

**DAILY FIELD REPORT 029**

Prepared By: LANGAN

<b>WEATHER</b>	Snow		Rain		Overcast		Partly Cloudy	X	Sunny	
<b>TEMP.</b>	< 32		32-50		50-70		70-85	X	>85	X

<b>BCP Project No:</b>	C231153	<b>Date:</b>	July 17, 2023
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<b>Project Name:</b>	Kasser Scrap Metal and Rector Cleaners Site	<b>Time:</b>	6:45 am to 3:30 pm
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<b>Consultant:</b> Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan)	<b>Langan Field Personnel:</b> Caitlyn Dempsey (Environmental) Xianglei Zheng (Geotechnical)
<b>Construction Manager:</b> Consigli Construction Co., Inc. (Consigli)	
<b>Foundation Contractor:</b> Urban Foundation/Engineering (Urban)	

**Work Activities Performed:**

- Urban excavated two about 7-foot-long by 5-foot-wide areas to about 4 feet below grade surface (bgs) in the southern part of waste characterization grid WC05\_0-5 to prepare for equipment mobilization. Excavated soil/fill was temporarily stockpiled adjacent to the excavation prior to being replaced into the excavation area.
- Urban excavated an about 50-foot-long by 7-foot-wide area to about 5 feet bgs in the western part of waste characterization grid WC02\_0-5 to prepare for equipment mobilization. Excavated soil/fill was stockpiled adjacent to the excavation and covered with polyethylene sheeting at the end of the day, pending off-site disposal.
- Urban graded an about 70-foot-long by 50-foot-wide area of soil/fill in the southeastern part of waste characterization grid WC02 to prepare for equipment mobilization.
- All excavated and graded soil/fill consisted of non-native soil; odors, staining, elevated photoionization detector (PID) readings, or other evidence of a petroleum or chemical release were not observed.
- During routine maintenance of a drill rig, fuel oil was observed leaking on the underlying soil (less than 1 gallon) in the northeastern part of waste characterization grid WC03. Spill kits were immediately applied to the area and the release was stopped and contained. No odors or elevated PID readings were observed on underlying soil following the cleanup.
- Urban removed concrete in the western part of waste characterization grid WC02. Concrete and demolition (C&D) debris was separated and stockpiled adjacent to the excavation area. Dust suppression measures (i.e., misting and spraying of concrete with water) were employed by Urban during the work.
- Urban installed four, about 58-inch-diameter, soil-mix columns using a Bauer BG 28H drilling rig in the northwestern and western parts of the site.
- Urban began drilling two rock sockets for two caissons using a Double L drilling rig in the central part of the site.

**Material Tracking:**

- No soil/fill was exported from the site.
- No material was imported to the site.

Materials Export Summary								
Facility Name	Bayshore Soil Management, LLC		Clean Earth of Carteret, LLC		PPark NJ		Faztec Solutions	
Location	Keasbey, NJ		Carteret, NJ		Prospect Park, NJ		Staten Island, NY	
Type of Waste	Non-hazardous Soil		Non-hazardous Soil		Non-hazardous Soil		C&D	
Today	Number of Loads	Approx. Volume (CY)	Number of Loads	Approx. Volume (CY)	Number of Loads	Approx. Volume (CY)	Number of Loads	Approximate Volume (CY)
		0	-	0	-	0	-	0
Total	Number of Loads	Approx. Volume (CY)	Number of Loads	Approx. Volume (CY)	Number of Loads	Approx. Volume (CY)	Number of Loads	Approximate Volume (CY)
	26	520	20	400	0	-	14	280

Materials Export Summary		
Facility Name	Dale Transfer Corp.	
Location	West Babylon, NY	
Type of Waste	Concrete	
Today	Number of Loads	Approx. Volume (CY)
		0
Total	Number of Loads	Approx. Volume (CY)
	2	40

**Samples Collected:**

- No samples were collected.

**Air Monitoring:**

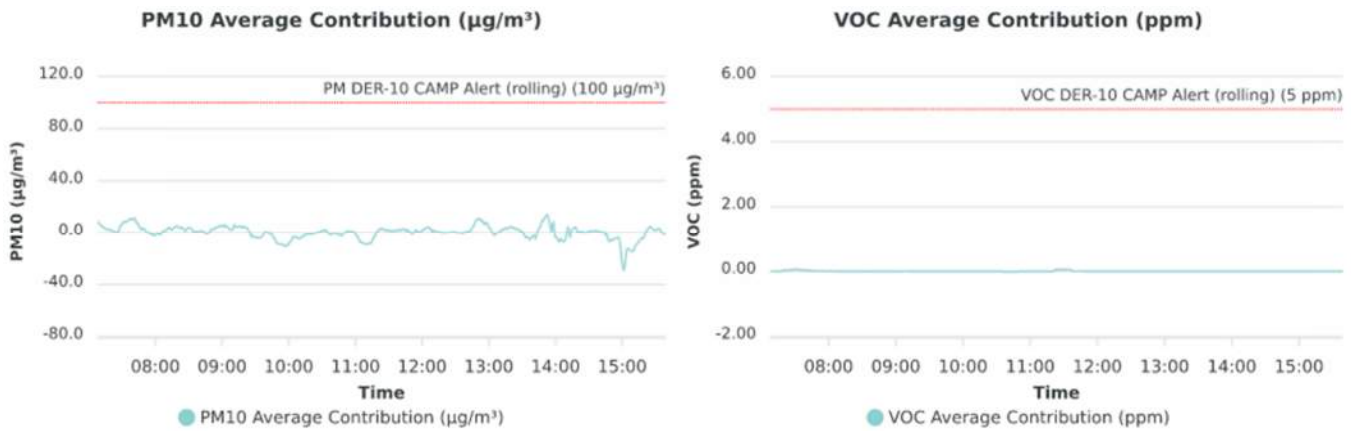
The 15-minute average site contributions for particulates and volatile organic compounds (VOCs) are calculated by subtracting the upwind readings from the downwind readings. A true action level exceedance is realized when this net result exceeds 100 µg/m<sup>3</sup> for particulates and 5 ppm for organic vapors. No particulates (PM10) or organic vapors exceeded the 15-minute average site contribution action level of 100 µg/m<sup>3</sup> and 5 ppm, respectively, on this day. A data gap was encountered between 14:58 and 15:00 and is attributed to an automated calibration conducted at the stations.

\*\*\*Please note the New York State Department of Environmental Conservation and State Department of Health (DOH) issued an Air Quality Advisory for fine particulate matter for the Long Island, New York City Metro, Lower Hudson Valley, Upper Hudson Valley, Adirondacks, Eastern Lake Ontario, Central New York, and Western New York regions for Monday, July 17, 2023. Ambient air quality conditions may have affected air monitoring results.\*\*\*

Particulate Monitoring (µg/m <sup>3</sup> )		Organic Vapor Monitoring (ppm)	
Daily Background	12.6	Daily Background	0.00
PM10 Average Site Contribution (Minimum)	-29.2	VOC Average Site Contribution (Minimum)	-0.01
PM10 Average Site Contribution (Maximum)	13.9	VOC Average Site Contribution (Maximum)	0.07

µg/m<sup>3</sup>: micrograms per cubic meter.

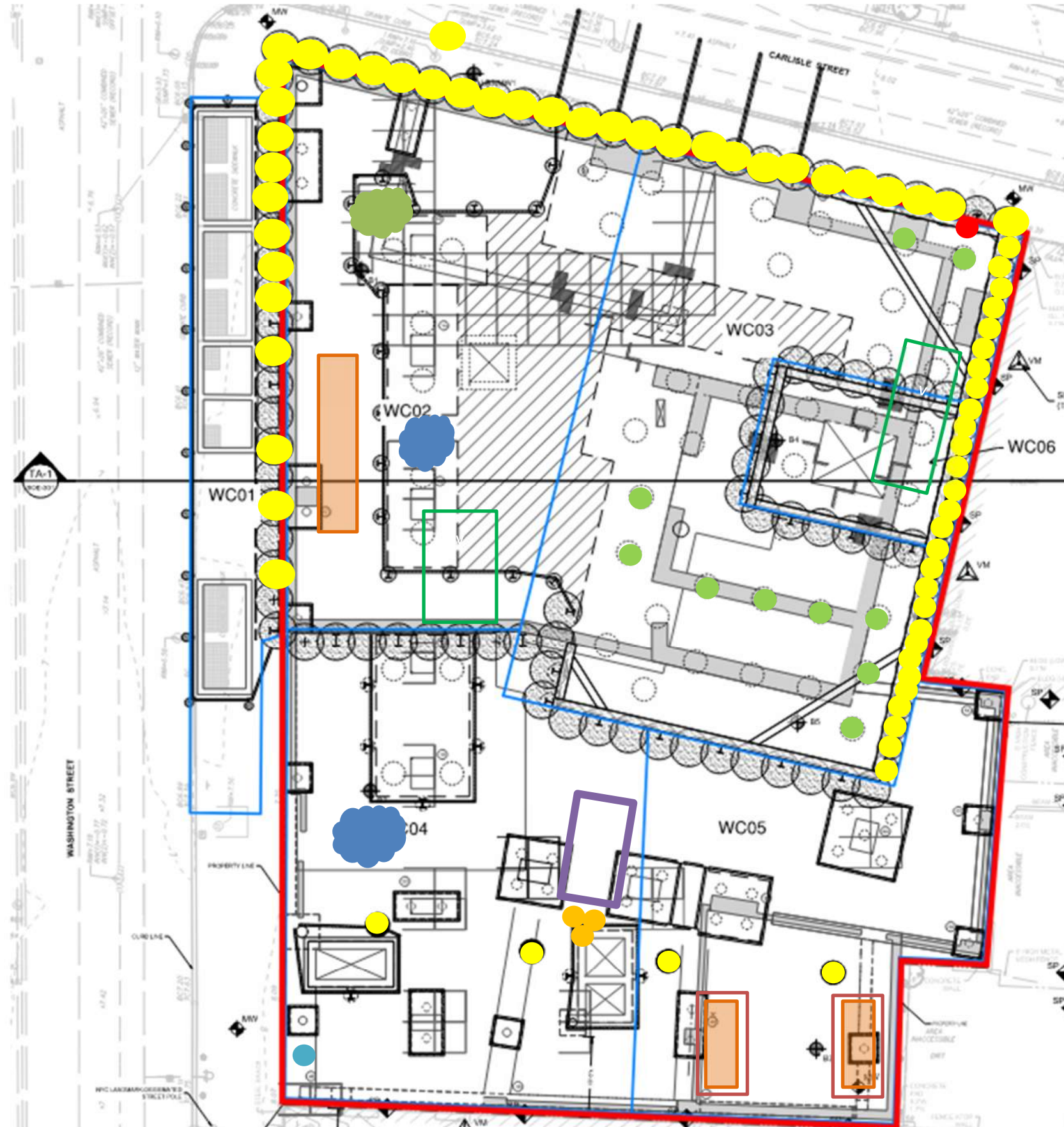
ppm: parts per million.



**Planned Activities:**

- Urban will continue installing soil-mix columns throughout the site.
- Urban will continue installing caisson casings throughout the site.
- Urban will export soil from WC02\_0-5.

**SITE PLAN**



- Site Boundary**
- Waste Characterization Grid Boundary**
- **CAMP station 1**
- **CAMP station 2**
- **Stockpile – Soil (no impacts)**
- **Stockpile – C&D**
- Approximate Location of Excavation**
- Approximate Area of Grading**
- Approximate Backfill Location**
- **Completed Soil-Mix Column**
- **Completed Caisson Casing**
- **Completed Soil-Mix Column as part of the In-Situ Stabilization of NAPL-contaminated Soil**
- Approximate Location of the Former UST**

**Note:** Waste characterization grid areas were developed by PT Consultants and Urban and is shown on this site plan for reference only.



### Photo Log

**Photo 1:** Urban excavating soil/fill in the western part of waste characterization grid WC02 (facing north).



**Photo 2:** Urban spraying water for dust suppression during concrete removal (facing east).





**Photo 3:** View of CAMP Station 2 in the southwestern part of the site (facing southwest).



**Photo 4:** View of CAMP Station 1 (next to the construction fence) in the northeastern part of the site (facing east).



**Photo 5:** View of the entrance/exit of the site along Washington Street at the end of the work day (facing northeast).



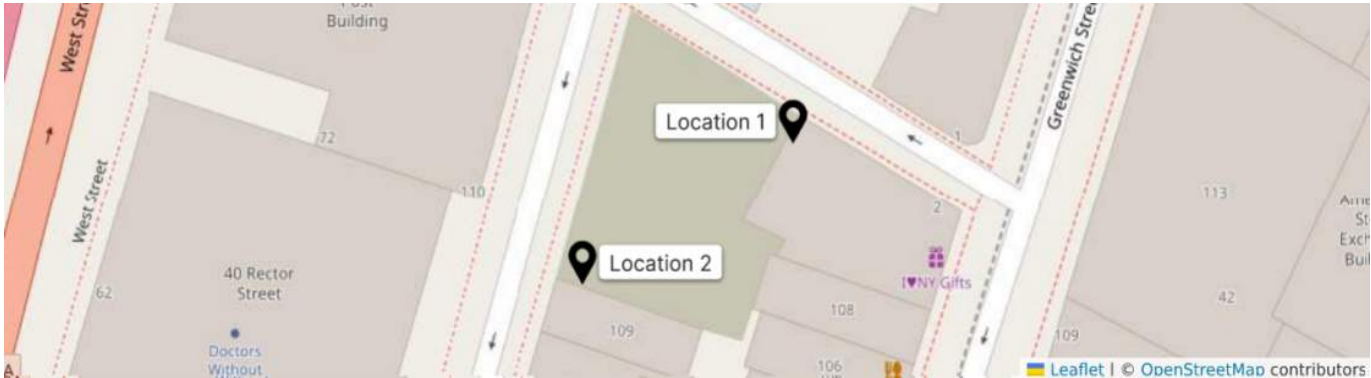
**Photo 6:** View of the entrance/exit of the site at the corner of Washington and Carlisle Street at the end of the work day (facing southeast).





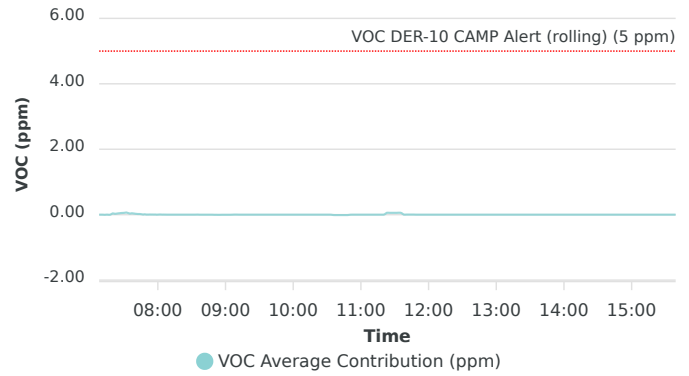
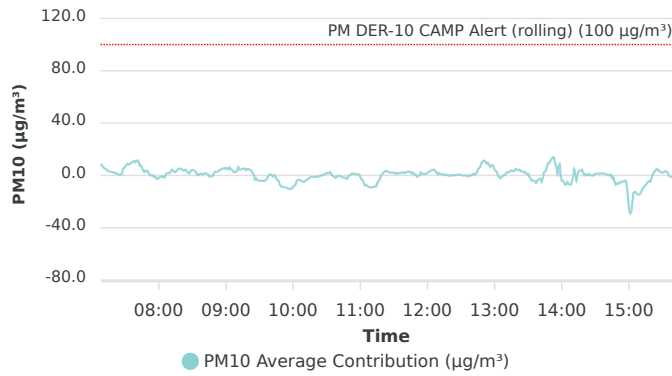
<b>LANGAN</b>	<b>Air Monitoring Report</b>	<b>170695201 - 111 Washington St</b>	
		<b>Report Period</b>	
		<b>From:</b>	7/17/2023 00:00
		<b>To:</b>	7/17/2023 23:59
		<b>PM10 Action Level:</b>	100 $\mu\text{g}/\text{m}^3$
<b>VOC Action Level:</b>	5 ppm		

<b>Daily Environmental Summary</b>	<b>Windspeed (mph)</b>	<b>Prevailing wind direction</b>
7/17/2023	0.3-2.5	SSW



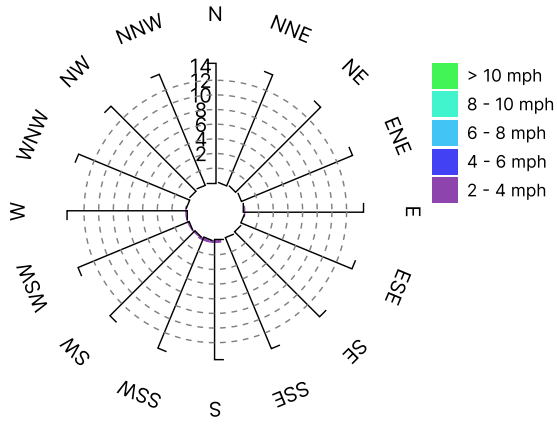
**PM10 Average Contribution ( $\mu\text{g}/\text{m}^3$ )**

**VOC Average Contribution (ppm)**





Contribution wind rose (mph)



Date/Time	Average Upwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Downwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Contribution PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 07:08:00	12.6	21.1	8.6	0.00	0.00	0.00	0.5	SW
7/17/2023 07:09:00	12.1	20.0	7.9	0.00	0.00	0.00	0.6	SW
7/17/2023 07:10:00	11.9	18.6	6.7	0.00	0.00	0.00	0.7	SSW
7/17/2023 07:11:00	11.7	17.4	5.7	0.00	0.00	0.00	0.7	SSW
7/17/2023 07:12:00	11.3	16.5	5.2	0.00	0.00	0.00	0.7	WSW
7/17/2023 07:13:00	10.9	15.7	4.8	0.01	0.00	-0.01	0.6	WNW
7/17/2023 07:14:00	10.9	14.7	3.7	0.00	0.00	0.00	0.7	E
7/17/2023 07:15:00	10.7	13.9	3.1	0.00	0.01	0.00	0.7	E
7/17/2023 07:16:00	10.4	13.4	2.9	0.01	0.01	0.00	0.7	SSW
7/17/2023 07:17:00	10.2	13.0	2.8	0.01	0.01	0.00	0.7	SSW
7/17/2023 07:18:00	10.0	12.7	2.7	0.02	0.02	0.00	0.7	SW
7/17/2023 07:19:00	9.8	12.4	2.5	0.02	0.04	0.02	0.7	SSW
7/17/2023 07:20:00	9.9	12.1	2.1	0.02	0.05	0.04	0.7	SSW
7/17/2023 07:21:00	9.9	11.8	1.9	0.02	0.05	0.03	0.7	SSW
7/17/2023 07:22:00	9.9	11.6	1.7	0.02	0.05	0.03	0.7	WSW
7/17/2023 07:23:00	9.7	10.8	1.1	0.03	0.06	0.03	0.7	WSW
7/17/2023 07:24:00	9.5	10.2	0.7	0.03	0.06	0.04	0.7	SW
7/17/2023 07:25:00	9.3	9.8	0.5	0.03	0.07	0.04	0.7	SSW
7/17/2023 07:26:00	9.0	9.6	0.6	0.03	0.07	0.04	0.7	SW
7/17/2023 07:27:00	9.0	10.1	1.2	0.03	0.08	0.05	0.7	W
7/17/2023 07:28:00	8.9	13.8	4.9	0.03	0.08	0.05	0.8	S
7/17/2023 07:29:00	8.6	14.3	5.7	0.03	0.08	0.05	0.7	S
7/17/2023 07:30:00	8.6	15.4	6.8	0.03	0.09	0.06	0.7	S
7/17/2023 07:31:00	8.6	16.6	8.0	0.03	0.09	0.06	0.8	S
7/17/2023 07:32:00	9.3	18.2	8.9	0.02	0.09	0.07	0.8	S
7/17/2023 07:33:00	10.5	18.8	8.3	0.03	0.08	0.06	0.8	SE
7/17/2023 07:34:00	10.8	19.4	8.6	0.03	0.07	0.05	0.8	NW
7/17/2023 07:35:00	10.9	20.2	9.4	0.03	0.06	0.04	0.8	WSW
7/17/2023 07:36:00	11.2	21.2	10.0	0.02	0.06	0.04	0.9	S
7/17/2023 07:37:00	11.6	22.3	10.7	0.02	0.06	0.04	0.9	ESE
7/17/2023 07:38:00	11.9	22.9	10.9	0.02	0.05	0.04	0.9	S
7/17/2023 07:39:00	13.1	23.1	10.0	0.02	0.05	0.03	0.9	SSE

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 07:40:00	13.4	24.4	11.0	0.01	0.04	0.03	0.9	WNW
7/17/2023 07:41:00	13.6	25.1	11.5	0.01	0.04	0.03	1.0	W
7/17/2023 07:42:00	14.2	24.4	10.2	0.01	0.03	0.02	1.0	SSE
7/17/2023 07:43:00	14.3	21.7	7.4	0.01	0.03	0.02	1.0	SW
7/17/2023 07:44:00	14.3	21.9	7.6	0.01	0.03	0.02	1.0	NNW
7/17/2023 07:45:00	15.1	21.0	5.8	0.01	0.03	0.02	1.1	E
7/17/2023 07:46:00	15.7	19.7	4.1	0.02	0.03	0.01	1.0	SSE
7/17/2023 07:47:00	15.7	18.2	2.5	0.02	0.02	0.00	1.0	SE
7/17/2023 07:48:00	14.7	18.5	3.8	0.01	0.02	0.01	1.0	SSE
7/17/2023 07:49:00	15.1	18.3	3.2	0.01	0.02	0.01	1.0	WNW
7/17/2023 07:50:00	15.4	18.7	3.3	0.01	0.01	0.00	1.0	NNE
7/17/2023 07:51:00	16.4	18.3	1.8	0.01	0.01	0.00	1.0	WSW
7/17/2023 07:52:00	17.5	17.9	0.4	0.01	0.01	0.00	1.0	SSW
7/17/2023 07:53:00	17.7	17.7	-0.1	0.01	0.01	0.01	1.0	SW
7/17/2023 07:54:00	17.2	17.6	0.3	0.01	0.01	0.00	1.1	W
7/17/2023 07:55:00	17.1	16.9	-0.3	0.01	0.01	0.00	1.2	SSW
7/17/2023 07:56:00	17.5	16.0	-1.5	0.01	0.01	0.00	1.2	SSE
7/17/2023 07:57:00	17.1	16.1	-1.0	0.01	0.01	0.00	1.2	ENE
7/17/2023 07:58:00	17.2	15.0	-2.3	0.01	0.01	0.00	1.1	WSW
7/17/2023 07:59:00	17.3	14.6	-2.8	0.01	0.01	0.00	1.2	S
7/17/2023 08:00:00	16.6	14.7	-1.9	0.01	0.01	0.00	1.2	S
7/17/2023 08:01:00	16.2	14.9	-1.3	0.00	0.01	0.00	1.2	SSW
7/17/2023 08:02:00	15.9	15.1	-0.8	0.00	0.01	0.01	1.2	S
7/17/2023 08:03:00	15.7	14.4	-1.2	0.00	0.00	0.00	1.2	S
7/17/2023 08:04:00	15.0	14.3	-0.7	0.00	0.00	0.00	1.2	SSE
7/17/2023 08:05:00	15.4	13.7	-1.7	0.00	0.00	0.00	1.3	SSW
7/17/2023 08:06:00	14.5	14.6	0.1	0.00	0.00	0.00	1.3	SE
7/17/2023 08:07:00	13.1	14.8	1.6	0.00	0.00	0.00	1.2	SE
7/17/2023 08:08:00	12.9	14.5	1.6	0.00	0.00	0.00	1.2	SSW
7/17/2023 08:09:00	12.8	14.5	1.7	0.00	0.00	0.00	1.1	SE
7/17/2023 08:10:00	12.5	14.7	2.1	0.00	0.00	0.00	1.1	S
7/17/2023 08:11:00	11.9	15.4	3.4	0.00	0.00	0.00	1.1	S
7/17/2023 08:12:00	11.6	16.0	4.4	0.00	0.00	0.00	1.1	SSW



Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 08:13:00	12.3	15.9	3.6	0.00	0.00	0.00	1.1	SSE
7/17/2023 08:14:00	13.0	15.6	2.5	0.00	0.00	0.00	1.1	E
7/17/2023 08:15:00	13.0	15.7	2.7	0.00	0.00	0.00	1.1	S
7/17/2023 08:16:00	12.7	16.4	3.6	0.00	0.00	0.00	1.1	S
7/17/2023 08:17:00	12.4	17.0	4.7	0.00	0.00	0.00	1.1	SSW
7/17/2023 08:18:00	12.3	17.1	4.8	0.00	0.00	0.00	1.1	S
7/17/2023 08:19:00	12.1	17.1	5.0	0.00	0.00	0.00	1.1	NW
7/17/2023 08:20:00	11.2	16.4	5.3	0.00	0.00	0.00	1.0	N
7/17/2023 08:21:00	10.7	15.0	4.3	0.00	0.00	0.00	1.0	NNW
7/17/2023 08:22:00	10.4	14.0	3.6	0.00	0.00	0.00	1.0	WNW
7/17/2023 08:23:00	9.8	13.8	4.0	0.00	0.00	0.00	1.0	WNW
7/17/2023 08:24:00	9.2	13.6	4.4	0.00	0.00	0.00	1.0	SSW
7/17/2023 08:25:00	9.4	12.7	3.2	0.00	0.00	0.00	1.0	SSW
7/17/2023 08:26:00	9.6	11.9	2.3	0.00	0.00	0.00	1.0	W
7/17/2023 08:27:00	9.7	11.1	1.4	0.00	0.00	0.00	0.9	E
7/17/2023 08:28:00	8.7	11.4	2.8	0.00	0.00	0.00	1.0	SSW
7/17/2023 08:29:00	7.8	11.8	4.0	0.00	0.00	0.00	1.0	S
7/17/2023 08:30:00	7.7	11.9	4.2	0.00	0.00	0.00	1.1	SSW
7/17/2023 08:31:00	7.5	11.7	4.1	0.00	0.00	0.00	1.1	SSW
7/17/2023 08:32:00	7.5	11.0	3.5	0.00	0.00	0.00	1.1	WSW
7/17/2023 08:33:00	8.8	11.4	2.7	0.00	0.00	0.00	1.1	S
7/17/2023 08:34:00	10.5	11.5	1.0	0.00	0.00	0.00	1.2	S
7/17/2023 08:35:00	12.4	12.5	0.1	0.00	0.00	0.00	1.2	S
7/17/2023 08:36:00	12.8	13.8	1.0	0.00	0.00	0.00	1.2	E
7/17/2023 08:37:00	13.4	14.7	1.3	0.00	0.00	0.00	1.2	ESE
7/17/2023 08:38:00	14.5	15.6	1.0	0.00	0.00	0.00	1.2	S
7/17/2023 08:39:00	15.5	16.4	0.8	0.00	0.00	0.00	1.1	E
7/17/2023 08:40:00	15.6	16.8	1.2	0.00	0.00	0.00	1.1	ENE
7/17/2023 08:41:00	15.6	17.3	1.7	0.00	0.00	0.00	1.2	ESE
7/17/2023 08:42:00	16.0	17.6	1.6	0.00	0.00	0.00	1.2	SSE
7/17/2023 08:43:00	16.7	17.8	1.1	0.00	0.00	0.00	1.2	SSE
7/17/2023 08:44:00	17.1	17.8	0.7	0.00	0.00	0.00	1.1	ENE
7/17/2023 08:45:00	18.2	17.3	-0.8	0.00	0.00	0.00	1.0	SSW

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 08:46:00	18.5	17.6	-1.0	0.00	0.00	0.00	1.0	ESE
7/17/2023 08:47:00	18.7	18.0	-0.7	0.00	0.00	0.00	1.0	E
7/17/2023 08:48:00	18.1	17.6	-0.5	0.00	0.00	0.00	0.9	S
7/17/2023 08:49:00	16.9	18.0	1.1	0.00	0.00	0.00	1.0	WSW
7/17/2023 08:50:00	15.5	18.2	2.7	0.00	0.00	0.00	1.1	SSW
7/17/2023 08:51:00	15.3	18.1	2.8	0.00	0.00	0.00	1.1	SSE
7/17/2023 08:52:00	15.6	18.3	2.7	0.00	0.00	0.00	1.1	S
7/17/2023 08:53:00	15.2	18.3	3.1	0.01	0.00	-0.01	1.1	WSW
7/17/2023 08:54:00	14.7	18.6	3.9	0.01	0.00	-0.01	1.2	S
7/17/2023 08:55:00	14.8	19.2	4.4	0.01	0.00	-0.01	1.3	S
7/17/2023 08:56:00	15.4	20.0	4.6	0.01	0.00	0.00	1.2	SSE
7/17/2023 08:57:00	15.8	21.1	5.3	0.01	0.00	0.00	1.3	SSW
7/17/2023 08:58:00	16.2	21.6	5.4	0.01	0.00	0.00	1.2	ESE
7/17/2023 08:59:00	16.7	21.8	5.1	0.01	0.00	0.00	1.2	S
7/17/2023 09:00:00	16.6	22.5	5.9	0.01	0.00	0.00	1.2	NE
7/17/2023 09:01:00	16.8	21.7	4.9	0.01	0.00	0.00	1.3	SE
7/17/2023 09:02:00	16.9	21.5	4.7	0.01	0.00	0.00	1.3	NNE
7/17/2023 09:03:00	16.3	22.5	6.3	0.01	0.00	0.00	1.2	SE
7/17/2023 09:04:00	17.5	22.5	5.0	0.01	0.00	0.00	1.2	W
7/17/2023 09:05:00	17.8	22.1	4.3	0.00	0.00	0.00	1.1	SW
7/17/2023 09:06:00	18.3	21.9	3.6	0.00	0.00	0.00	1.1	ESE
7/17/2023 09:07:00	19.0	21.6	2.6	0.00	0.00	0.00	1.1	SSE
7/17/2023 09:08:00	19.1	21.4	2.3	0.00	0.00	0.00	1.0	W
7/17/2023 09:09:00	18.6	21.3	2.7	0.00	0.00	0.00	1.0	SW
7/17/2023 09:10:00	18.1	21.5	3.5	0.00	0.00	0.00	0.9	WNW
7/17/2023 09:11:00	17.4	23.8	6.4	0.00	0.00	0.00	1.0	NW
7/17/2023 09:12:00	17.5	22.2	4.7	0.00	0.00	0.00	1.0	N
7/17/2023 09:13:00	16.7	21.2	4.5	0.00	0.00	0.00	0.9	ESE
7/17/2023 09:14:00	15.8	20.4	4.6	0.00	0.00	0.00	1.0	S
7/17/2023 09:15:00	14.7	19.6	4.8	0.00	0.00	0.00	1.0	S
7/17/2023 09:16:00	14.2	19.5	5.3	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:17:00	13.9	19.0	5.1	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:18:00	13.8	17.6	3.8	0.00	0.00	0.00	1.0	SSW

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 09:19:00	12.0	16.8	4.8	0.00	0.00	0.00	1.0	SW
7/17/2023 09:20:00	11.1	16.1	5.0	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:21:00	10.9	15.1	4.2	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:22:00	10.2	14.3	4.2	0.00	0.00	0.00	1.0	SW
7/17/2023 09:23:00	10.7	13.6	3.0	0.00	0.00	0.00	1.0	S
7/17/2023 09:24:00	11.0	12.5	1.6	0.00	0.00	0.00	1.0	SW
7/17/2023 09:25:00	11.0	11.1	0.1	0.00	0.00	0.00	1.0	SW
7/17/2023 09:26:00	10.9	7.6	-3.3	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:27:00	9.9	7.7	-2.2	0.00	0.00	0.00	1.0	SSE
7/17/2023 09:28:00	11.2	7.7	-3.5	0.00	0.00	0.00	1.0	S
7/17/2023 09:29:00	11.6	7.7	-4.0	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:30:00	11.6	7.6	-4.0	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:31:00	11.6	7.6	-4.1	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:32:00	11.6	7.4	-4.2	0.00	0.00	0.00	1.0	SW
7/17/2023 09:33:00	11.5	7.3	-4.3	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:34:00	11.6	7.4	-4.2	0.00	0.00	0.00	1.0	SSE
7/17/2023 09:35:00	11.9	8.0	-3.8	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:36:00	11.9	8.7	-3.1	0.00	0.00	0.00	1.0	SSW
7/17/2023 09:37:00	11.3	9.5	-1.8	0.00	0.00	0.00	1.0	SW
7/17/2023 09:38:00	9.9	9.9	0.0	0.00	0.00	0.00	1.0	WSW
7/17/2023 09:39:00	9.5	10.2	0.7	0.00	0.00	0.00	1.0	WSW
7/17/2023 09:40:00	9.8	10.4	0.6	0.00	0.00	0.00	1.0	W
7/17/2023 09:41:00	10.6	10.7	0.1	0.00	0.00	0.00	0.9	WSW
7/17/2023 09:42:00	11.7	10.8	-0.9	0.00	0.00	0.00	1.0	SW
7/17/2023 09:43:00	10.9	11.1	0.2	0.00	0.00	0.00	0.9	SW
7/17/2023 09:44:00	11.9	11.6	-0.3	0.00	0.00	0.00	0.9	SW
7/17/2023 09:45:00	14.8	12.0	-2.8	0.00	0.00	0.00	0.9	WSW
7/17/2023 09:46:00	16.2	12.9	-3.3	0.00	0.00	0.00	0.9	SW
7/17/2023 09:47:00	18.1	13.8	-4.3	0.00	0.00	0.00	0.9	SW
7/17/2023 09:48:00	21.4	14.4	-7.0	0.00	0.00	0.00	0.9	WSW
7/17/2023 09:49:00	23.1	14.9	-8.2	0.00	0.00	0.00	0.9	SW
7/17/2023 09:50:00	23.6	14.9	-8.7	0.00	0.00	0.00	0.9	WSW
7/17/2023 09:51:00	23.8	15.0	-8.9	0.00	0.00	0.00	0.9	WSW



Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 09:52:00	24.4	15.4	-9.0	0.00	0.00	0.00	1.0	SW
7/17/2023 09:53:00	25.4	16.3	-9.2	0.00	0.00	0.00	1.0	W
7/17/2023 09:54:00	26.3	17.1	-9.2	0.00	0.00	0.00	1.0	WSW
7/17/2023 09:55:00	27.4	17.5	-9.8	0.00	0.00	0.00	1.0	WSW
7/17/2023 09:56:00	28.4	17.9	-10.5	0.00	0.00	0.00	1.0	SW
7/17/2023 09:57:00	28.5	18.5	-10.0	0.00	0.00	0.00	1.0	SW
7/17/2023 09:58:00	29.1	18.9	-10.2	0.00	0.00	0.00	1.0	SSE
7/17/2023 09:59:00	29.2	19.2	-10.0	0.00	0.00	0.00	0.9	SW
7/17/2023 10:00:00	28.0	19.6	-8.4	0.00	0.00	0.00	0.9	S
7/17/2023 10:01:00	27.5	19.4	-8.1	0.00	0.00	0.00	0.9	SSW
7/17/2023 10:02:00	26.3	19.2	-7.2	0.00	0.00	0.00	0.9	SSW
7/17/2023 10:03:00	23.7	19.1	-4.6	0.00	0.00	0.00	0.9	SW
7/17/2023 10:04:00	22.3	18.8	-3.6	0.00	0.00	0.00	0.9	S
7/17/2023 10:05:00	21.7	18.3	-3.3	0.00	0.00	0.00	0.9	S
7/17/2023 10:06:00	21.2	17.8	-3.5	0.00	0.00	0.00	0.9	SE
7/17/2023 10:07:00	20.9	16.9	-4.0	0.00	0.00	0.00	0.8	N
7/17/2023 10:08:00	20.4	15.9	-4.5	0.00	0.00	0.00	0.8	SW
7/17/2023 10:09:00	20.1	15.1	-4.9	0.00	0.00	0.00	0.9	SW
7/17/2023 10:10:00	19.6	14.8	-4.8	0.00	0.00	0.00	0.9	WSW
7/17/2023 10:11:00	18.5	14.5	-4.0	0.00	0.00	0.00	0.9	SW
7/17/2023 10:12:00	17.6	14.1	-3.5	0.00	0.00	0.00	0.9	WNW
7/17/2023 10:13:00	16.9	13.9	-3.0	0.00	0.00	0.00	0.9	SW
7/17/2023 10:14:00	16.7	14.3	-2.4	0.00	0.00	0.00	0.9	SW
7/17/2023 10:15:00	15.8	14.3	-1.4	0.00	0.00	0.00	0.9	SW
7/17/2023 10:16:00	15.4	14.1	-1.4	0.00	0.00	0.00	0.9	NNW
7/17/2023 10:17:00	15.4	14.1	-1.3	0.00	0.00	0.00	1.0	S
7/17/2023 10:18:00	15.4	14.2	-1.2	0.00	0.00	0.00	1.0	WSW
7/17/2023 10:19:00	15.6	14.5	-1.1	0.00	0.00	0.00	0.9	SW
7/17/2023 10:20:00	16.1	14.8	-1.2	0.00	0.00	0.00	0.9	E
7/17/2023 10:21:00	16.6	15.4	-1.2	0.00	0.00	0.00	0.9	ESE
7/17/2023 10:22:00	17.3	16.3	-0.9	0.00	0.00	0.00	0.9	SSE
7/17/2023 10:23:00	17.8	17.3	-0.6	0.00	0.00	0.00	0.9	SW
7/17/2023 10:24:00	18.6	18.1	-0.5	0.00	0.00	0.00	0.9	SE

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 10:25:00	19.2	19.2	-0.1	0.00	0.00	0.00	0.9	S
7/17/2023 10:26:00	19.9	20.1	0.3	0.00	0.00	0.00	0.9	SSW
7/17/2023 10:27:00	20.8	21.1	0.4	0.00	0.00	0.00	1.0	S
7/17/2023 10:28:00	21.5	22.3	0.8	0.00	0.00	0.00	1.0	SSW
7/17/2023 10:29:00	21.7	23.2	1.5	0.00	0.00	0.00	1.0	SW
7/17/2023 10:30:00	22.6	24.3	1.6	0.00	0.00	0.00	1.0	SW
7/17/2023 10:31:00	23.7	25.6	1.8	0.00	0.00	0.00	1.0	S
7/17/2023 10:32:00	24.8	26.6	1.8	0.00	0.00	0.00	1.0	SW
7/17/2023 10:33:00	25.8	28.4	2.6	0.00	0.00	0.00	1.0	SSE
7/17/2023 10:34:00	28.2	29.2	1.1	0.00	0.00	0.00	1.1	SSW
7/17/2023 10:35:00	30.0	30.0	0.1	0.01	0.00	-0.01	1.0	S
7/17/2023 10:36:00	31.5	30.8	-0.7	0.01	0.00	-0.01	1.0	WNW
7/17/2023 10:37:00	32.5	31.0	-1.4	0.01	0.00	-0.01	0.9	SSE
7/17/2023 10:38:00	33.0	31.2	-1.8	0.01	0.00	-0.01	0.9	S
7/17/2023 10:39:00	33.1	32.0	-1.1	0.01	0.00	-0.01	0.9	SSE
7/17/2023 10:40:00	33.0	32.6	-0.4	0.01	0.00	-0.01	0.9	E
7/17/2023 10:41:00	33.2	32.7	-0.6	0.01	0.00	-0.01	0.9	SSE
7/17/2023 10:42:00	33.2	32.7	-0.6	0.01	0.00	-0.01	0.8	SE
7/17/2023 10:43:00	33.1	32.3	-0.9	0.01	0.00	-0.01	0.8	SW
7/17/2023 10:44:00	33.0	31.6	-1.4	0.01	0.00	-0.01	0.8	S
7/17/2023 10:45:00	32.8	31.1	-1.7	0.01	0.00	-0.01	0.8	E
7/17/2023 10:46:00	32.3	30.6	-1.7	0.01	0.00	-0.01	0.9	SSE
7/17/2023 10:47:00	32.0	30.1	-1.9	0.01	0.00	-0.01	0.8	E
7/17/2023 10:48:00	31.8	29.0	-2.8	0.01	0.00	-0.01	0.8	SSE
7/17/2023 10:49:00	30.2	29.0	-1.1	0.01	0.00	-0.01	0.8	SSE
7/17/2023 10:50:00	28.9	28.8	-0.1	0.00	0.00	0.00	0.8	SE
7/17/2023 10:51:00	28.1	28.5	0.3	0.00	0.00	0.00	0.8	SW
7/17/2023 10:52:00	27.3	28.4	1.1	0.00	0.00	0.00	0.9	SE
7/17/2023 10:53:00	27.0	28.3	1.4	0.00	0.00	0.00	0.9	ESE
7/17/2023 10:54:00	26.8	28.2	1.4	0.00	0.00	0.00	0.9	ESE
7/17/2023 10:55:00	26.6	27.6	0.9	0.00	0.00	0.00	0.9	E
7/17/2023 10:56:00	26.4	27.5	1.1	0.00	0.00	0.00	0.8	E
7/17/2023 10:57:00	26.6	27.5	0.9	0.00	0.00	0.00	0.9	SSE

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 10:58:00	26.7	27.4	0.8	0.00	0.00	0.00	0.9	SSW
7/17/2023 10:59:00	26.7	27.4	0.7	0.00	0.00	0.00	0.8	SE
7/17/2023 11:00:00	26.6	25.5	-1.1	0.00	0.00	0.00	0.8	SE
7/17/2023 11:01:00	26.7	23.8	-2.9	0.00	0.00	0.00	0.8	S
7/17/2023 11:02:00	27.4	24.0	-3.4	0.00	0.00	0.00	0.8	S
7/17/2023 11:03:00	27.9	22.2	-5.7	0.00	0.00	0.00	0.8	S
7/17/2023 11:04:00	27.9	20.2	-7.7	0.00	0.00	0.00	0.8	S
7/17/2023 11:05:00	28.1	20.6	-7.5	0.00	0.00	0.00	0.8	SSW
7/17/2023 11:06:00	28.8	21.0	-7.7	0.00	0.00	0.00	0.8	SSE
7/17/2023 11:07:00	29.8	21.2	-8.6	0.00	0.00	0.00	0.8	S
7/17/2023 11:08:00	30.5	21.5	-9.0	0.00	0.00	0.00	0.8	S
7/17/2023 11:09:00	30.8	21.5	-9.3	0.00	0.00	0.00	0.8	SSW
7/17/2023 11:10:00	31.1	22.1	-9.0	0.00	0.00	0.00	0.8	SSW
7/17/2023 11:11:00	31.4	22.4	-9.0	0.00	0.00	0.00	0.9	SW
7/17/2023 11:12:00	31.5	22.9	-8.6	0.00	0.00	0.00	0.8	W
7/17/2023 11:13:00	31.9	23.4	-8.4	0.00	0.00	0.00	0.8	SW
7/17/2023 11:14:00	32.5	23.9	-8.6	0.00	0.00	0.00	0.8	NE
7/17/2023 11:15:00	32.9	26.4	-6.4	0.00	0.00	0.00	0.8	SSW
7/17/2023 11:16:00	33.3	29.0	-4.3	0.00	0.00	0.00	0.8	SSW
7/17/2023 11:17:00	33.1	29.4	-3.8	0.00	0.00	0.00	0.9	SSW
7/17/2023 11:18:00	33.0	31.6	-1.4	0.00	0.00	0.00	0.9	SW
7/17/2023 11:19:00	33.1	33.8	0.7	0.00	0.00	0.00	0.9	SW
7/17/2023 11:20:00	33.2	34.6	1.3	0.00	0.00	0.00	0.9	W
7/17/2023 11:21:00	33.3	35.7	2.4	0.00	0.01	0.01	0.9	SW
7/17/2023 11:22:00	33.2	36.2	3.0	0.00	0.04	0.04	0.9	SW
7/17/2023 11:23:00	33.0	36.5	3.6	0.00	0.06	0.06	0.9	NW
7/17/2023 11:24:00	33.2	36.4	3.2	0.00	0.06	0.06	0.9	S
7/17/2023 11:25:00	33.4	36.1	2.7	0.00	0.06	0.06	0.9	NNE
7/17/2023 11:26:00	33.6	36.0	2.4	0.00	0.06	0.06	0.9	SE
7/17/2023 11:27:00	33.6	35.7	2.2	0.00	0.06	0.06	0.9	E
7/17/2023 11:28:00	33.4	35.5	2.1	0.00	0.06	0.06	0.9	S
7/17/2023 11:29:00	33.2	35.4	2.2	0.00	0.06	0.06	0.9	SE
7/17/2023 11:30:00	33.1	35.1	2.0	0.00	0.06	0.06	1.0	SSW



Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 11:31:00	33.0	34.9	1.9	0.00	0.06	0.06	0.9	SW
7/17/2023 11:32:00	33.6	34.8	1.2	0.00	0.06	0.06	0.9	SE
7/17/2023 11:33:00	33.5	35.3	1.8	0.00	0.06	0.06	0.9	S
7/17/2023 11:34:00	33.6	35.1	1.5	0.00	0.06	0.06	0.9	SW
7/17/2023 11:35:00	33.6	35.3	1.7	0.00	0.06	0.06	0.9	S
7/17/2023 11:36:00	32.9	34.8	1.9	0.00	0.05	0.05	0.9	S
7/17/2023 11:37:00	32.3	34.4	2.1	0.00	0.03	0.02	0.9	S
7/17/2023 11:38:00	31.8	34.4	2.6	0.00	0.01	0.00	1.0	S
7/17/2023 11:39:00	32.4	34.1	1.8	0.00	0.00	0.00	1.0	NNW
7/17/2023 11:40:00	32.5	34.4	1.9	0.00	0.00	0.00	1.0	WSW
7/17/2023 11:41:00	32.3	34.9	2.6	0.00	0.00	0.00	0.9	N
7/17/2023 11:42:00	32.1	34.9	2.8	0.00	0.00	0.00	0.9	ENE
7/17/2023 11:43:00	31.8	34.5	2.7	0.00	0.00	0.00	0.9	ESE
7/17/2023 11:44:00	31.4	34.5	3.0	0.00	0.00	0.00	0.9	SE
7/17/2023 11:45:00	31.7	34.0	2.3	0.00	0.00	0.00	0.9	S
7/17/2023 11:46:00	32.5	33.8	1.3	0.00	0.00	0.00	0.9	S
7/17/2023 11:47:00	32.7	34.9	2.3	0.00	0.00	0.00	0.9	SSE
7/17/2023 11:48:00	33.8	34.7	0.9	0.00	0.00	0.00	0.9	SE
7/17/2023 11:49:00	34.7	35.5	0.8	0.00	0.00	0.00	0.9	SSE
7/17/2023 11:50:00	35.2	35.0	-0.2	0.00	0.00	0.00	0.9	S
7/17/2023 11:51:00	35.6	34.4	-1.2	0.00	0.00	0.00	1.0	SSW
7/17/2023 11:52:00	35.1	34.9	-0.2	0.00	0.00	0.00	1.0	SSW
7/17/2023 11:53:00	35.0	35.2	0.2	0.00	0.00	0.00	1.0	S
7/17/2023 11:54:00	34.2	36.6	2.4	0.00	0.00	0.00	1.1	SSE
7/17/2023 11:55:00	35.3	36.2	0.9	0.00	0.00	0.00	1.1	NE
7/17/2023 11:56:00	35.5	36.6	1.1	0.00	0.00	0.00	1.1	SW
7/17/2023 11:57:00	35.6	36.6	1.0	0.00	0.00	0.00	1.2	S
7/17/2023 11:58:00	35.7	36.8	1.1	0.00	0.00	0.00	1.3	S
7/17/2023 11:59:00	35.5	36.7	1.2	0.00	0.00	0.00	1.3	SSE
7/17/2023 12:00:00	34.9	36.9	1.9	0.00	0.00	0.00	1.3	SSW
7/17/2023 12:01:00	33.7	36.5	2.8	0.00	0.00	0.00	1.3	SSW
7/17/2023 12:02:00	32.3	35.1	2.8	0.00	0.00	0.00	1.3	SSE
7/17/2023 12:03:00	30.9	34.5	3.6	0.00	0.00	0.00	1.2	W

Date/Time	Average Upwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Downwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Contribution PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 12:04:00	29.5	33.8	4.2	0.00	0.00	0.00	1.2	S
7/17/2023 12:05:00	28.7	32.9	4.2	0.00	0.00	0.00	1.2	E
7/17/2023 12:06:00	28.3	32.7	4.4	0.00	0.00	0.00	1.1	ESE
7/17/2023 12:07:00	28.6	31.8	3.3	0.00	0.00	0.00	1.1	ESE
7/17/2023 12:08:00	28.8	31.1	2.3	0.00	0.00	0.00	1.0	ESE
7/17/2023 12:09:00	28.8	29.5	0.6	0.00	0.00	0.00	1.0	E
7/17/2023 12:10:00	27.3	29.4	2.1	0.00	0.00	0.00	1.1	E
7/17/2023 12:11:00	27.1	28.3	1.2	0.00	0.00	0.00	1.1	E
7/17/2023 12:12:00	27.0	28.1	1.1	0.00	0.00	0.00	1.1	E
7/17/2023 12:13:00	27.0	28.0	1.0	0.00	0.00	0.00	1.1	ESE
7/17/2023 12:14:00	27.4	27.9	0.5	0.00	0.00	0.00	1.1	E
7/17/2023 12:15:00	27.7	28.1	0.5	0.00	0.00	0.00	1.1	E
7/17/2023 12:16:00	27.9	28.3	0.5	0.00	0.00	0.00	1.2	SE
7/17/2023 12:17:00	28.1	28.5	0.4	0.00	0.00	0.00	1.2	SSE
7/17/2023 12:18:00	28.4	28.4	0.1	0.00	0.00	0.00	1.2	SE
7/17/2023 12:19:00	28.8	28.5	-0.3	0.00	0.00	0.00	1.2	SE
7/17/2023 12:20:00	28.9	28.8	-0.1	0.00	0.00	0.00	1.2	ESE
7/17/2023 12:21:00	29.0	29.1	0.1	0.00	0.00	0.00	1.3	E
7/17/2023 12:22:00	29.1	29.1	0.1	0.00	0.00	0.00	1.3	NW
7/17/2023 12:23:00	29.1	29.1	0.0	0.00	0.00	0.00	1.3	NE
7/17/2023 12:24:00	29.1	29.2	0.1	0.00	0.00	0.00	1.3	E
7/17/2023 12:25:00	29.2	29.5	0.3	0.00	0.00	0.00	1.2	ENE
7/17/2023 12:26:00	29.2	29.6	0.3	0.00	0.00	0.00	1.1	NE
7/17/2023 12:27:00	29.3	29.9	0.5	0.00	0.00	0.00	1.1	S
7/17/2023 12:28:00	29.3	29.9	0.6	0.00	0.00	0.00	1.0	W
7/17/2023 12:29:00	29.2	29.9	0.7	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:30:00	29.1	29.4	0.4	0.00	0.00	0.00	1.0	NW
7/17/2023 12:31:00	29.1	29.0	-0.1	0.00	0.00	0.00	1.0	ENE
7/17/2023 12:32:00	28.8	28.6	-0.1	0.00	0.00	0.00	1.0	NE
7/17/2023 12:33:00	28.5	28.4	-0.1	0.00	0.00	0.00	1.0	E
7/17/2023 12:34:00	28.1	28.2	0.2	0.00	0.00	0.00	1.1	NE
7/17/2023 12:35:00	28.3	28.0	-0.2	0.00	0.00	0.00	1.0	NW
7/17/2023 12:36:00	28.5	27.6	-0.9	0.00	0.00	0.00	1.0	NNE

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 12:37:00	28.0	27.5	-0.5	0.00	0.00	0.00	1.0	NW
7/17/2023 12:38:00	27.6	28.0	0.5	0.00	0.00	0.00	1.0	SW
7/17/2023 12:39:00	27.9	27.9	0.0	0.00	0.00	0.00	0.9	SE
7/17/2023 12:40:00	27.5	28.0	0.4	0.00	0.00	0.00	1.0	SSW
7/17/2023 12:41:00	27.0	28.2	1.2	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:42:00	27.0	27.5	0.5	0.00	0.00	0.00	1.0	SE
7/17/2023 12:43:00	26.5	27.6	1.1	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:44:00	26.3	28.5	2.2	0.00	0.00	0.00	1.0	WNW
7/17/2023 12:45:00	26.0	30.3	4.3	0.00	0.00	0.00	1.0	WNW
7/17/2023 12:46:00	25.5	31.0	5.5	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:47:00	25.2	31.7	6.5	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:48:00	24.8	34.0	9.2	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:49:00	24.4	34.6	10.2	0.00	0.00	0.00	0.9	WSW
7/17/2023 12:50:00	23.6	34.7	11.2	0.00	0.00	0.00	0.9	S
7/17/2023 12:51:00	23.1	34.3	11.2	0.00	0.00	0.00	0.9	SE
7/17/2023 12:52:00	23.2	33.6	10.4	0.00	0.00	0.00	0.9	NE
7/17/2023 12:53:00	23.5	32.4	8.9	0.00	0.00	0.00	1.0	SE
7/17/2023 12:54:00	22.5	32.3	9.8	0.00	0.00	0.00	1.0	SSW
7/17/2023 12:55:00	23.4	31.5	8.1	0.00	0.00	0.00	1.0	ENE
7/17/2023 12:56:00	24.0	30.5	6.5	0.00	0.00	0.00	1.0	SSE
7/17/2023 12:57:00	23.1	30.9	7.8	0.00	0.00	0.00	1.0	SW
7/17/2023 12:58:00	23.0	31.0	8.0	0.00	0.00	0.00	1.0	WNW
7/17/2023 12:59:00	23.1	29.6	6.5	0.00	0.00	0.00	1.0	NNW
7/17/2023 13:00:00	23.2	27.4	4.2	0.00	0.00	0.00	1.0	NNE
7/17/2023 13:01:00	23.4	26.9	3.5	0.00	0.00	0.00	1.0	ESE
7/17/2023 13:02:00	23.7	26.1	2.5	0.00	0.00	0.00	1.0	ESE
7/17/2023 13:03:00	23.9	23.6	-0.3	0.00	0.00	0.00	1.1	E
7/17/2023 13:04:00	23.9	22.7	-1.2	0.00	0.00	0.00	1.1	SSW
7/17/2023 13:05:00	24.1	21.8	-2.3	0.00	0.00	0.00	1.2	NNW
7/17/2023 13:06:00	23.6	22.2	-1.4	0.00	0.00	0.00	1.2	SW
7/17/2023 13:07:00	23.1	22.5	-0.6	0.00	0.00	0.00	1.3	S
7/17/2023 13:08:00	22.4	22.6	0.2	0.00	0.00	0.00	1.3	SSE
7/17/2023 13:09:00	22.2	22.3	0.1	0.00	0.00	0.00	1.2	S



Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 13:10:00	20.9	22.3	1.4	0.00	0.00	0.00	1.2	S
7/17/2023 13:11:00	20.3	22.7	2.5	0.00	0.00	0.00	1.3	SSW
7/17/2023 13:12:00	20.7	23.0	2.4	0.00	0.00	0.00	1.3	S
7/17/2023 13:13:00	20.8	23.2	2.5	0.00	0.00	0.00	1.3	SSE
7/17/2023 13:14:00	20.3	23.7	3.5	0.00	0.00	0.00	1.3	S
7/17/2023 13:15:00	19.9	23.8	4.0	0.00	0.00	0.00	1.4	S
7/17/2023 13:16:00	19.8	23.3	3.5	0.00	0.00	0.00	1.3	ENE
7/17/2023 13:17:00	19.9	23.1	3.2	0.00	0.00	0.00	1.3	ESE
7/17/2023 13:18:00	19.7	23.7	4.0	0.00	0.00	0.00	1.2	WSW
7/17/2023 13:19:00	19.6	24.6	5.0	0.00	0.00	0.00	1.1	S
7/17/2023 13:20:00	20.2	24.7	4.5	0.00	0.00	0.00	1.1	NE
7/17/2023 13:21:00	20.9	24.9	4.0	0.00	0.00	0.00	1.0	SE
7/17/2023 13:22:00	21.3	25.8	4.5	0.00	0.00	0.00	1.0	SSW
7/17/2023 13:23:00	22.7	25.9	3.2	0.00	0.00	0.00	0.9	ESE
7/17/2023 13:24:00	22.9	26.5	3.5	0.00	0.00	0.00	0.9	S
7/17/2023 13:25:00	23.7	26.5	2.8	0.00	0.00	0.00	0.9	ESE
7/17/2023 13:26:00	24.0	26.4	2.4	0.00	0.00	0.00	0.8	ENE
7/17/2023 13:27:00	23.9	26.5	2.6	0.00	0.00	0.00	0.9	ESE
7/17/2023 13:28:00	24.3	26.1	1.7	0.00	0.00	0.00	0.8	NW
7/17/2023 13:29:00	25.4	26.2	0.9	0.00	0.00	0.00	0.8	SE
7/17/2023 13:30:00	25.7	26.9	1.2	0.00	0.00	0.00	0.9	SSE
7/17/2023 13:31:00	28.0	27.0	-1.0	0.00	0.00	0.00	0.9	SE
7/17/2023 13:32:00	29.1	26.9	-2.2	0.00	0.00	0.00	0.9	NNW
7/17/2023 13:33:00	30.3	26.2	-4.1	0.00	0.00	0.00	0.9	SE
7/17/2023 13:34:00	30.3	26.5	-3.8	0.00	0.00	0.00	0.9	WNW
7/17/2023 13:35:00	30.7	26.5	-4.2	0.00	0.00	0.00	1.0	ENE
7/17/2023 13:36:00	30.4	25.9	-4.5	0.00	0.00	0.00	1.0	SE
7/17/2023 13:37:00	31.1	25.2	-5.9	0.00	0.00	0.00	1.0	SE
7/17/2023 13:38:00	30.4	26.5	-4.0	0.00	0.00	0.00	1.0	SSE
7/17/2023 13:39:00	30.6	27.2	-3.4	0.00	0.00	0.00	1.0	S
7/17/2023 13:40:00	30.5	28.1	-2.4	0.00	0.00	0.00	1.1	S
7/17/2023 13:41:00	31.0	28.3	-2.7	0.00	0.00	0.00	1.1	E
7/17/2023 13:42:00	32.5	27.4	-5.1	0.00	0.00	0.00	1.1	ESE

Date/Time	Average Upwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Downwind PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Contribution PM10 ( $\mu\text{g}/\text{m}^3$ )	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 13:43:00	32.4	30.7	-1.8	0.00	0.00	0.00	1.1	WNW
7/17/2023 13:44:00	32.1	34.5	2.3	0.00	0.00	0.00	1.0	WNW
7/17/2023 13:45:00	32.7	35.5	2.8	0.00	0.00	0.00	1.0	W
7/17/2023 13:46:00	31.6	36.2	4.6	0.00	0.00	0.00	1.0	ESE
7/17/2023 13:47:00	30.7	38.1	7.4	0.00	0.00	0.00	1.0	W
7/17/2023 13:48:00	30.0	39.7	9.7	0.00	0.00	0.00	1.0	S
7/17/2023 13:49:00	30.5	40.0	9.5	0.00	0.00	0.00	1.0	SSE
7/17/2023 13:50:00	29.6	41.1	11.5	0.00	0.00	0.00	1.0	SSE
7/17/2023 13:51:00	29.8	42.6	12.8	0.00	0.00	0.00	1.0	W
7/17/2023 13:52:00	30.1	44.1	13.9	0.00	0.00	0.00	1.0	NW
7/17/2023 13:53:00	30.8	44.5	13.7	0.00	0.00	0.00	1.0	W
7/17/2023 13:54:00	34.1	43.5	9.4	0.00	0.00	0.00	1.0	ESE
7/17/2023 13:55:00	36.3	42.7	6.4	0.00	0.00	0.00	0.9	N
7/17/2023 13:56:00	41.8	42.7	0.9	0.00	0.00	0.00	0.9	SE
7/17/2023 13:57:00	40.3	46.9	6.6	0.00	0.00	0.00	0.9	SSW
7/17/2023 13:58:00	40.5	49.2	8.7	0.00	0.00	0.00	0.9	W
7/17/2023 13:59:00	46.3	45.7	-0.7	0.00	0.00	0.00	0.9	SSE
7/17/2023 14:00:00	48.2	44.0	-4.2	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:01:00	47.3	43.3	-4.0	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:02:00	46.8	41.4	-5.4	0.00	0.00	0.00	0.9	N
7/17/2023 14:03:00	47.1	39.8	-7.3	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:04:00	46.6	40.1	-6.5	0.00	0.00	0.00	0.8	WNW
7/17/2023 14:05:00	46.2	41.3	-5.0	0.00	0.00	0.00	0.9	SSW
7/17/2023 14:06:00	46.4	39.7	-6.7	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:07:00	44.9	37.9	-7.0	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:08:00	43.8	36.6	-7.2	0.00	0.00	0.00	0.9	NW
7/17/2023 14:09:00	41.4	36.4	-4.9	0.00	0.00	0.00	0.9	SE
7/17/2023 14:10:00	38.7	37.3	-1.3	0.00	0.00	0.00	0.9	NW
7/17/2023 14:11:00	32.2	37.2	5.0	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:12:00	31.9	33.1	1.2	0.00	0.00	0.00	0.9	WSW
7/17/2023 14:13:00	31.4	27.3	-4.1	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:14:00	25.7	26.5	0.8	0.00	0.00	0.00	0.9	W
7/17/2023 14:15:00	23.3	26.3	3.1	0.00	0.00	0.00	0.9	NW

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 14:16:00	22.9	26.6	3.7	0.00	0.00	0.00	0.9	NNW
7/17/2023 14:17:00	22.8	26.6	3.8	0.00	0.00	0.00	1.0	E
7/17/2023 14:18:00	22.0	26.5	4.5	0.00	0.00	0.00	1.0	NNE
7/17/2023 14:19:00	22.1	24.4	2.3	0.00	0.00	0.00	1.0	SSE
7/17/2023 14:20:00	22.1	22.1	0.0	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:21:00	21.4	22.3	0.9	0.00	0.00	0.00	1.0	WSW
7/17/2023 14:22:00	21.6	22.1	0.6	0.00	0.00	0.00	0.9	SSE
7/17/2023 14:23:00	21.4	21.6	0.2	0.00	0.00	0.00	0.9	W
7/17/2023 14:24:00	20.2	21.4	1.2	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:25:00	20.0	20.3	0.2	0.00	0.00	0.00	1.0	NW
7/17/2023 14:26:00	19.9	20.1	0.1	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:27:00	19.8	19.8	0.0	0.00	0.00	0.00	1.0	NW
7/17/2023 14:28:00	19.6	19.5	-0.1	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:29:00	18.8	19.5	0.8	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:30:00	18.2	19.5	1.2	0.00	0.00	0.00	1.0	W
7/17/2023 14:31:00	18.0	19.2	1.2	0.00	0.00	0.00	1.0	SSW
7/17/2023 14:32:00	17.7	19.1	1.4	0.00	0.00	0.00	1.0	W
7/17/2023 14:33:00	17.5	19.0	1.5	0.00	0.00	0.00	1.0	SE
7/17/2023 14:34:00	17.5	18.9	1.4	0.00	0.00	0.00	1.0	ESE
7/17/2023 14:35:00	17.3	18.8	1.5	0.00	0.00	0.00	1.0	NW
7/17/2023 14:36:00	17.3	18.8	1.5	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:37:00	17.1	18.8	1.6	0.00	0.00	0.00	1.0	S
7/17/2023 14:38:00	17.2	18.6	1.4	0.00	0.00	0.00	1.0	ESE
7/17/2023 14:39:00	17.3	18.5	1.1	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:40:00	17.5	18.3	0.8	0.00	0.00	0.00	0.9	SE
7/17/2023 14:41:00	18.0	18.2	0.2	0.00	0.00	0.00	0.9	E
7/17/2023 14:42:00	18.0	18.3	0.3	0.00	0.00	0.00	0.9	NW
7/17/2023 14:43:00	18.1	18.1	0.0	0.00	0.00	0.00	0.9	ENE
7/17/2023 14:44:00	18.3	18.9	0.7	0.00	0.00	0.00	0.9	NW
7/17/2023 14:45:00	21.5	19.2	-2.3	0.00	0.00	0.00	0.9	N
7/17/2023 14:46:00	21.8	20.6	-1.3	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:47:00	25.5	20.8	-4.7	0.00	0.00	0.00	0.9	NNW
7/17/2023 14:48:00	28.6	21.4	-7.2	0.00	0.00	0.00	0.9	ENE

Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 14:49:00	29.0	22.4	-6.6	0.00	0.00	0.00	0.9	SSE
7/17/2023 14:50:00	29.3	23.7	-5.7	0.00	0.00	0.00	0.9	NW
7/17/2023 14:51:00	30.0	23.7	-6.3	0.00	0.00	0.00	0.9	N
7/17/2023 14:52:00	30.1	24.5	-5.6	0.00	0.00	0.00	0.9	NW
7/17/2023 14:53:00	30.0	25.2	-4.7	0.00	0.00	0.00	1.0	WNW
7/17/2023 14:54:00	30.0	25.2	-4.7	0.00	0.00	0.00	1.0	ESE
7/17/2023 14:55:00	29.8	25.1	-4.7	0.00	0.00	0.00	0.9	ESE
7/17/2023 14:56:00	29.2	25.3	-3.9	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:57:00	29.2	25.1	-4.1	0.00	0.00	0.00	0.9	WNW
7/17/2023 14:58:00				0.00	0.00	0.00	0.9	WNW
7/17/2023 14:59:00				0.00	0.00	0.00	0.9	W
7/17/2023 15:00:00				0.00	0.00	0.00	0.9	ESE
7/17/2023 15:01:00	29.2	0.0	-29.2	0.00	0.00	0.00	0.9	NNW
7/17/2023 15:02:00	27.8	0.0	-27.8	0.00	0.00	0.00	1.0	ESE
7/17/2023 15:03:00	27.1	6.9	-20.2	0.00	0.00	0.00	1.0	NW
7/17/2023 15:04:00	25.8	12.5	-13.3	0.00	0.00	0.00	1.1	N
7/17/2023 15:05:00	27.3	14.7	-12.5	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:06:00	29.7	16.8	-12.9	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:07:00	31.9	18.1	-13.8	0.00	0.00	0.00	1.1	NW
7/17/2023 15:08:00	33.7	19.1	-14.6	0.00	0.00	0.00	1.1	NW
7/17/2023 15:09:00	34.6	20.0	-14.6	0.00	0.00	0.00	1.1	WSW
7/17/2023 15:10:00	34.8	20.6	-14.1	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:11:00	34.1	22.0	-12.1	0.00	0.00	0.00	1.2	ESE
7/17/2023 15:12:00	33.5	23.1	-10.4	0.00	0.00	0.00	1.2	ESE
7/17/2023 15:13:00	33.3	24.2	-9.1	0.00	0.00	0.00	1.2	ESE
7/17/2023 15:14:00	33.6	25.6	-8.0	0.00	0.00	0.00	1.2	SSE
7/17/2023 15:15:00	34.0	26.6	-7.4	0.00	0.00	0.00	1.1	NNW
7/17/2023 15:16:00	35.0	29.3	-5.7	0.00	0.00	0.00	1.1	W
7/17/2023 15:17:00	37.4	32.4	-5.0	0.00	0.00	0.00	1.1	ENE
7/17/2023 15:18:00	39.1	34.9	-4.2	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:19:00	41.1	36.3	-4.8	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:20:00	42.3	39.8	-2.5	0.00	0.00	0.00	1.1	WSW
7/17/2023 15:21:00	42.9	43.3	0.3	0.00	0.00	0.00	1.1	W



Date/Time	Average Upwind PM10 (µg/m³)	Average Downwind PM10 (µg/m³)	Average Contribution PM10 (µg/m³)	Average Upwind VOC (ppm)	Average Downwind VOC (ppm)	Average Contribution VOC (ppm)	Wind Speed 15 min Avg	Wind Direction
7/17/2023 15:22:00	43.1	44.9	1.8	0.00	0.00	0.00	1.1	N
7/17/2023 15:23:00	43.2	46.3	3.1	0.00	0.00	0.00	1.1	W
7/17/2023 15:24:00	43.6	48.1	4.5	0.00	0.00	0.00	1.1	NW
7/17/2023 15:25:00	44.9	49.8	4.9	0.00	0.00	0.00	1.0	SE
7/17/2023 15:26:00	46.4	50.6	4.1	0.00	0.00	0.00	1.1	W
7/17/2023 15:27:00	47.8	51.1	3.3	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:28:00	48.9	51.7	2.7	0.00	0.00	0.00	1.1	WNW
7/17/2023 15:29:00	49.6	51.9	2.3	0.00	0.00	0.00	1.1	WSW
7/17/2023 15:30:00	50.1	52.2	2.1	0.00	0.00	0.00	1.2	WSW
7/17/2023 15:31:00	50.1	52.4	2.3	0.00	0.00	0.00	1.2	W
7/17/2023 15:32:00	48.9	52.2	3.3	0.00	0.00	0.00	1.2	W
7/17/2023 15:33:00	48.2	51.1	3.0	0.00	0.00	0.00	1.2	SE
7/17/2023 15:34:00	47.6	50.5	2.9	0.00	0.00	0.00	1.2	W
7/17/2023 15:35:00	47.1	48.2	1.1	0.00	0.00	0.00	1.2	WNW
7/17/2023 15:36:00	46.3	45.7	-0.6	0.00	0.00	0.00	1.1	N
7/17/2023 15:37:00	45.9	45.0	-0.9	0.00	0.00	0.00	1.1	NW
7/17/2023 15:38:00	45.6	44.6	-1.0	0.00	0.00	0.00	1.1	W
7/17/2023 15:39:00	45.2	43.5	-1.7	0.00	0.00	0.00	1.1	WNW

# Air Quality Health Advisory Issued for All Regions of New York State In Effect for Monday, July 17, 2023

New York State Department of Environmental Conservation (DEC) Commissioner Basil Seggos and State Department of Health (DOH) Commissioner Dr. James McDonald issued an Air Quality Health Advisory for the Long Island, New York City Metro, Lower Hudson Valley, Upper Hudson Valley, Adirondacks, Eastern Lake Ontario, Central New York, and Western New York regions for Monday, July 17, 2023.

The pollutants of concern are:

- **Fine Particulate Matter for New York City Metro, Lower Hudson Valley, Upper Hudson Valley, Adirondacks, Eastern Lake Ontario, Central New York, and Western New York**
- **Ozone for Long Island, New York City Metro**

The fine particulate matter advisory will be in effect from **12 a.m. through 11:59 p.m.**

The ozone advisory will be in effect from **11 a.m. until 11 p.m.**

DEC and DOH issue Air Quality Health Advisories when DEC meteorologists predict levels of pollution, either ozone or fine particulate matter are expected to exceed an Air Quality Index (AQI) value of 100. The AQI was created as an easy way to correlate levels of different pollutants to one scale, with a higher AQI value indicating a greater health concern.

## Ozone

Summer heat can lead to the formation of ground-level ozone, a major component of photochemical smog. Automobile exhaust and out-of-state emission sources are the primary sources of ground-level ozone and are the most serious air pollution problems in the northeast. This surface pollutant should not be confused with the protective layer of ozone in the upper atmosphere.

Ozone and PM<sub>2.5</sub> are two different pollutants that form in different ways: PM<sub>2.5</sub> is often produced directly as smoke from wildfires and other sources of small particles emitted into the air.

Ozone is not a direct emission, and is produced indirectly when sunlight chemically reacts with nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) from automobile exhaust and industrial emissions. High ozone isn't as visible as PM<sub>2.5</sub> because it's a colorless gas, but it will produce hazy skies and reduce visibility in high concentrations.

The smoky and hazy sky in an otherwise mostly sunny, stagnant air mass can be very conducive for ozone production. The wildfire smoke can enhance the ozone production, but it's not the primary component.

People, especially young children, those who exercise outdoors, those involved in vigorous outdoor work and those who have respiratory disease (such as asthma) should consider limiting strenuous outdoor physical activity when ozone levels are the highest (generally afternoon to early evening). When outdoor levels of ozone are elevated, going indoors will usually reduce your exposure. Individuals experiencing symptoms such as shortness of breath, chest pain or coughing should consider consulting their doctor.

Ozone levels generally decrease at night and can be minimized during daylight hours by curtailment of automobile travel and the use of public transportation where available.

## Fine Particulate Matter

Fine particulate matter consists of tiny solid particles or liquid droplets in the air that are 2.5 microns or less in diameter. PM<sub>2.5</sub> can be made of many different types of particles and often come from processes that involve combustion (e.g. vehicle exhaust, power plants, and fires) and from chemical reactions in the atmosphere.

Exposure can cause short-term health effects such as irritation to the eyes, nose, and throat, coughing, sneezing, runny nose, and shortness of breath. Exposure to elevated levels of fine particulate matter can also worsen medical conditions such as asthma and heart disease. People with heart or breathing problems, and children and the elderly may be particularly sensitive to PM<sub>2.5</sub>.

When outdoor levels are elevated, going indoors may reduce exposure. If there are significant indoor sources of PM<sub>2.5</sub> (tobacco, candle or incense smoke, or fumes from cooking) levels inside may not be lower than outside. Some ways to reduce exposure are to minimize outdoor and indoor sources and avoid strenuous activities in areas where fine particle concentrations are high.

New Yorkers also are urged to take the following energy saving and pollution-reducing steps:

- use mass transit instead of driving, as automobile emissions account for about 60 percent of pollution in our cities. People are strongly advised to carpool only with members of their households;
- conserve fuel and reduce exhaust emissions by combining necessary motor vehicle trips;
- turn off all lights and electrical appliances in unoccupied areas;
- use fans to circulate air. If air conditioning is necessary, set thermostats at 78 degrees;
- close the blinds and shades to limit heat build-up and to preserve cooled air;
- limit use of household appliances. If necessary, run the appliances at off-peak (after 7 p.m.) hours. These would include dishwashers, dryers, pool pumps and water heaters;
- set refrigerators and freezers at more efficient temperatures;
- purchase and install energy efficient lighting and appliances with the Energy Star label; and
- reduce or eliminate outdoor burning and attempt to minimize indoor sources of PM<sub>2.5</sub> such as smoking. A toll-free Air Quality Hotline (1-800-535-1345) has been established by DEC to keep New Yorkers informed of the latest Air Quality situation.

Additional information on [ozone and PM 2.5](#) is available on DEC's website and on [DOH's website \(PM 2.5\)](#) / [DOH's website \(ozone\)](#). To stay up-to-date with announcements from DEC, sign up to receive [Air Quality Alerts through DEC Delivers: DEC's Premier Email Service](#).

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