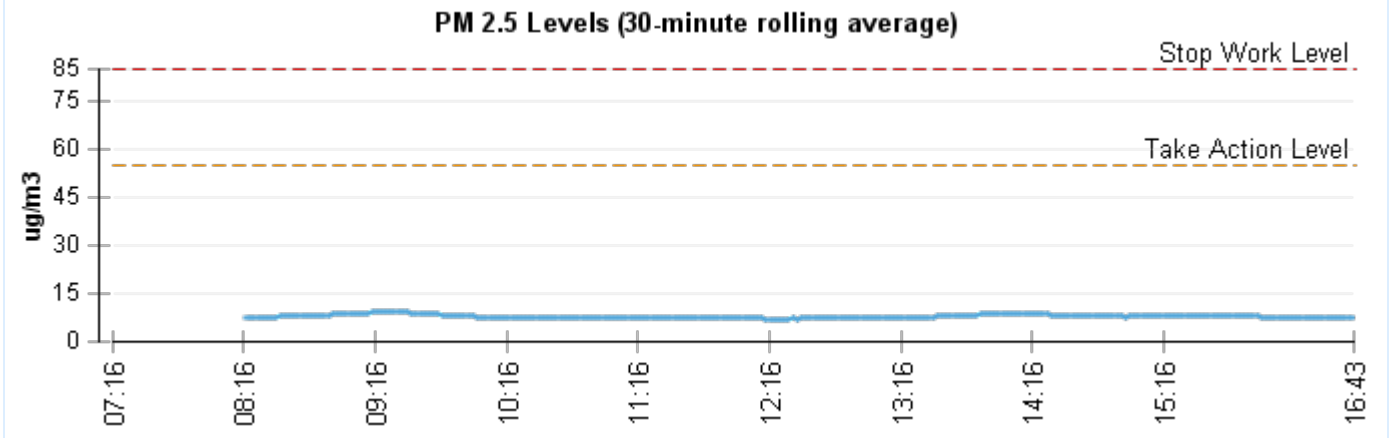
Station ID AMS-08b
Location Description 29.78207, -95.31766 - IMY SE - Fontinot



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

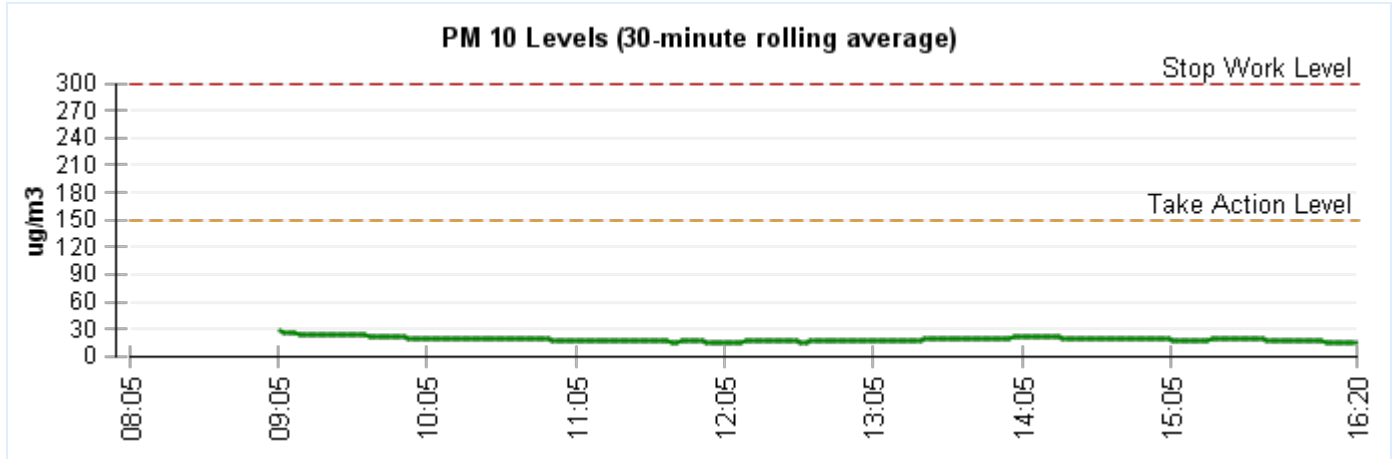
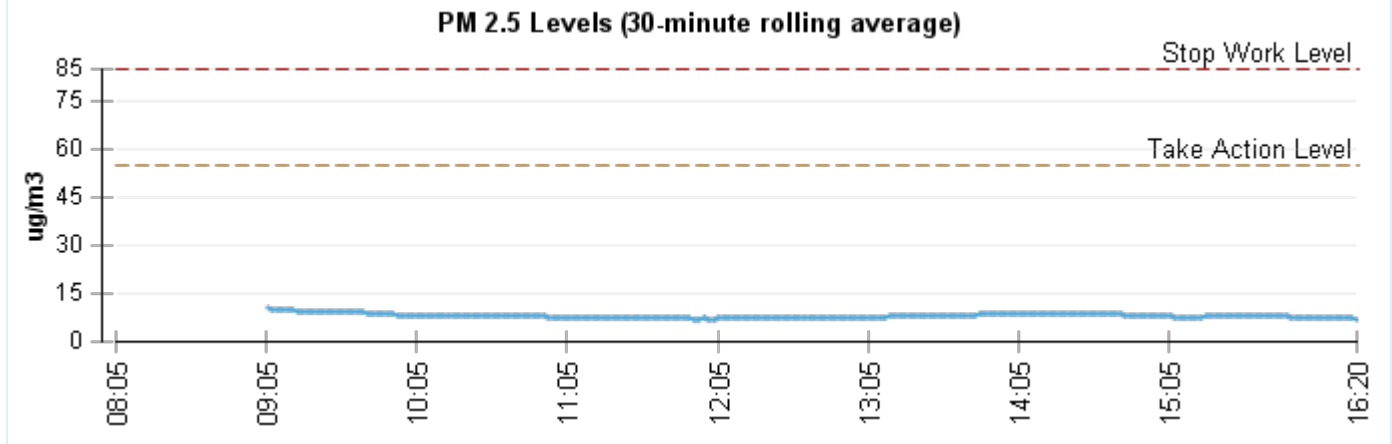
Station ID AMS-09
Location Description 29.78213, -95.32499 - IMY South - Waco and Lee



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

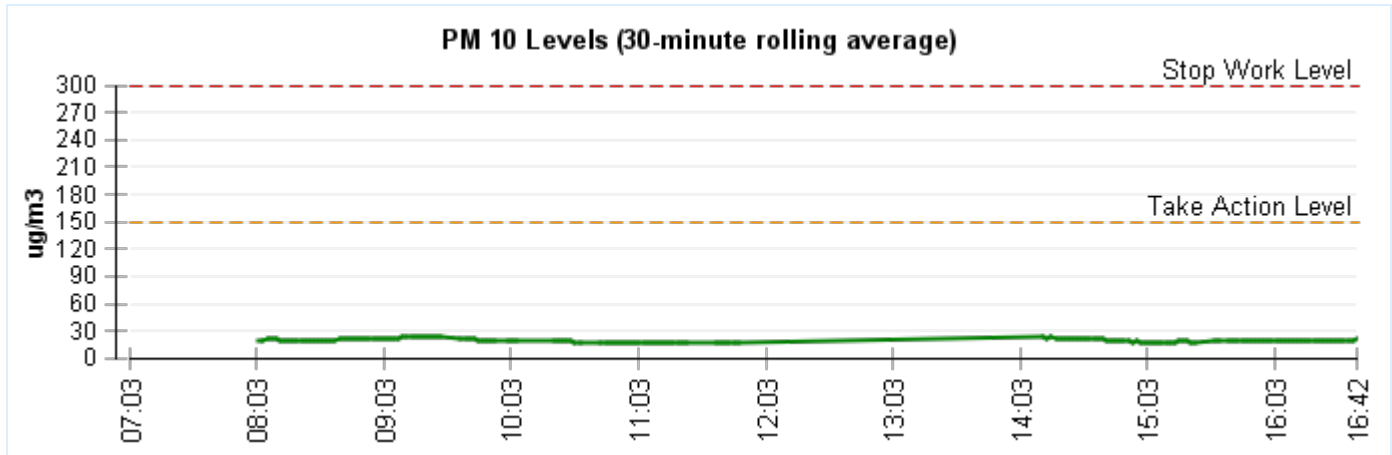
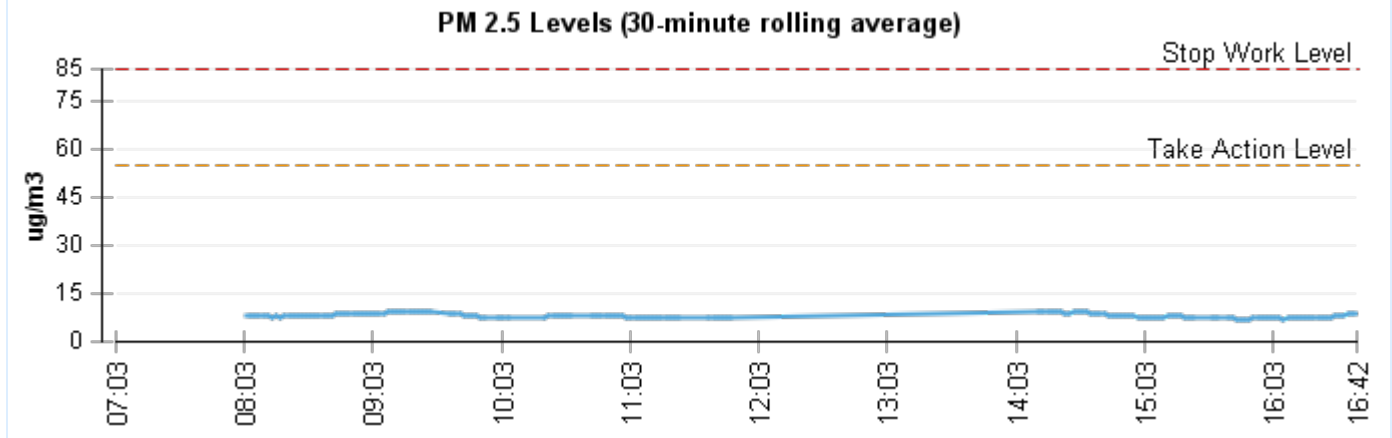
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Location Description 29.7874, -95.32373 - HWPW - Kashmere and Liberty



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

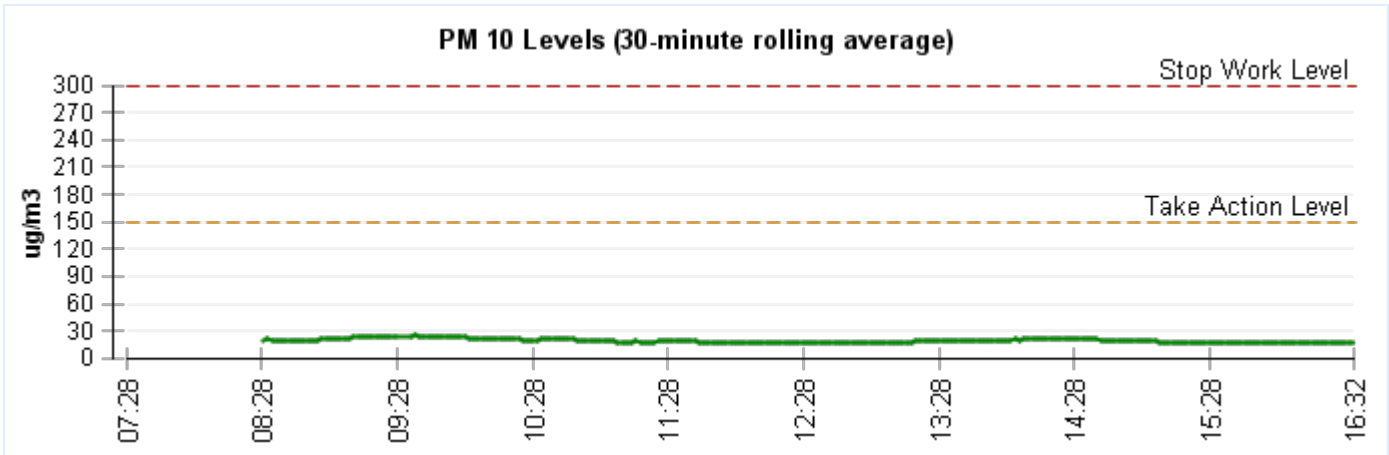
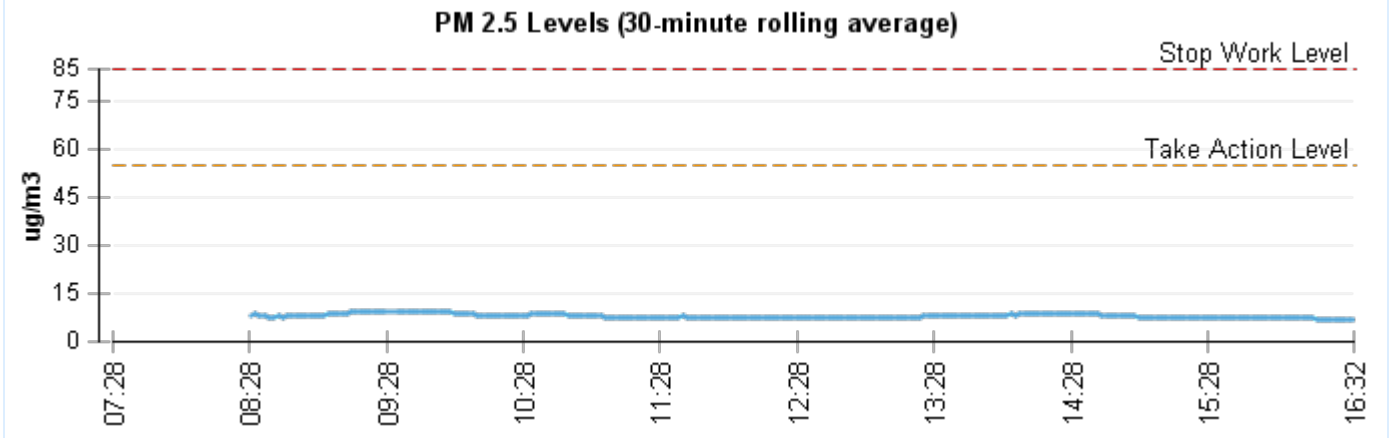
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PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

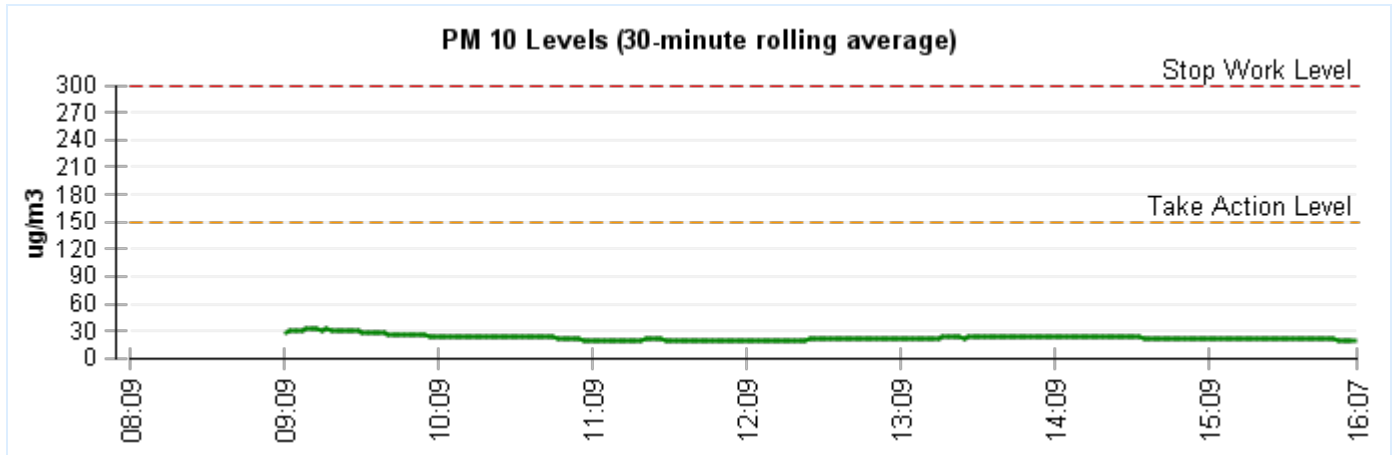
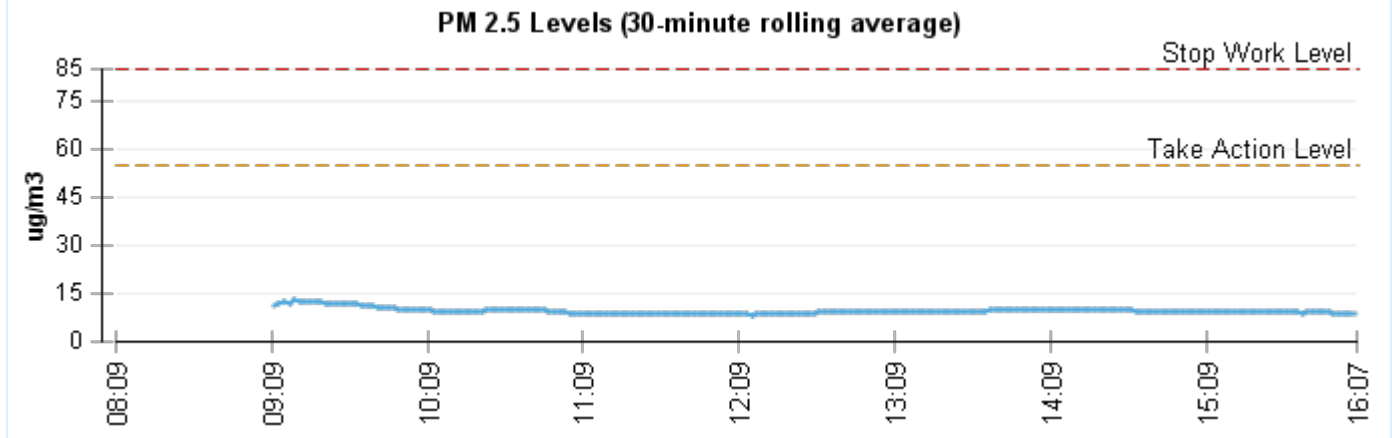
Station ID AMS-12
Location Description 29.78757, -95.31837 - HWPW - Fontinot North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 25, 2023

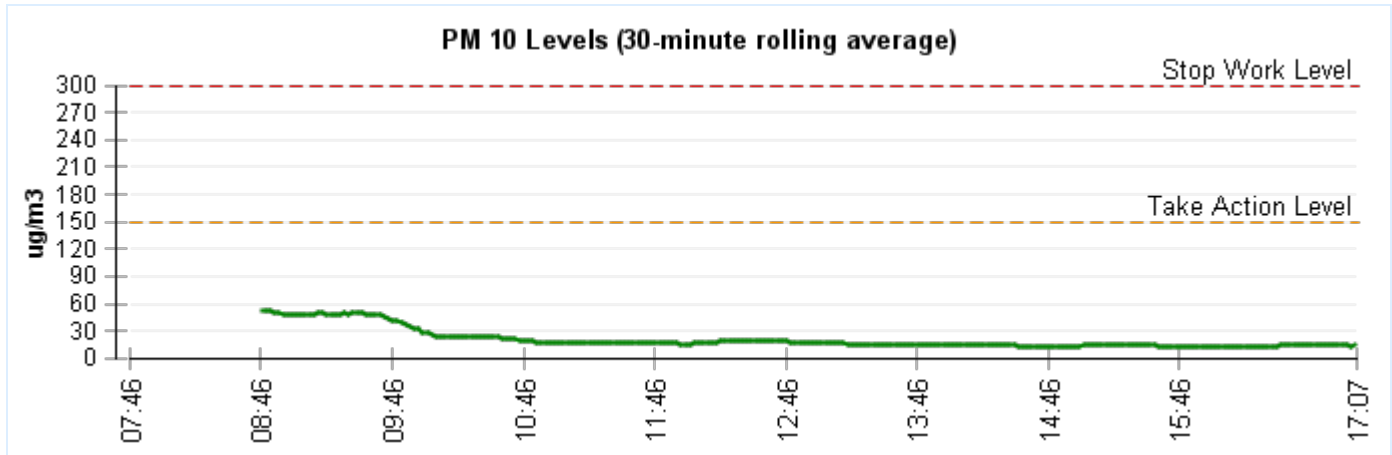
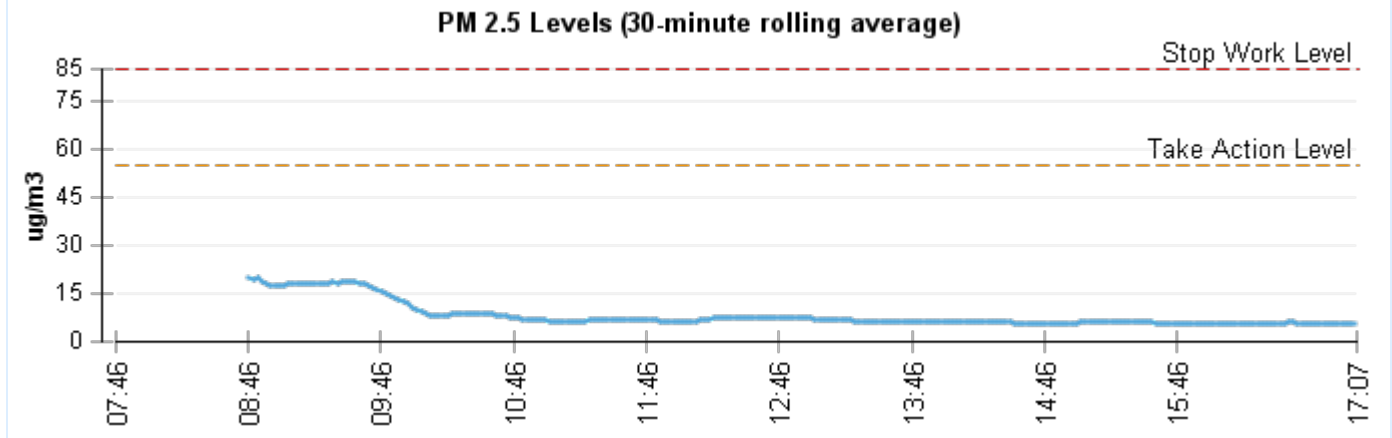
Station ID AMS-13a
Location Description 29.78486, -95.32386 - HWPW - Quitman East



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

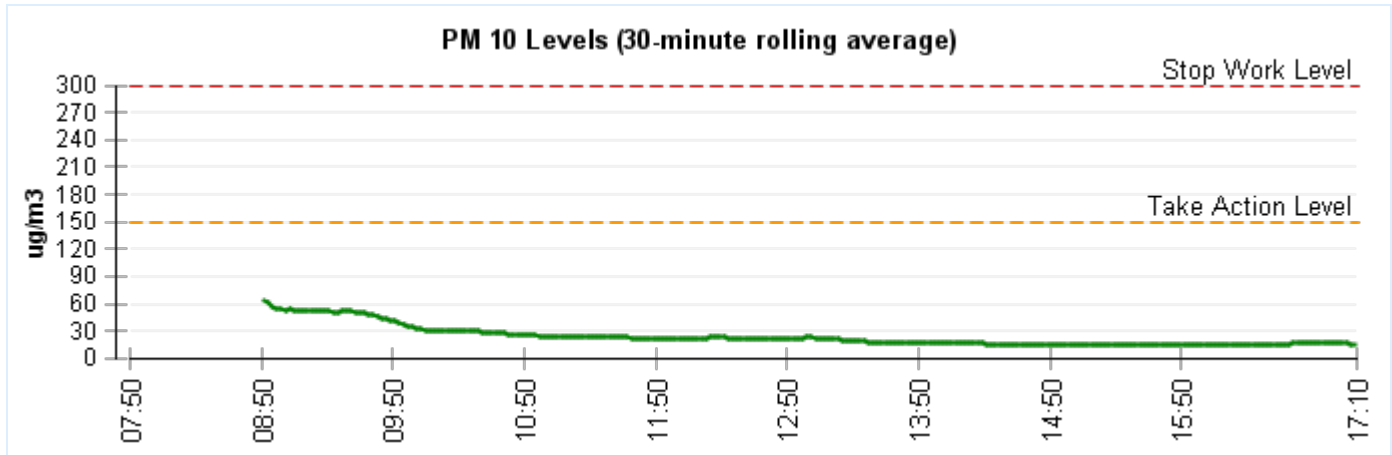
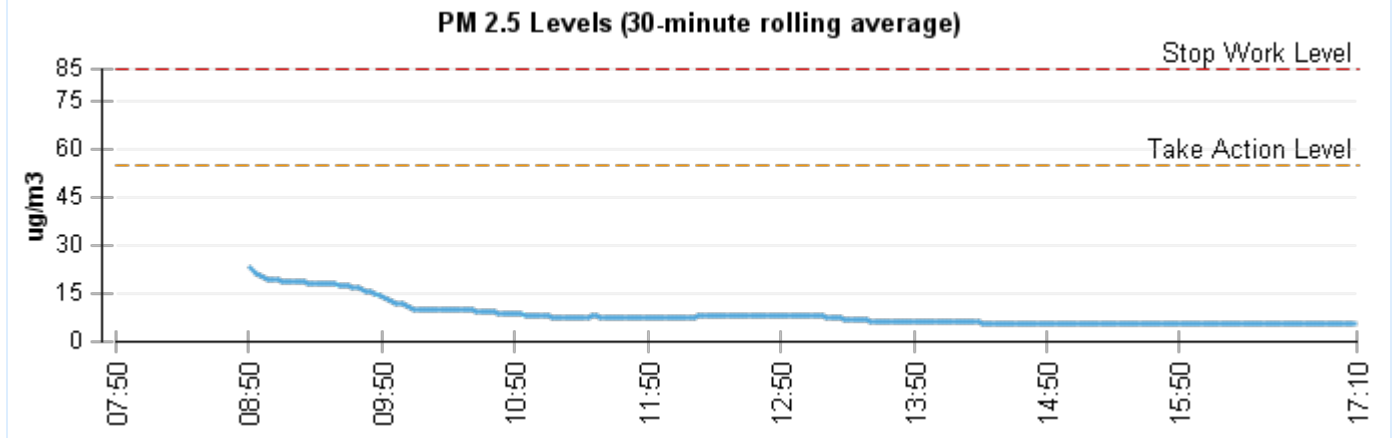
Station ID AMS-01
Location Description 29.78754, -95.32377 - HWPW - Kashmere and Liberty



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

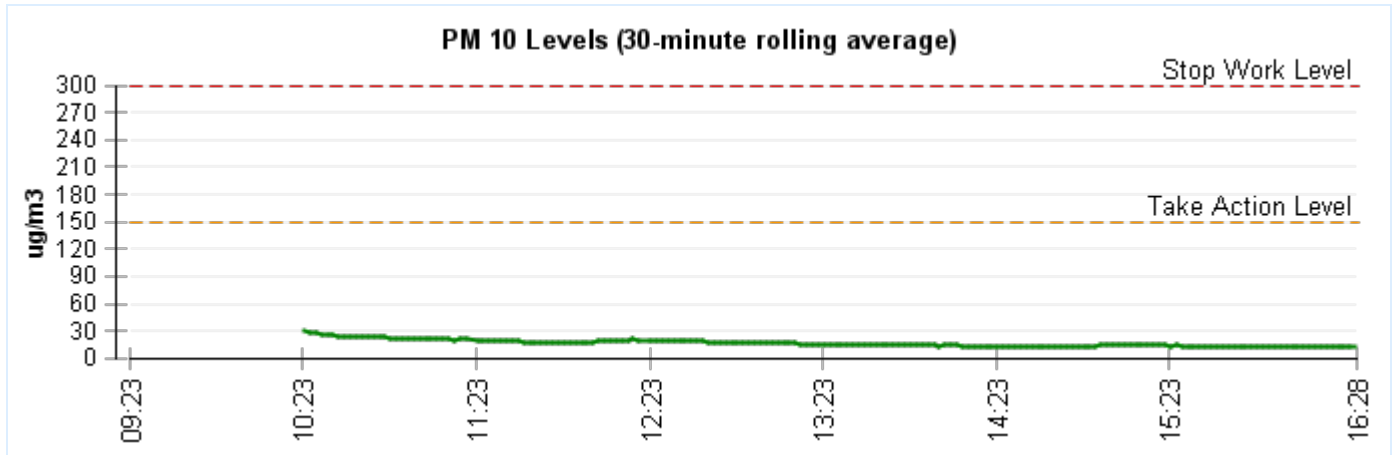
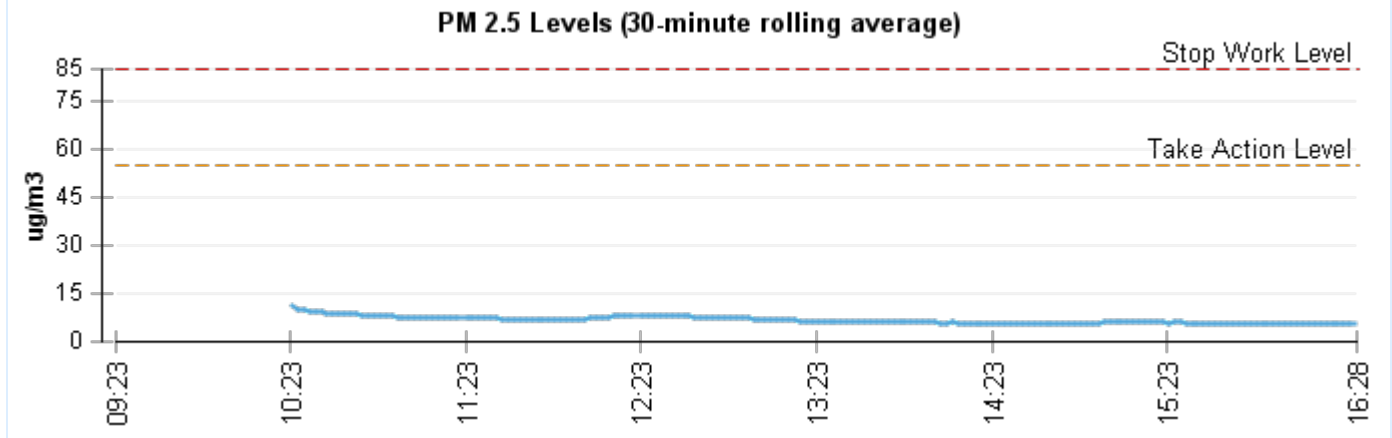
Station ID AMS-02b **Location Description** 29.78489, -95.32397 - HWPW - Quitman East



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

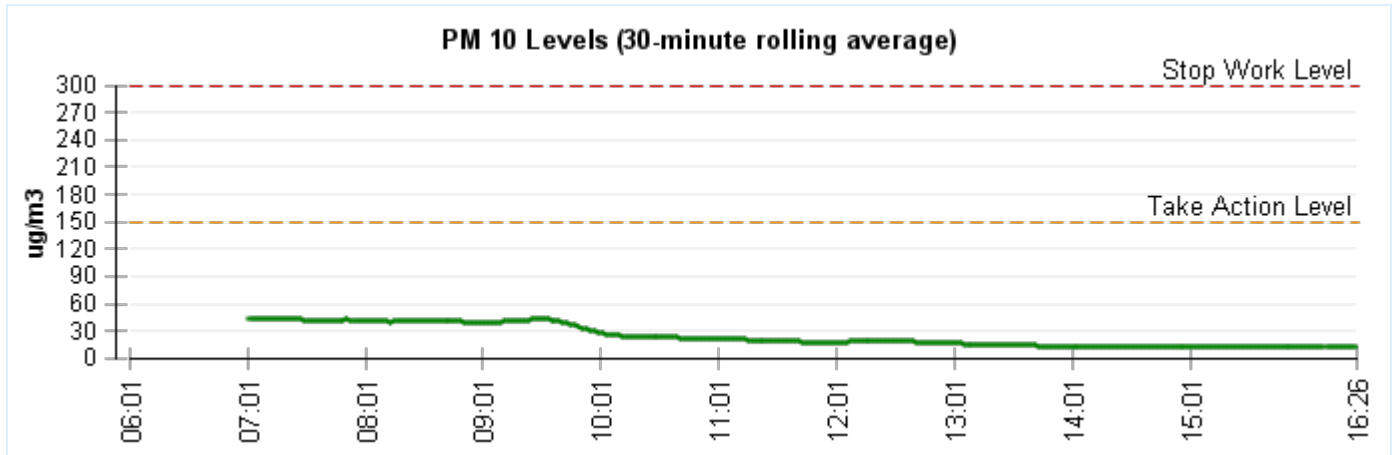
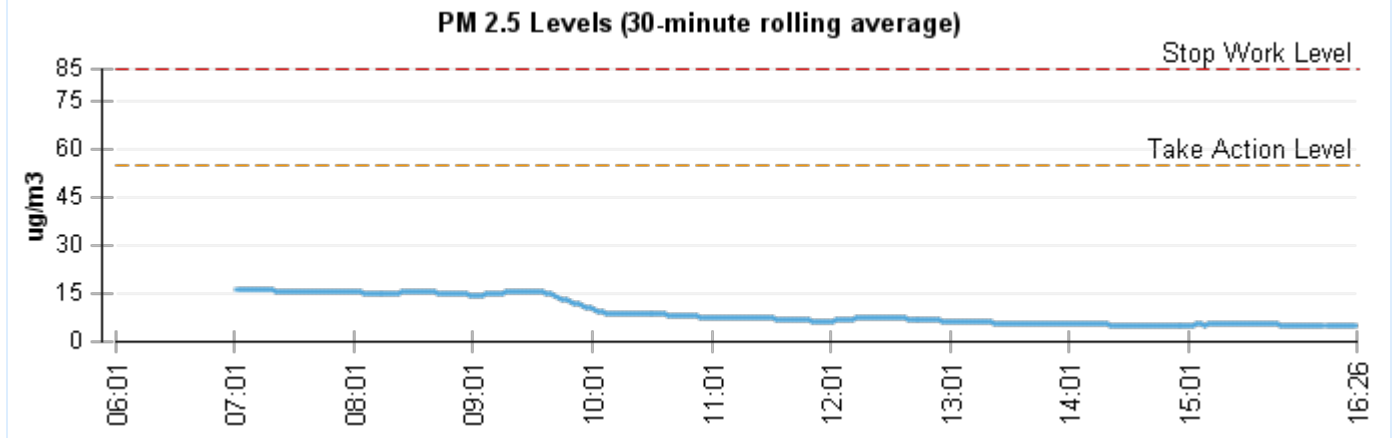
Station ID AMS-06b
Location Description 29.78208, -95.31927 - IMY SE - Clementine



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

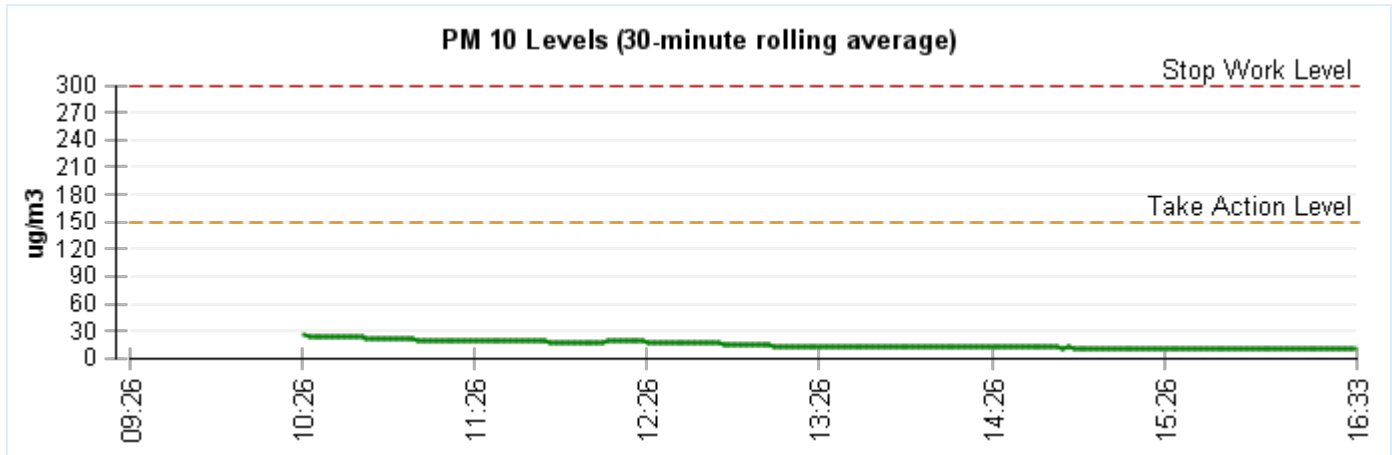
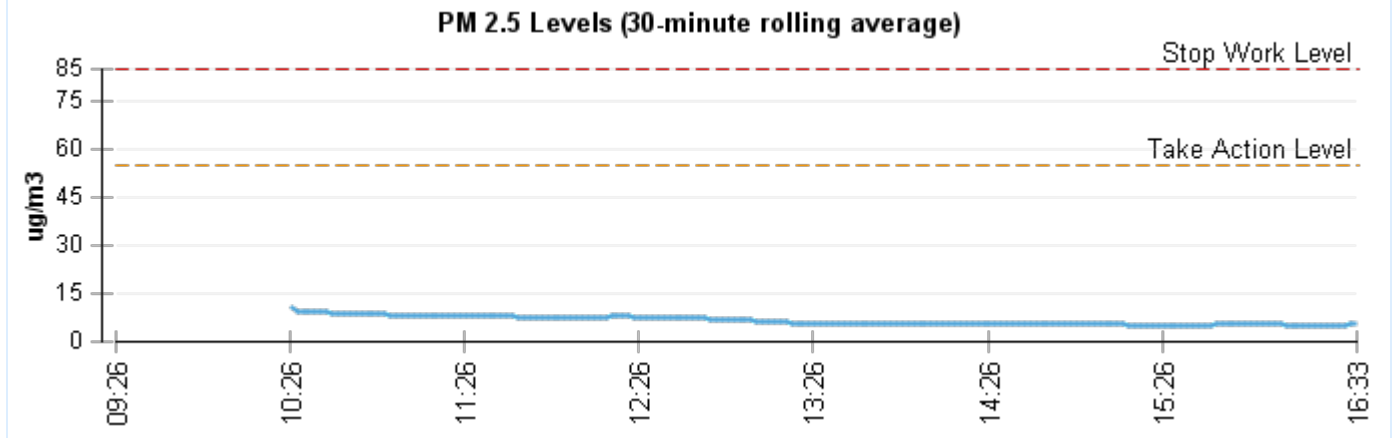
Station ID AMS-08b
Location Description 29.78207, -95.31766 - IMY SE - Fontinot



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

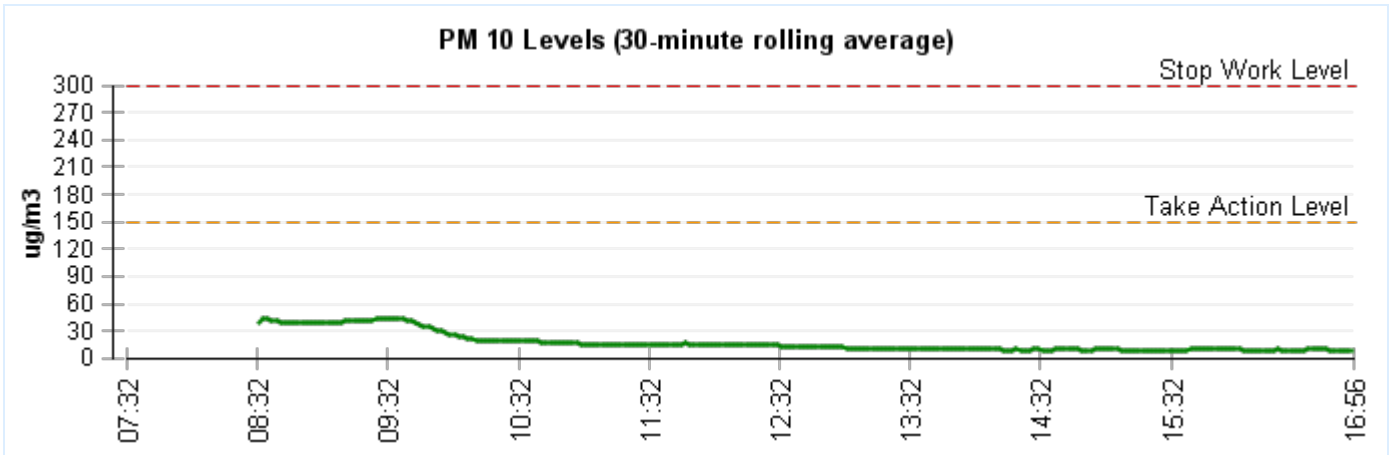
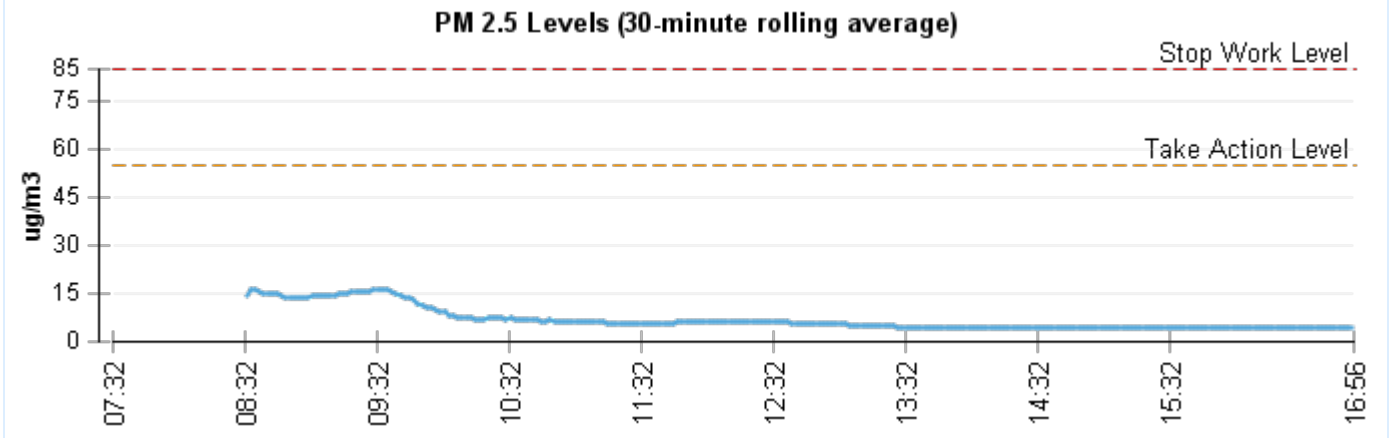
Station ID AMS-09
Location Description 29.78213, -95.32497 - IMY South - Waco and Lee



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

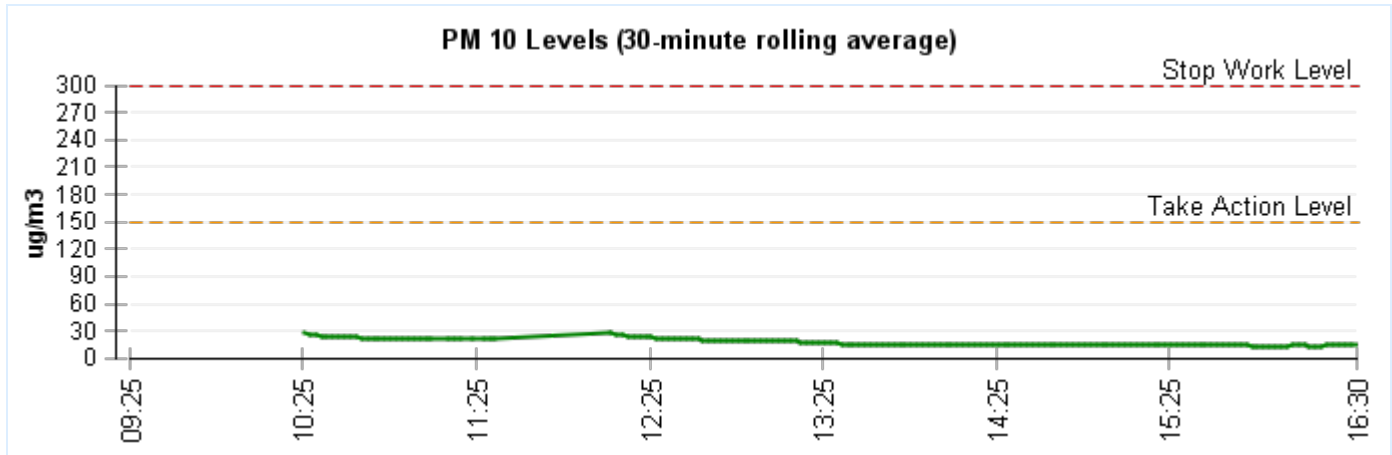
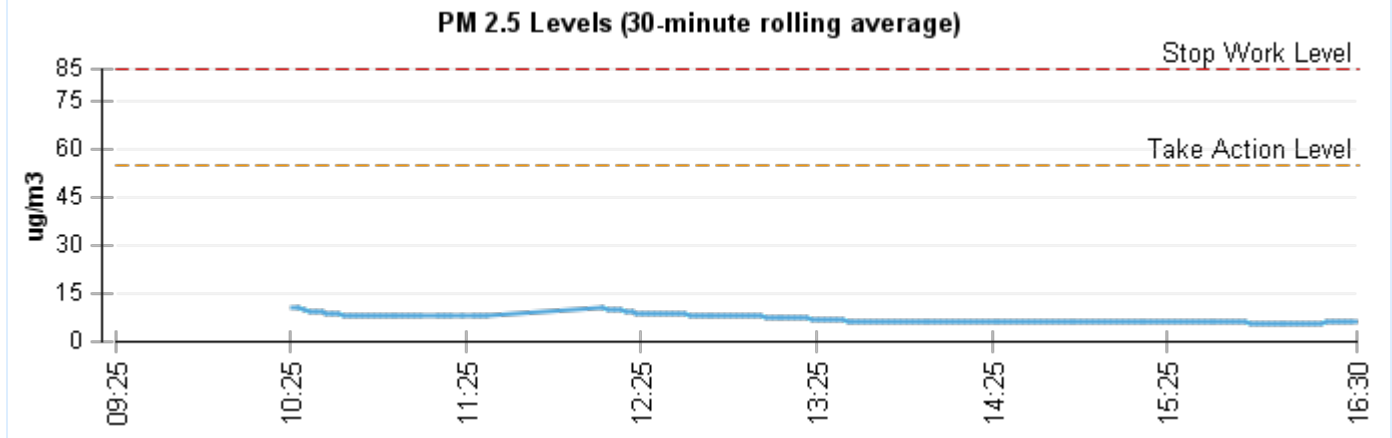
Station ID AMS-10b
Location Description 29.78748, -95.31851 - HWPW - Clementine North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

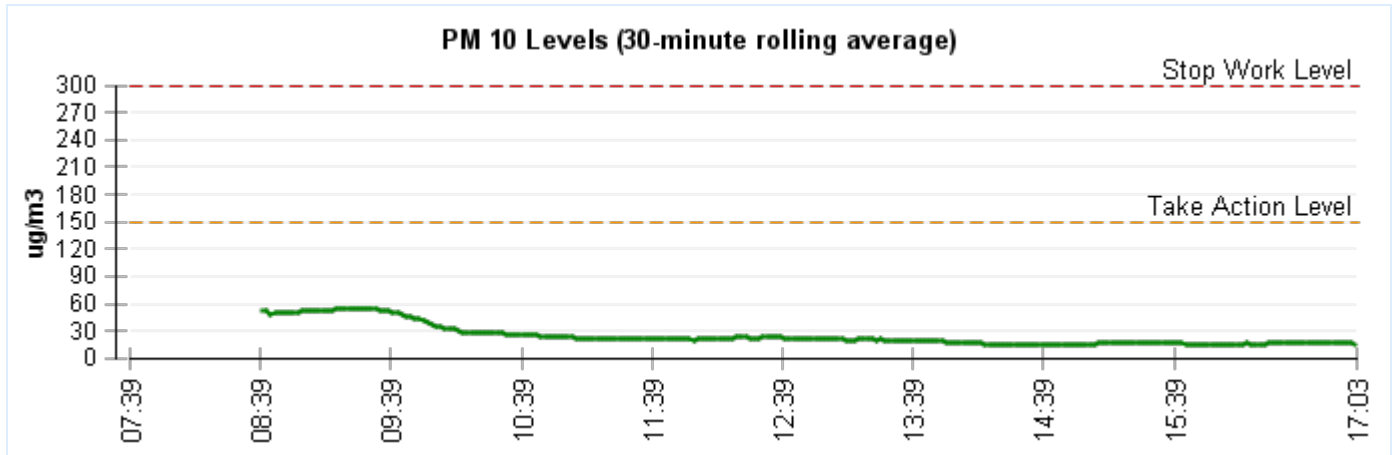
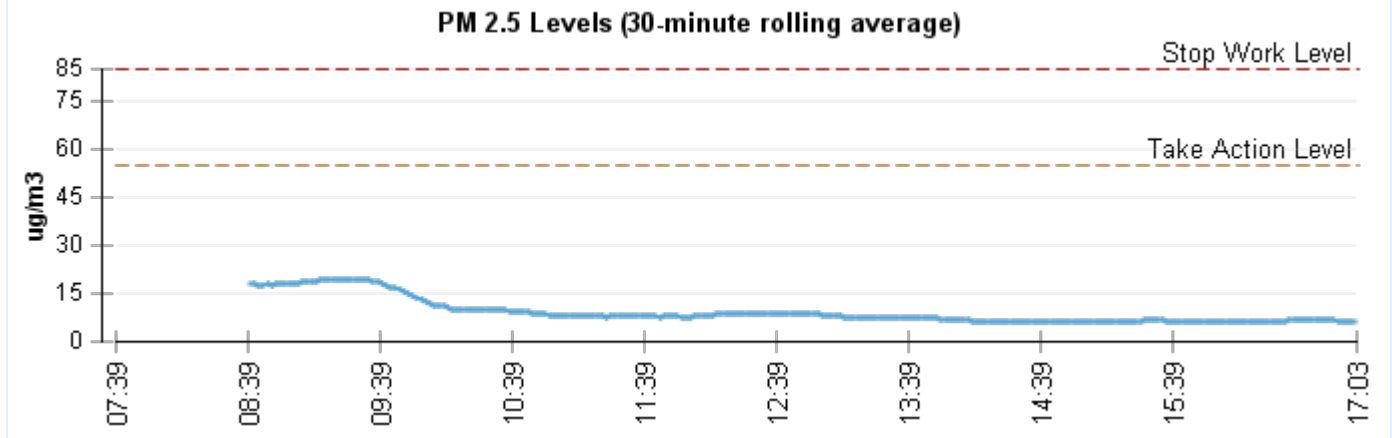
Station ID AMS-11
Location Description 29.78222, -95.32328 - IMY South - Yates



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

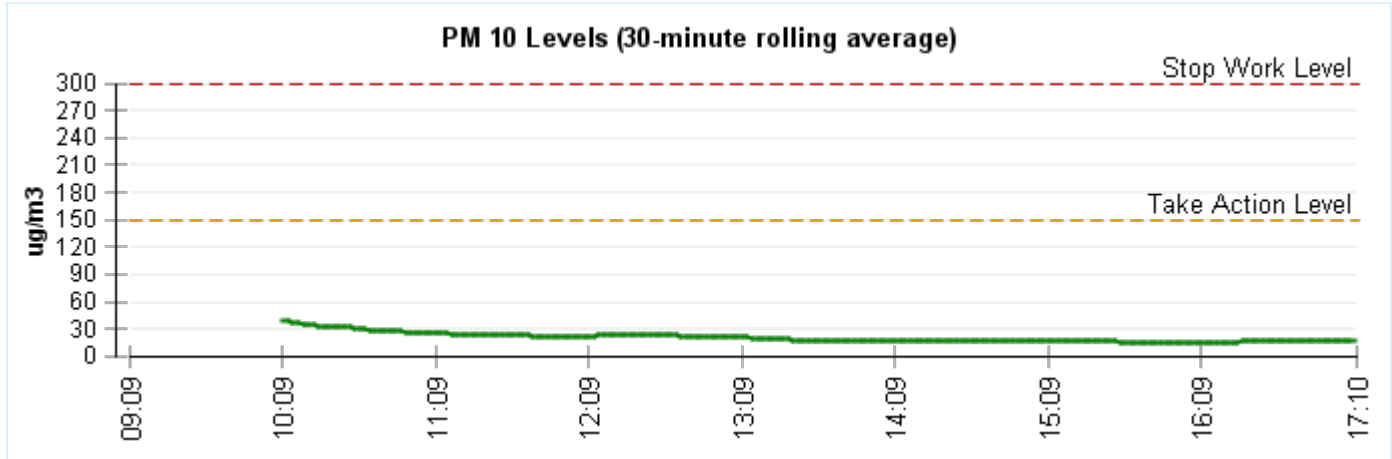
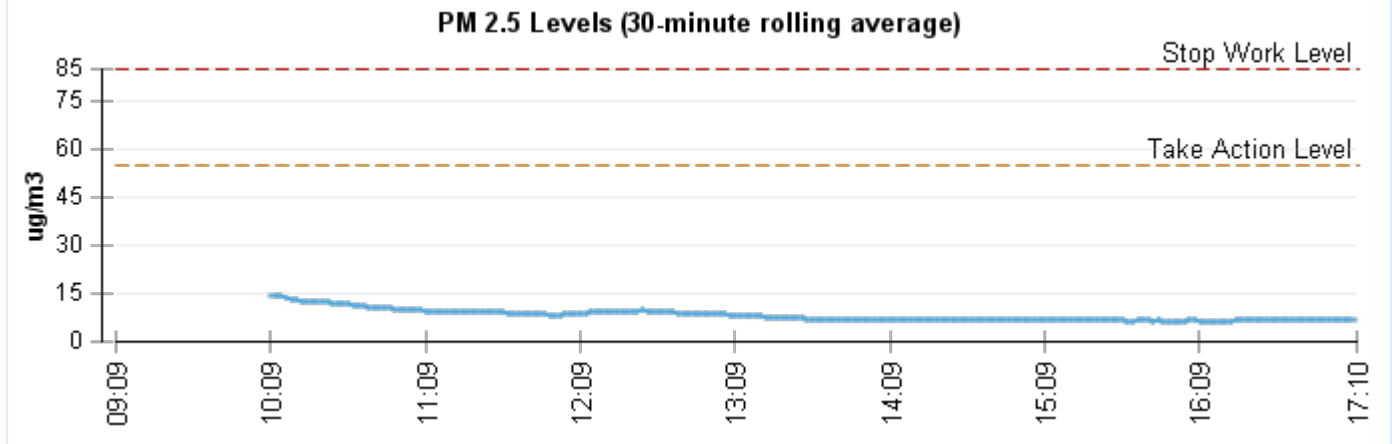
Station ID AMS-12
Location Description 29.78757, -95.31837 - HWPW - Fontinot North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 26, 2023

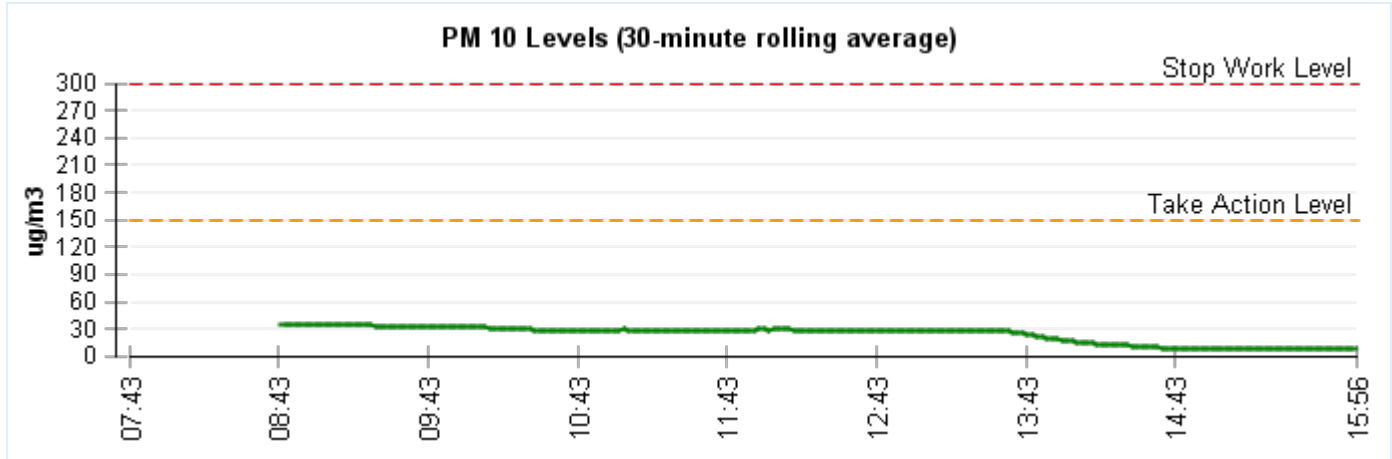
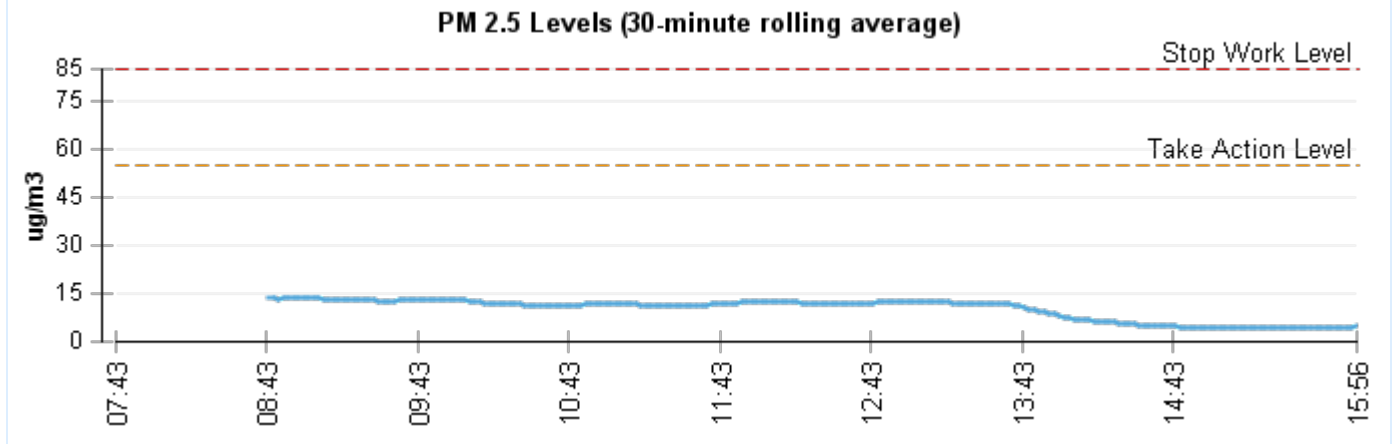
Station ID AMS-13a
Location Description 29.78596, -95.32381 - HWPW - Eddie and Amboy



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

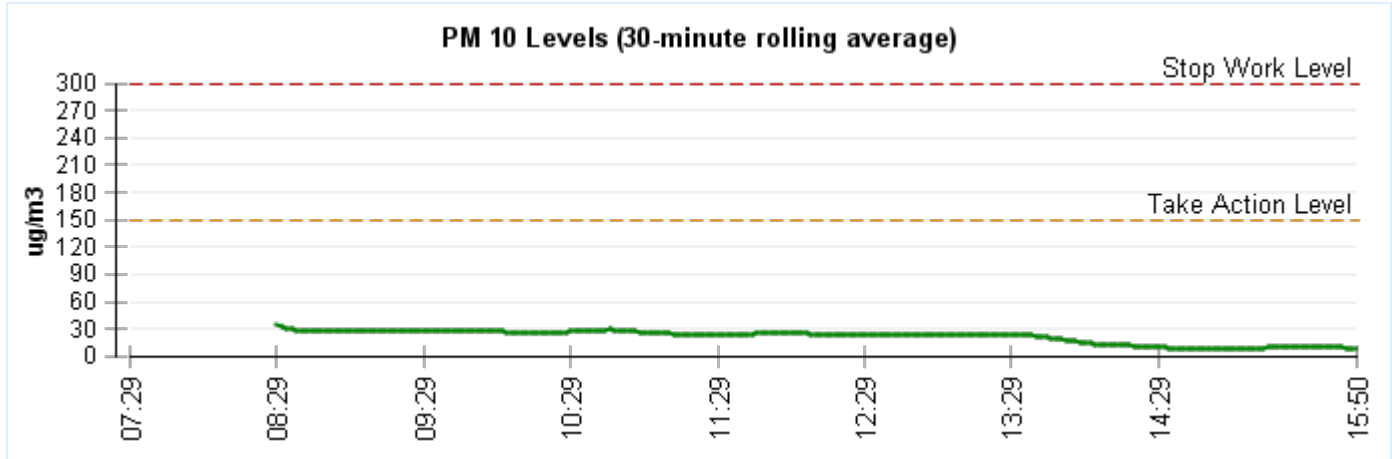
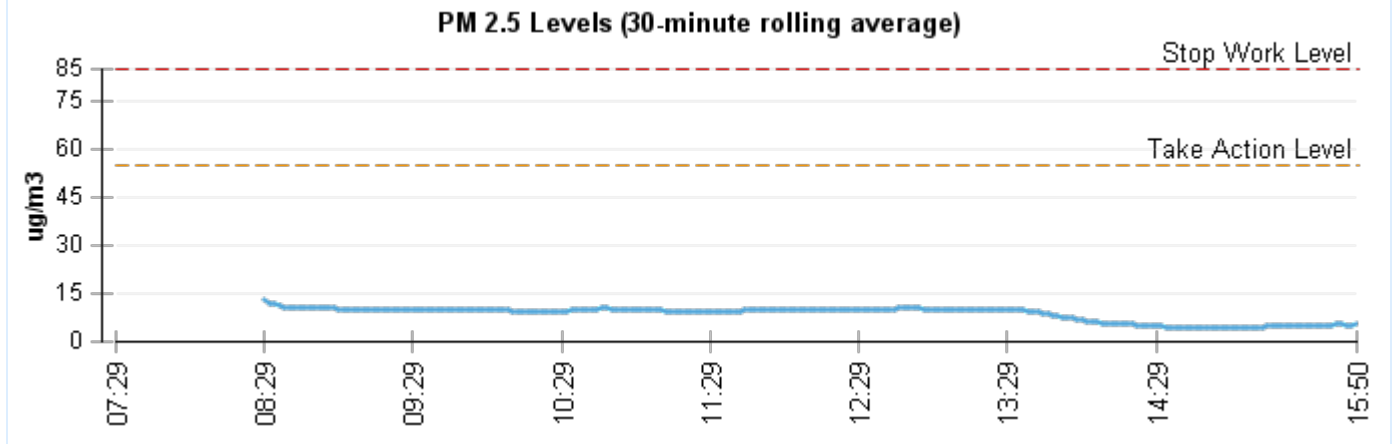
Station ID AMS-01 **Location Description** 29.78489, -95.32394 - HWPW - Quitman East



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

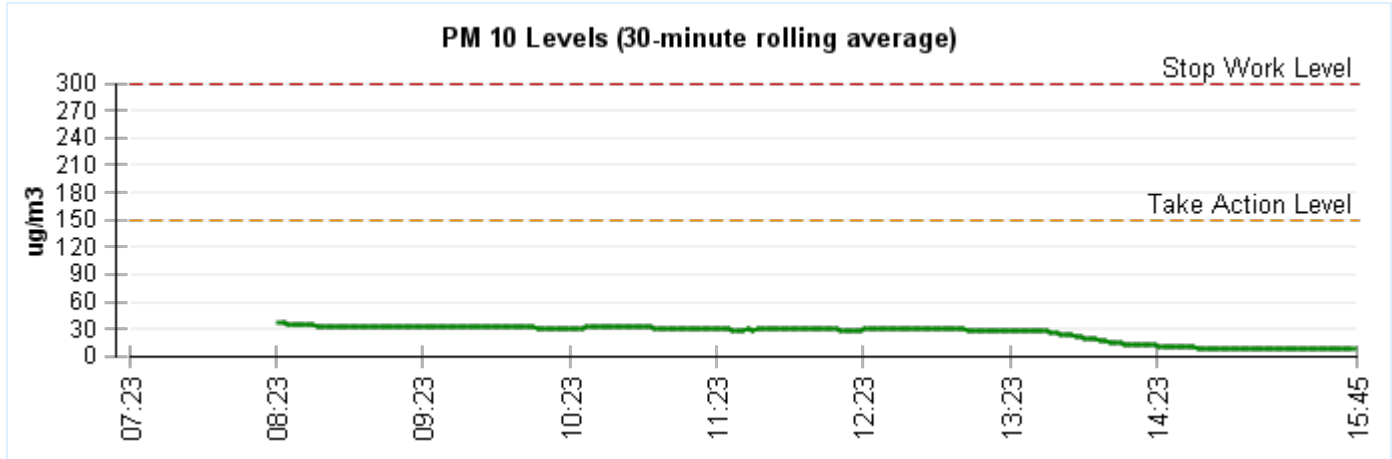
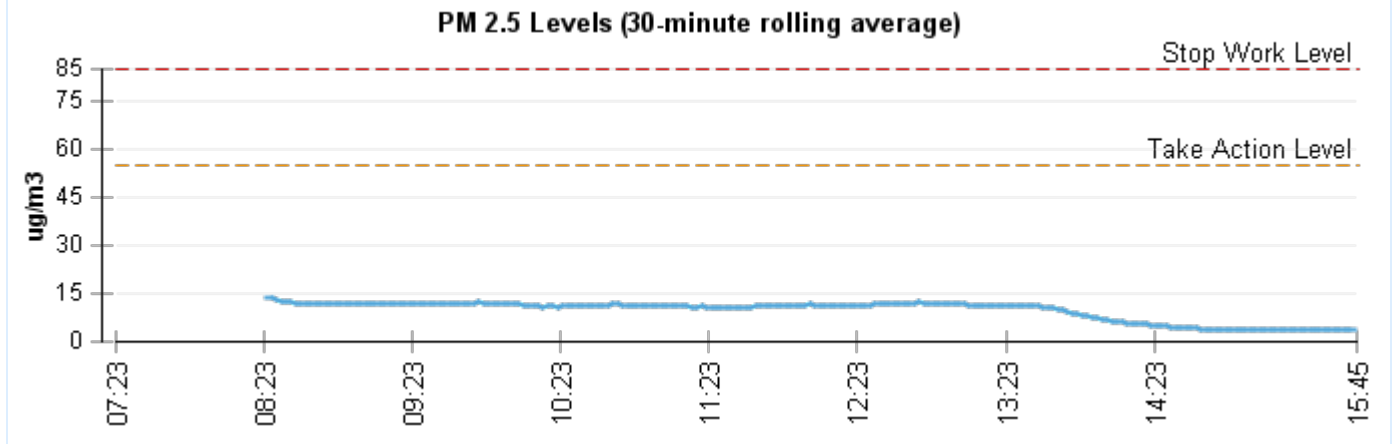
Station ID AMS-02b
Location Description 29.78751, -95.32379 - HWPW - Kashmere and Liberty



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

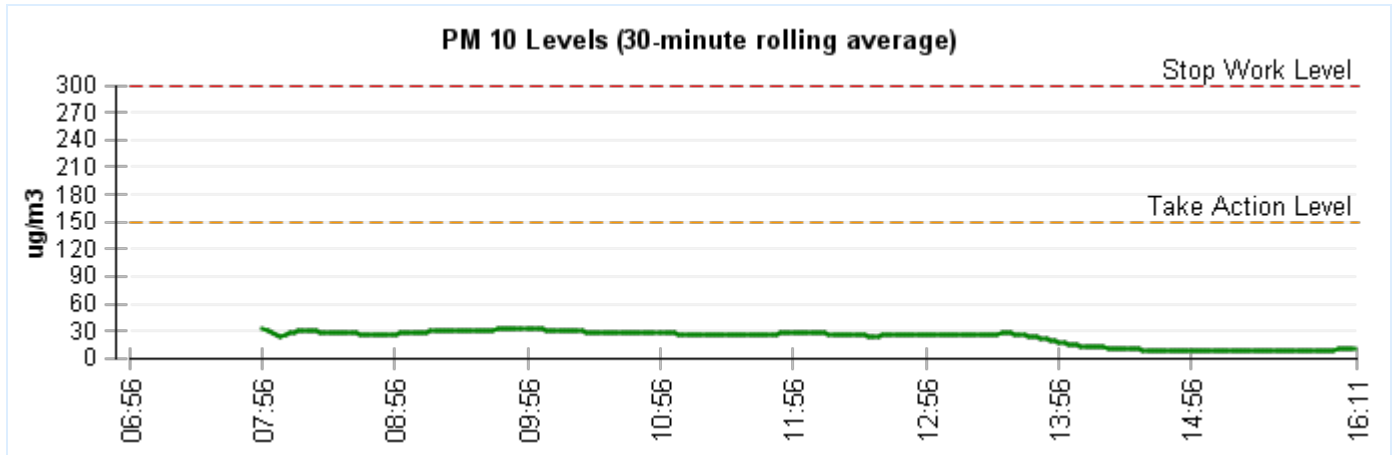
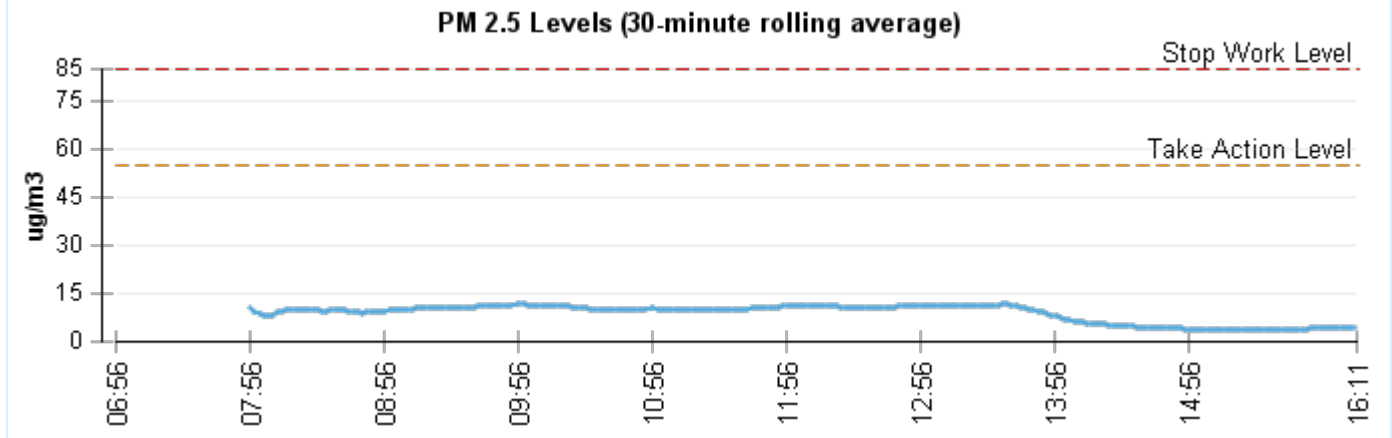
Station ID AMS-03a
Location Description 29.78734, -95.32102 - HWPW - Solo North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

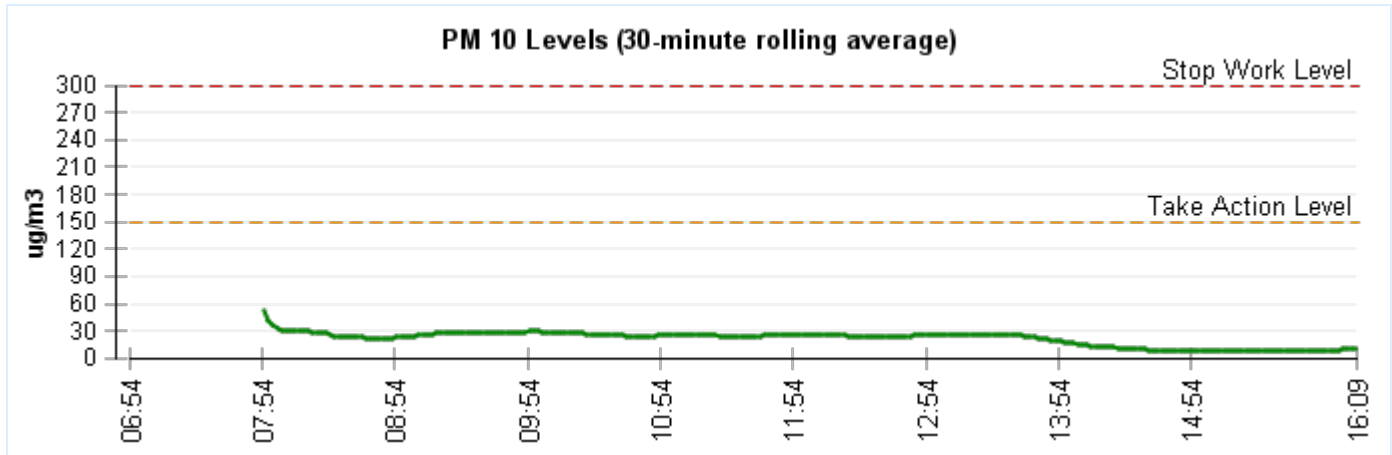
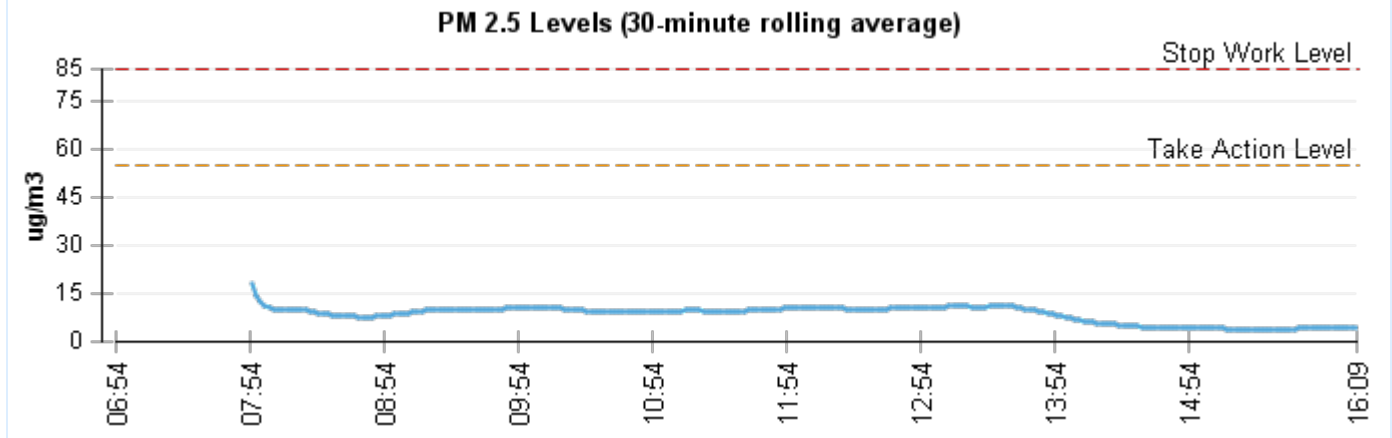
Station ID AMS-06b
Location Description 29.78204, -95.31929 - IMY South - Gagne



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

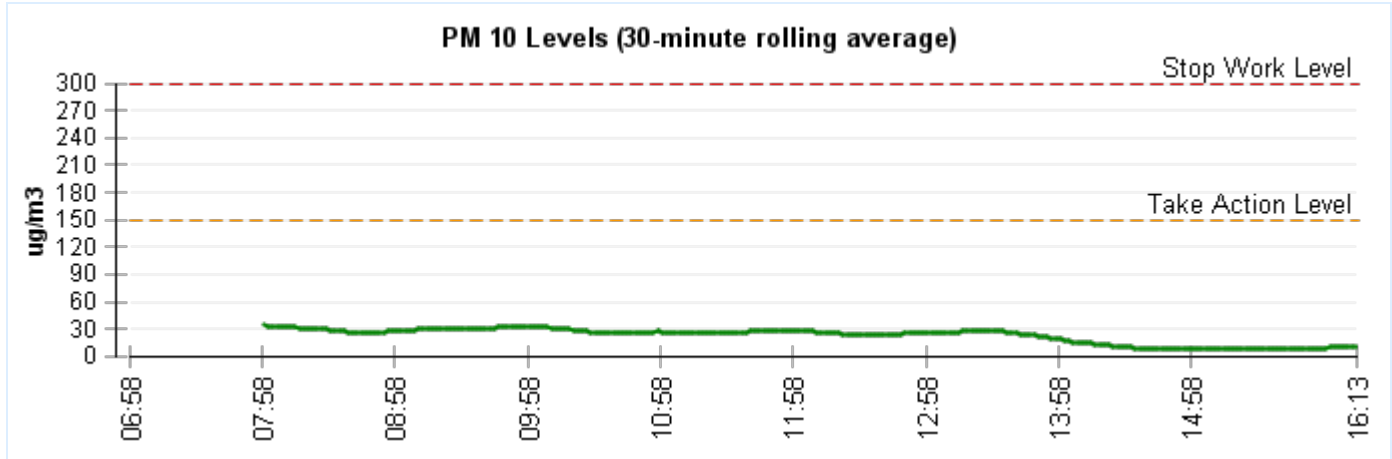
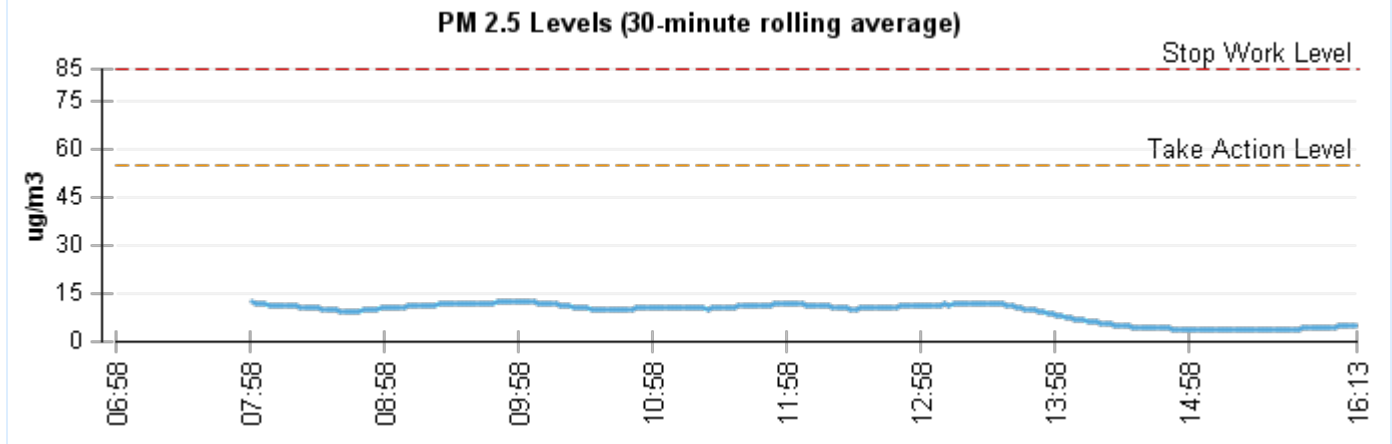
Station ID AMS-08b
Location Description 29.78208, -95.31771 - IMY SE - Fontinot



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

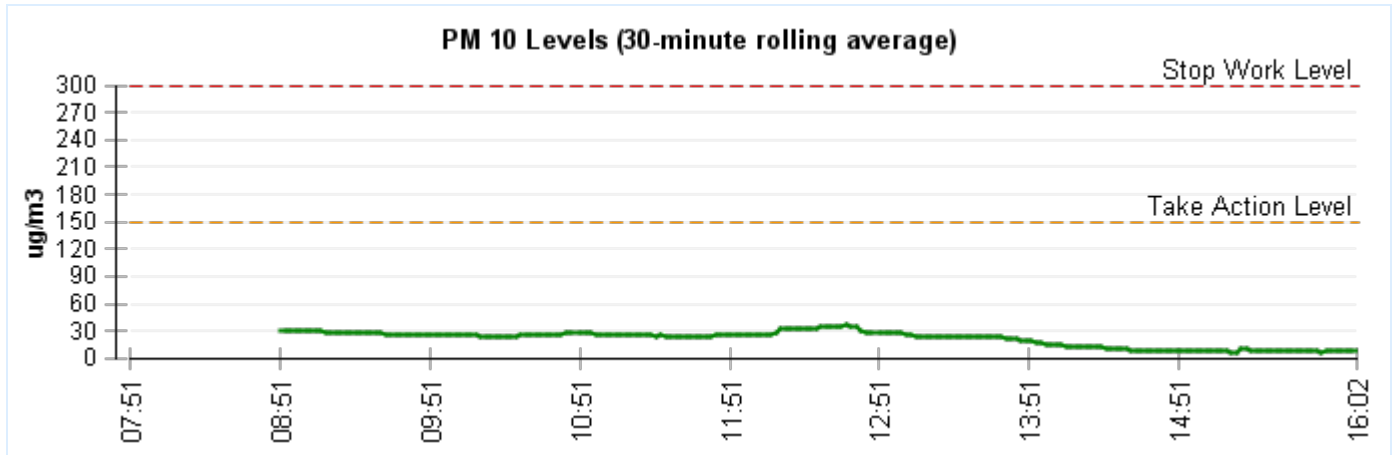
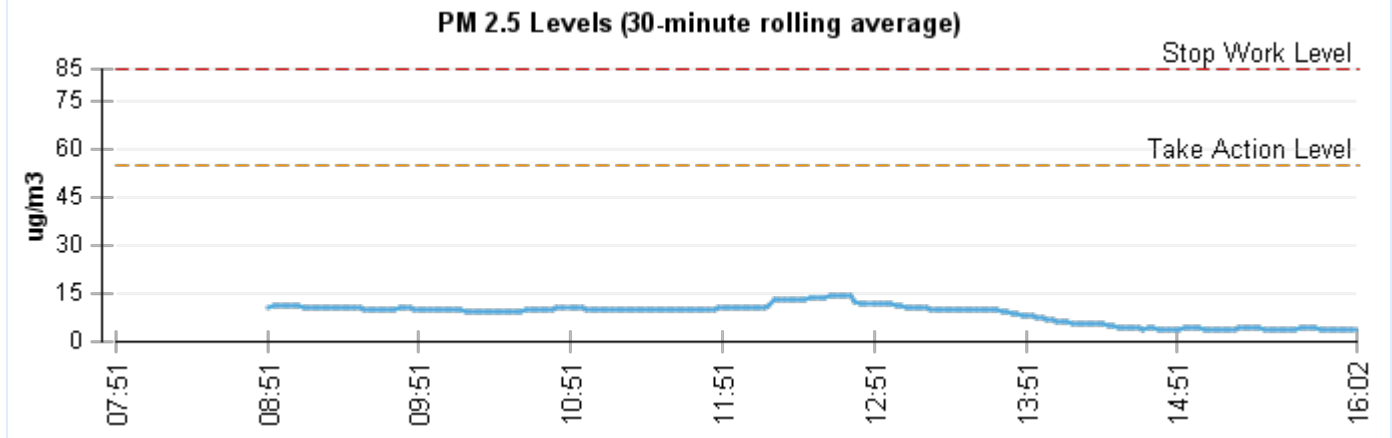
Station ID AMS-09
Location Description 29.78209, -95.32496 - IMY South - Waco and Lee



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

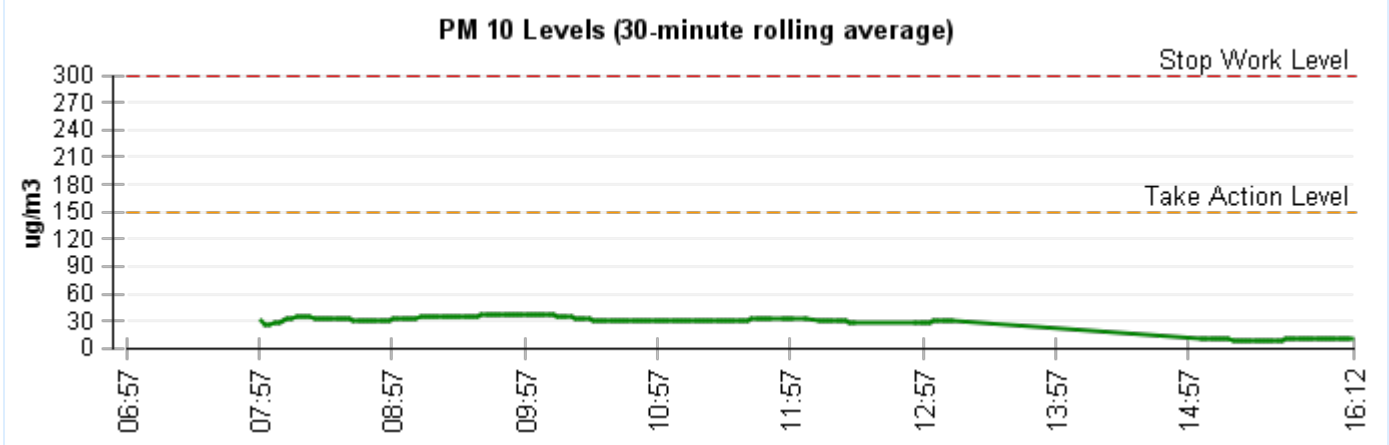
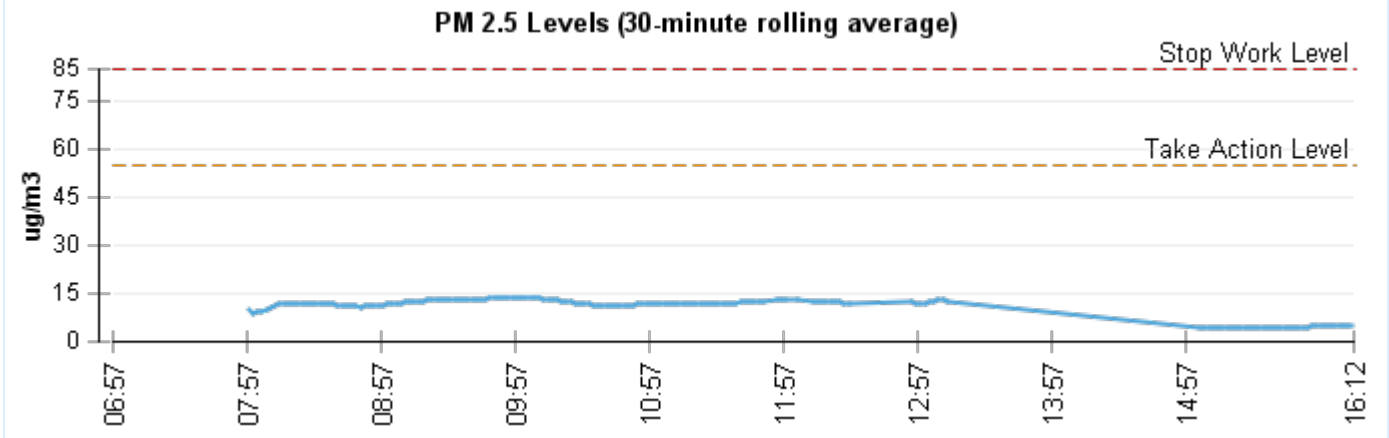
Station ID AMS-10b
Location Description 29.78763, -95.31669 - HWPW - Erastus



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

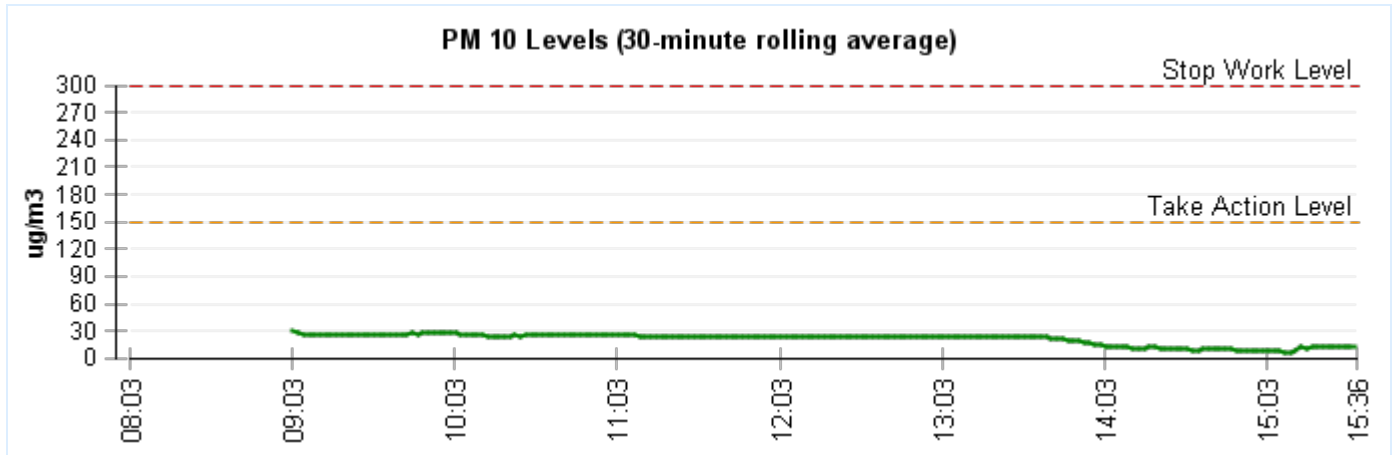
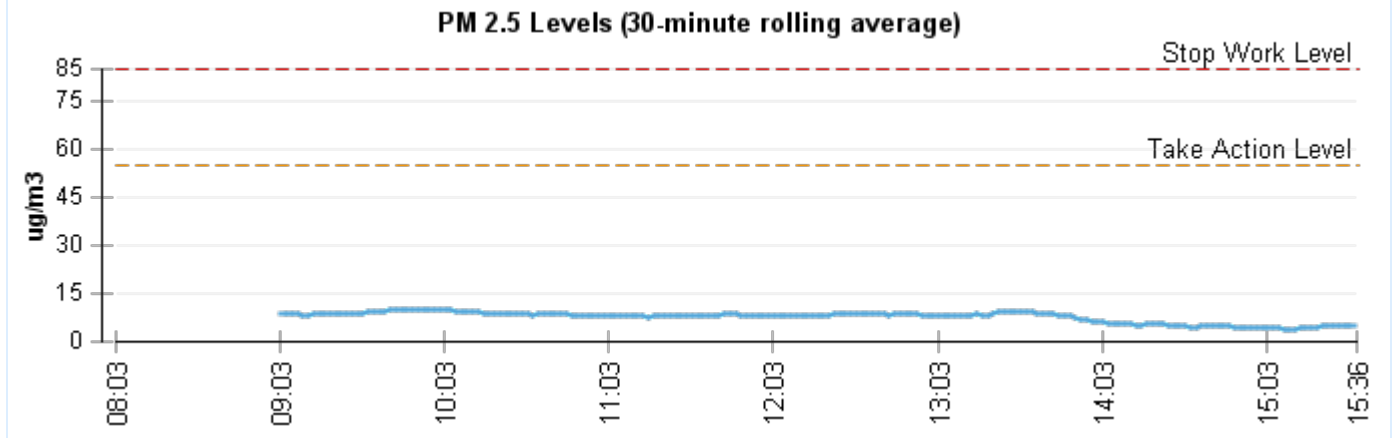
Station ID AMS-11
Location Description 29.78215, -95.32325 - IMY South - Yates



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

Station ID AMS-12
Location Description 29.78754, -95.31853 - HWPW - Clementine North



PM 2.5 and PM 10 Time History Data

Sample Date Apr 27, 2023

Station ID AMS-13a
Location Description 29.78592, -95.32382 - HWPW - Eddie and Amboy

