GZA

Proactive by Design

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

M E M O R A N D U M

To: Joseph Martella, RIDEM

From: Dave Rusczyk, GZA

CC: Kenneth Lento, National Grid

Date: May 25, 2021

Re: Site Response Action Report
Period May 2, 2021 through May 15, 2021
Former Tidewater Facility
Pawtucket, Rhode Island
RIDEM Case No. 95-022 / Site Remediation File No. SR-26-0934

SITE ACTIVITIES PERFORMED

- Charter Contracting Company, LLC (Charter) continued activities related to implementation of the remedial construction work. These activities included:
  - Continued installation of the steel sheetpiles for the containment wall.
  - Continued on-Site processing/sizing of the concrete debris for fill beneath the engineered cap.
  - Off-Site disposal of the balance of the excavated material from Source Area #1
  - Backfilling behind the installed portions of the containment wall.
  - Regrading of the southern portion of the Site to engineered cap subgrade.
  - Initiation of the removal of the piping from Source Area #3.
  - Continued installation of recovery wells in the southern portion of the Site.
  - Extension of the existing City of Pawtucket stormwater drain line through the containment wall.
  - Trimming of the top of the installed portions of the containment wall to finished grade elevations.
- GZA continued to perform a monitoring program to evaluate turbidity levels within the Seekonk River adjacent to the Site. These readings were obtained inside and outside the turbidity curtain.
- Perimeter air monitoring was performed during the period covered by this report with 11 air monitoring stations (4 solar powered units located proximate to the river and 7 electrically powered units). These stations measured and recorded respirable dust and total volatile organic compounds (TVOC) concentrations continuously 24 hours per day/7 days per week. As indicated in the attached weekly perimeter air monitoring graphs, isolated exceedances of the TVOC (0.5 parts per million) and respirable dust (150 µg/m^3) perimeter threshold levels were noted during the period covered by this report. The isolated respirable dust exceedance was detected at Station 7 on May 3, 2021 at 1:06 pm. This isolated respirable dust level exceedance was attributed to the work activities; however, the elevated dust levels decreased to background levels before implementation of engineered controls were necessary. The

elevated TVOC perimeter threshold exceedances were primarily detected in the early evenings and mornings at the 4 solar powered stations located adjacent to the river. The air samples screened by the 4 solar powered stations (Stations 1 through 4) are not preheated within the unit prior to measuring the TVOC concentrations. As a result, the TVOC concentrations measured by the solar powered stations are affected and biased high during conditions with elevated humidity/dewpoint levels or during rapid changes in humidity levels. As shown on the TVOC plots for the 4 solar power air monitoring stations, the humidity levels as measured by the on-Site weather station over the past 2-weeks ranged from less than 5% to 100% and, with the exception of an isolated elevated TVOC level at Station 4, the elevated TVOC levels observed at the 4 solar powered air monitoring stations during this period were attributed to these elevated humidity levels and rapid changes in humidity levels rather than Site work activities. The elevated TVOC level at Station 4 was detected on May 12, 2021 at 11:10 am and the elevated TVOC level at this station was attributed to the work activities; however, the elevated TVOC levels decreased to background levels before implementation of engineered controls were necessary. The air monitoring results were posted to the project website and the bulletin boards at the ends of Tidewater Street and Bowles Court and are also attached to this report.

- GZA collected ambient air samples from upwind and downwind locations on May 6, 2021 and May 13, 2021 for laboratory analysis for benzene, toluene, ethylbenzene, xylenes, and naphthalene. The analytical results from these samples indicated there were no exceedances of the project action levels. The analytical results were posted to the project website and the bulletin boards at the ends of Tidewater Street and Bowles Court and are also attached to this report.

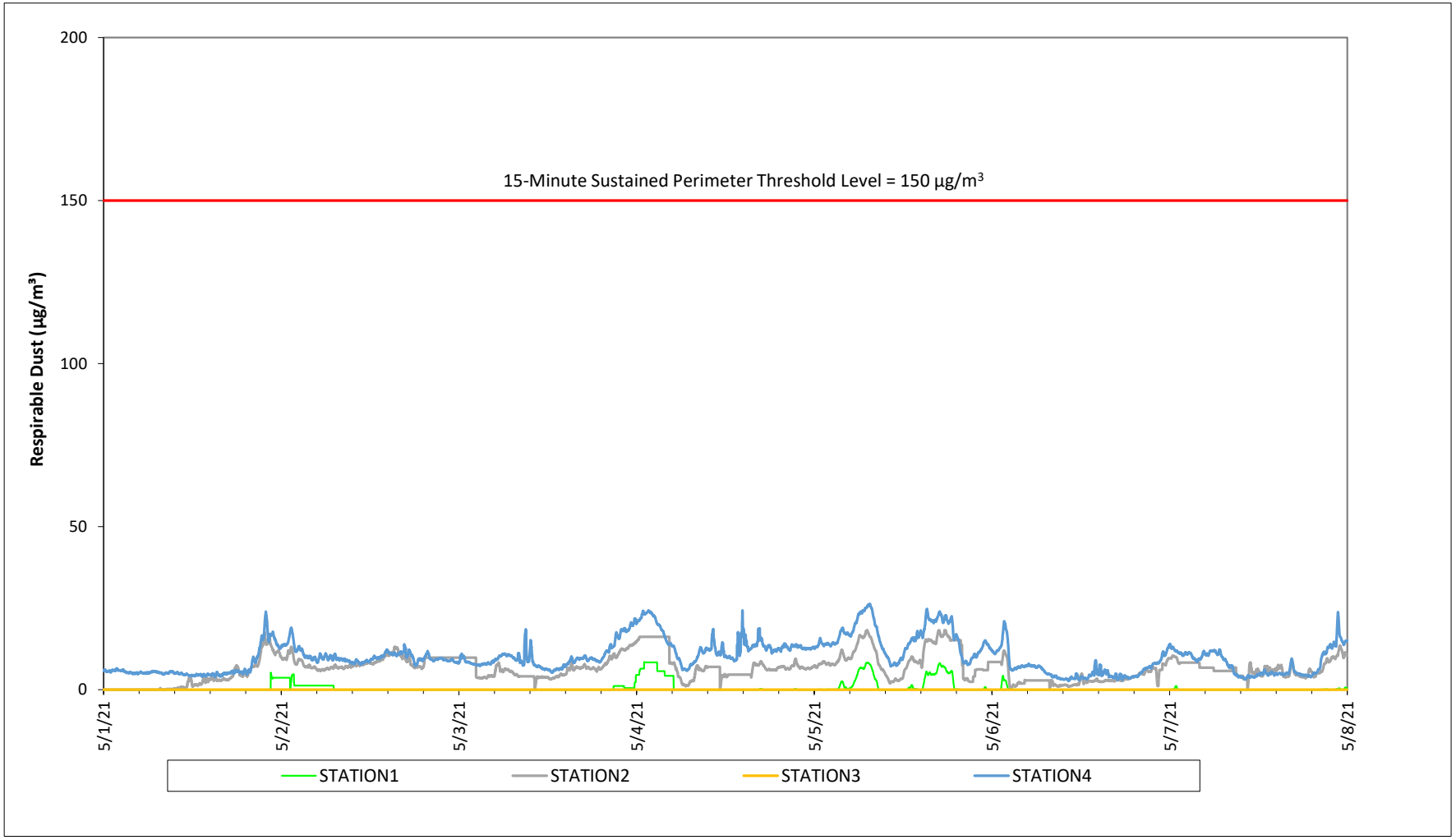
ANTICIPATED SITE ACTIVITIES TO BE PERFORMED WITHIN NEXT 2 WEEKS

- Continued installation of the steel sheetpiles for the new containment wall.
- Continued backfilling behind the containment wall.
- Continued on-Site processing of concrete debris.
- Continued construction of the revetment on the riverbank in the southern portion of the Site.
- Continued removal of the material from Source Area #3.
- Continued regrading of the southern portion of the Site to subgrade elevations for the engineered cap.
- Installation of the balance of recovery and monitoring wells in the central and southern portions of the Site.
- Development of the installed monitoring and recovery wells.
- Removal of the impacted materials from Source Area #2.
- Extension of the CSO piping through the containment wall.

Please contact Kenneth Lento at 781-907-3655 if you have any questions or comments.

Attachments:
Weekly Perimeter Air Monitoring Results
Air Monitoring Station Locations
Weekly Ambient Air Sampling Results

Prepared by National Grid for the Businesses and Residents Located Near the Former Tidewater Facility
Air Quality Monitoring - Respirable Dust



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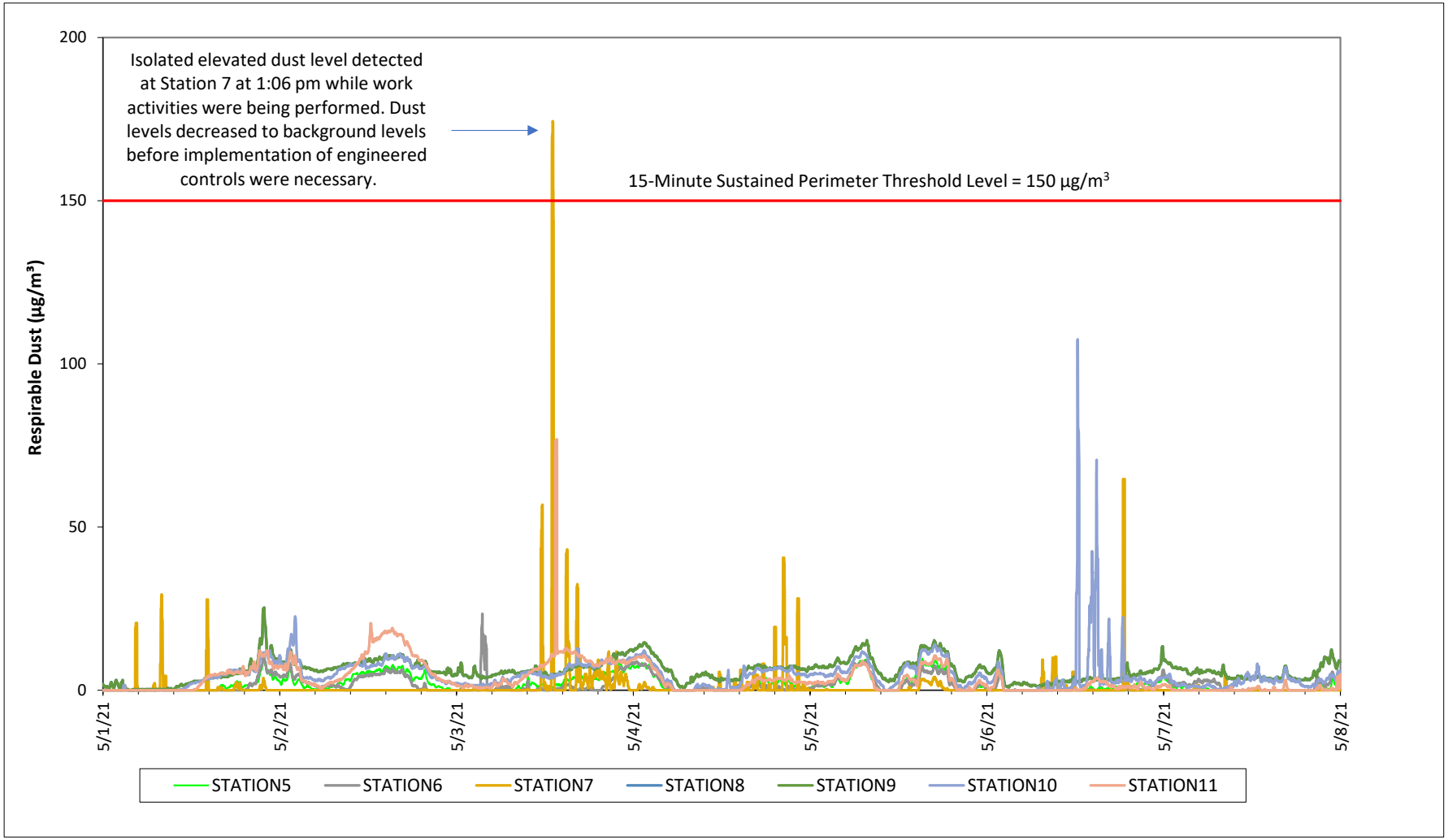
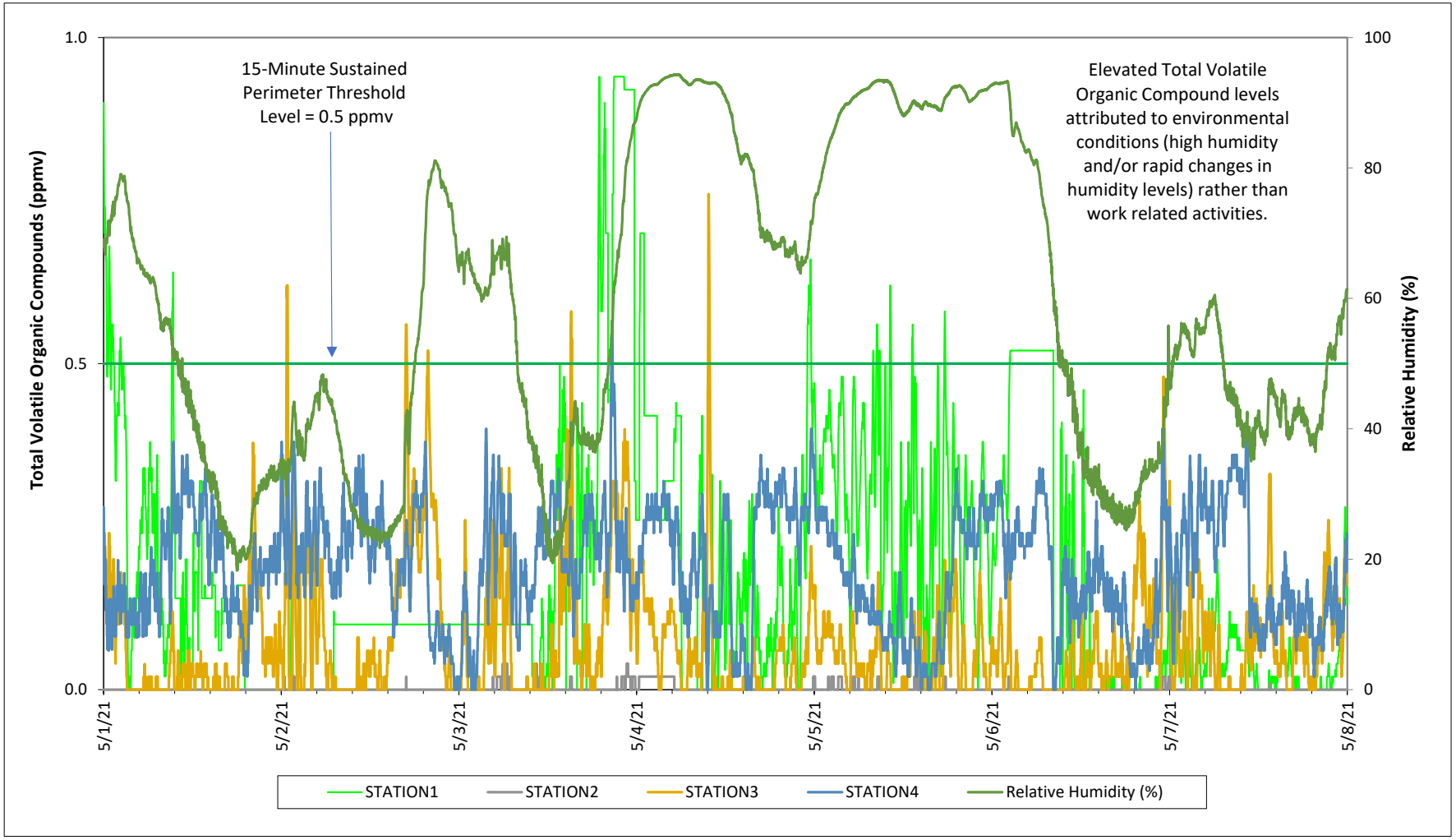
Air Quality Monitoring - Respirable Dust



Prepared by National Grid for the Businesses and Residents Located Near the Former Tidewater Facility
Air Quality Monitoring - Total Volatile Organic Compounds



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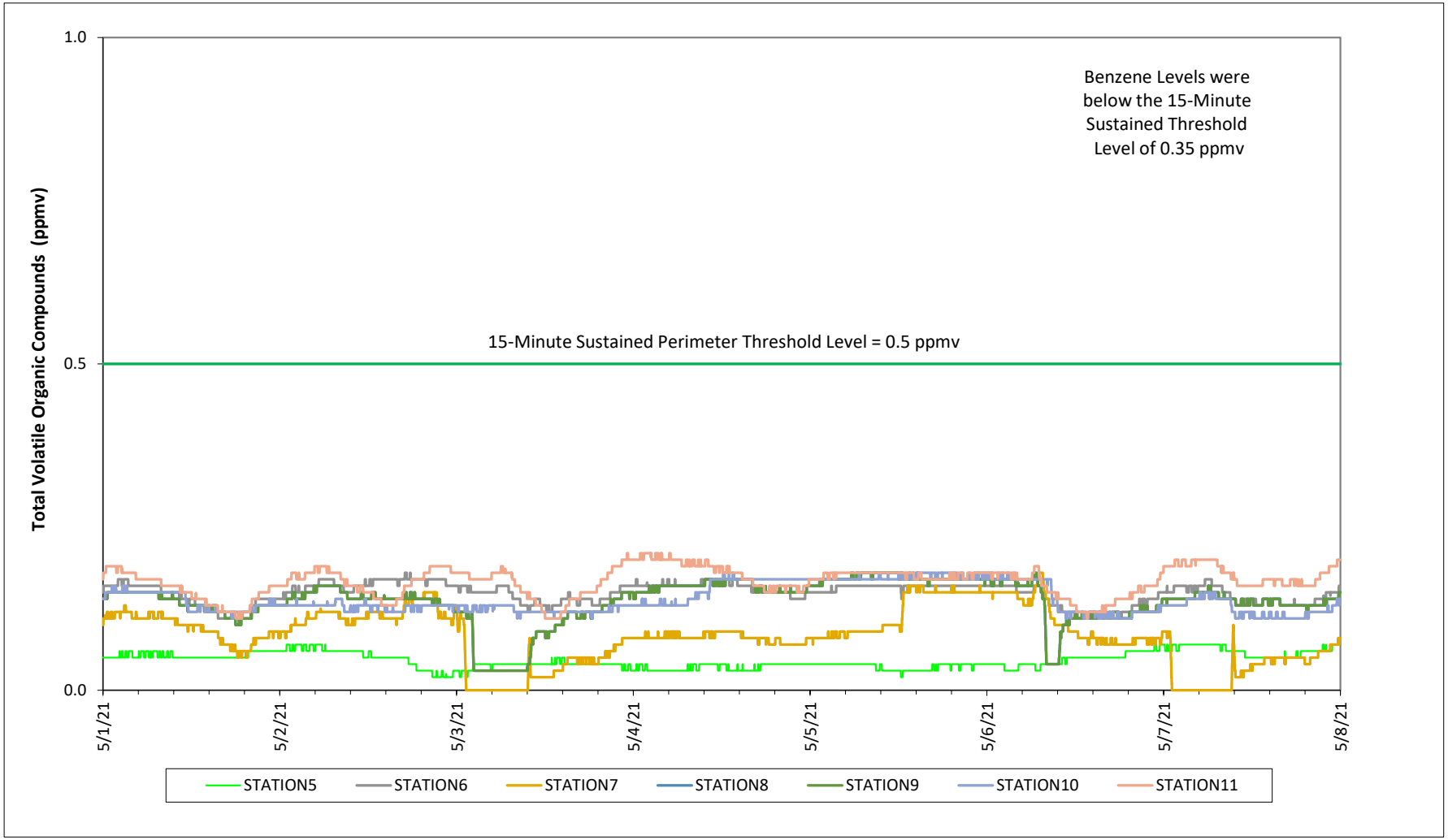

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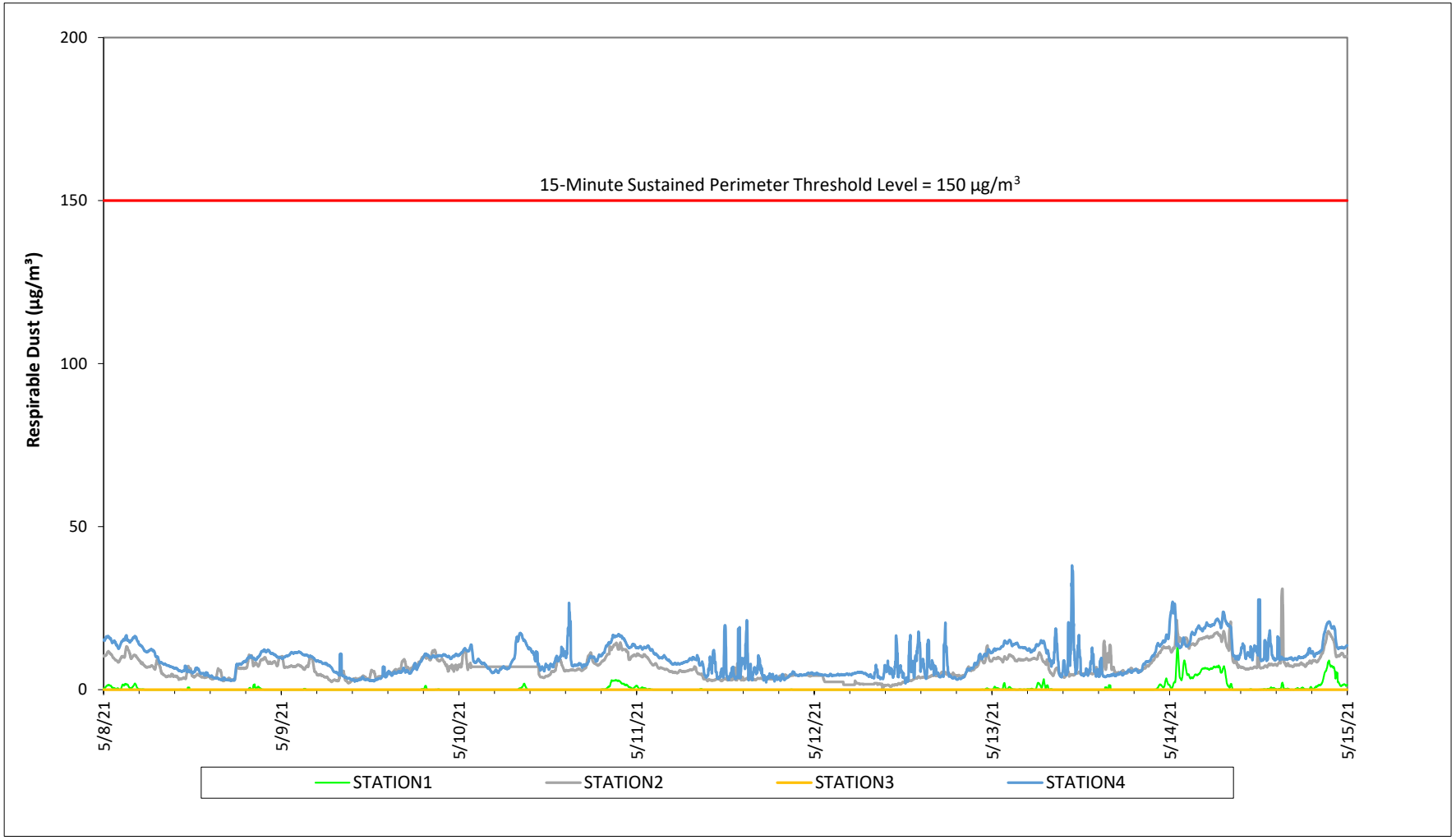

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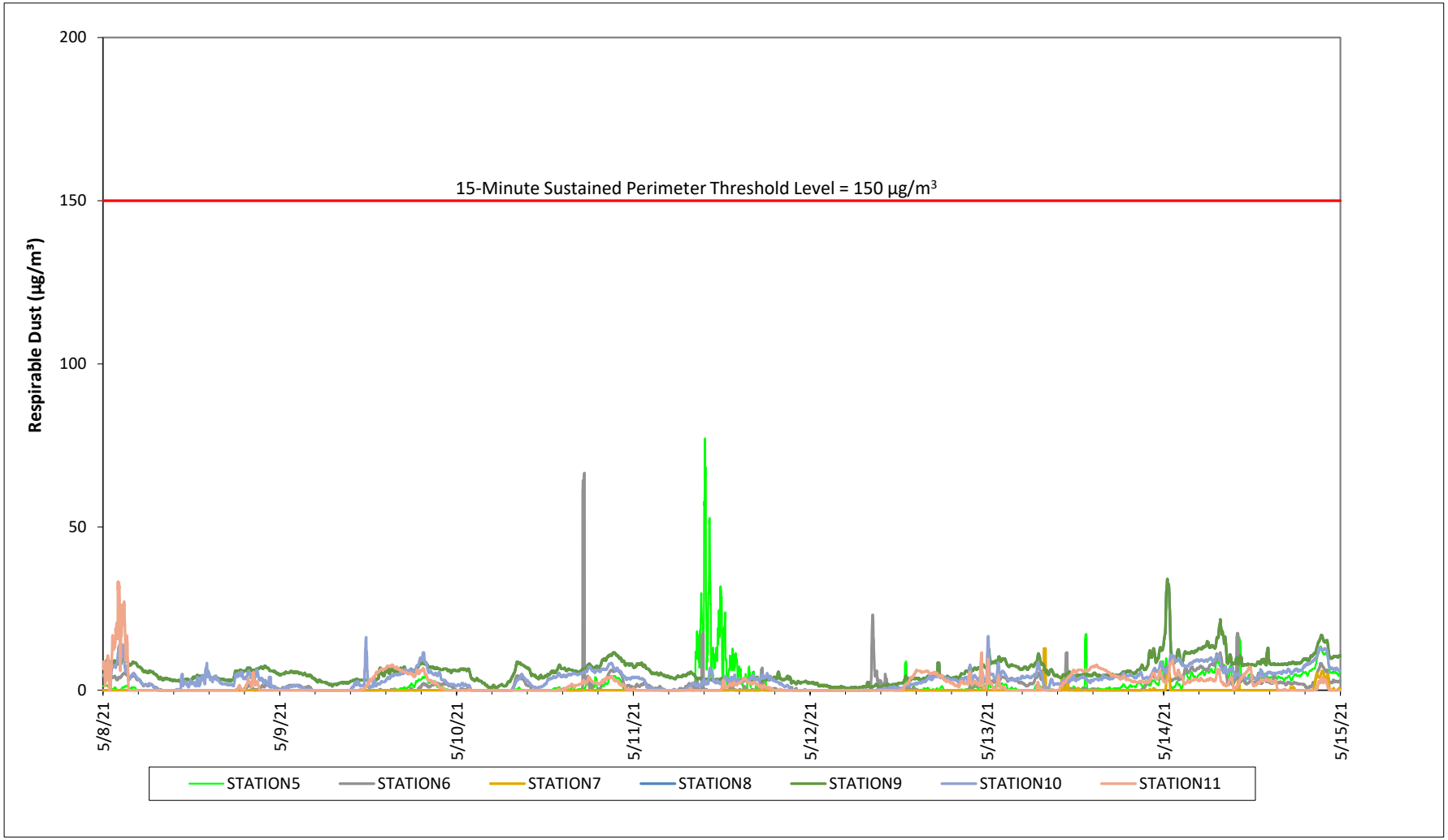

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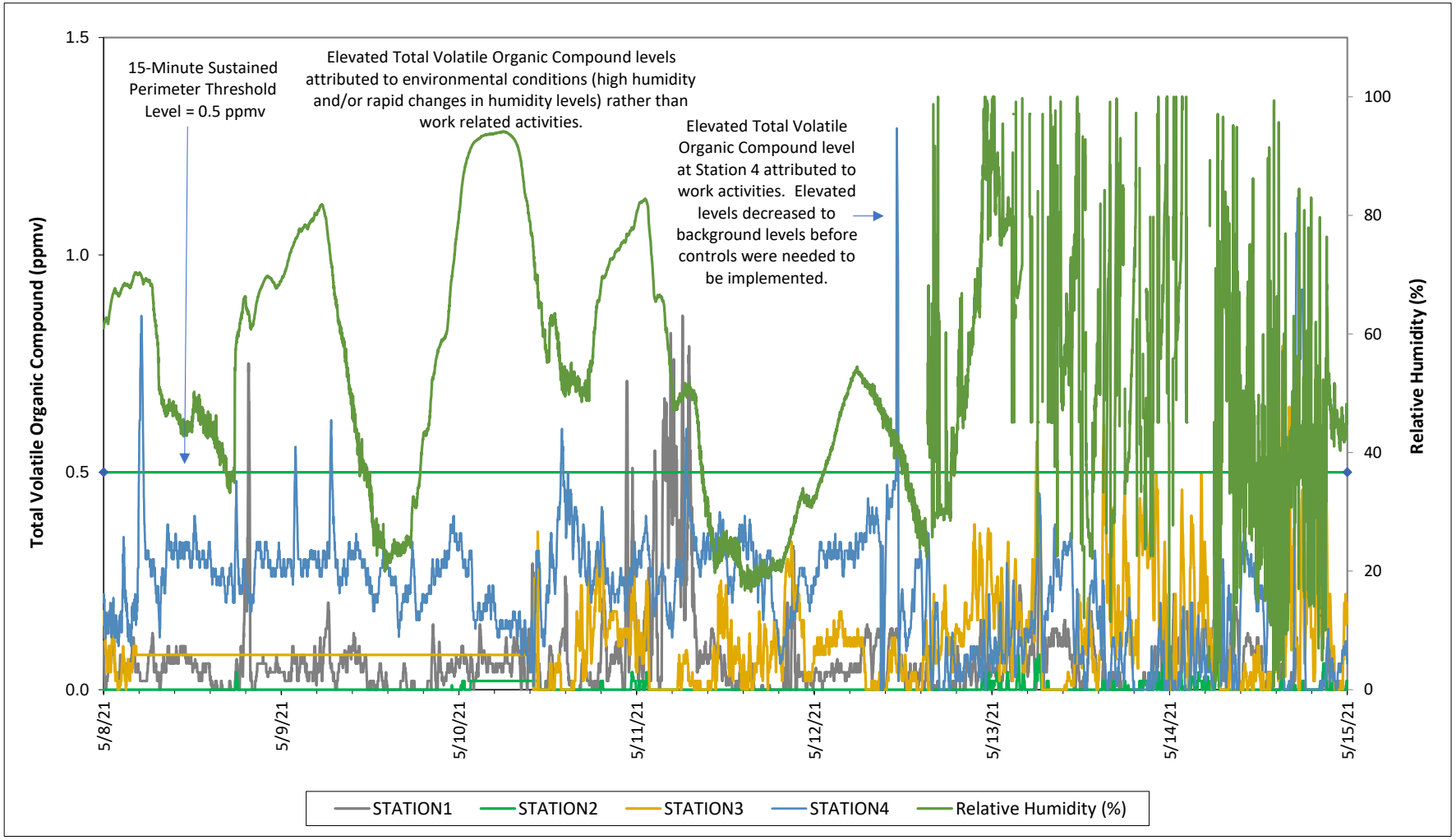

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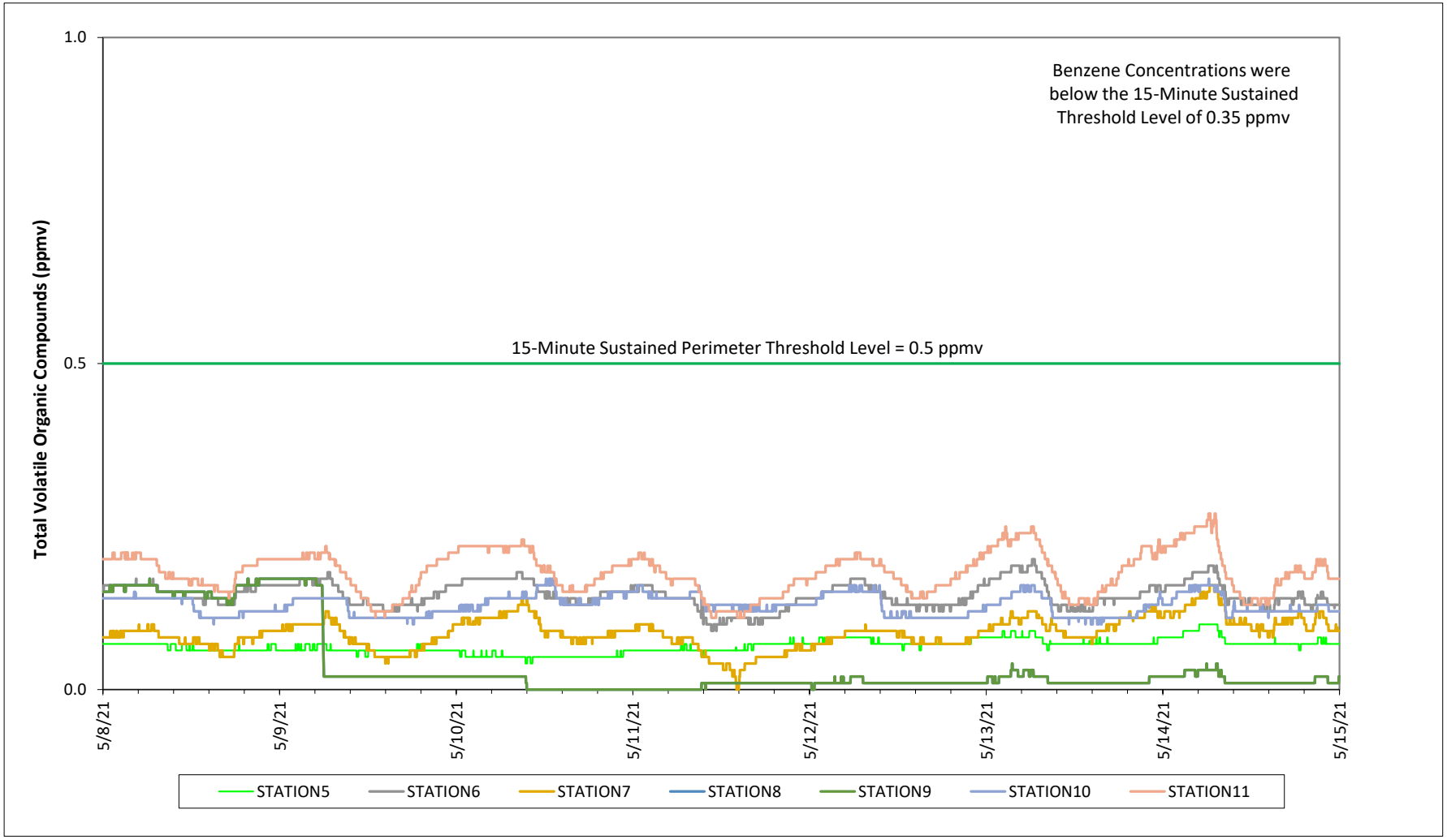
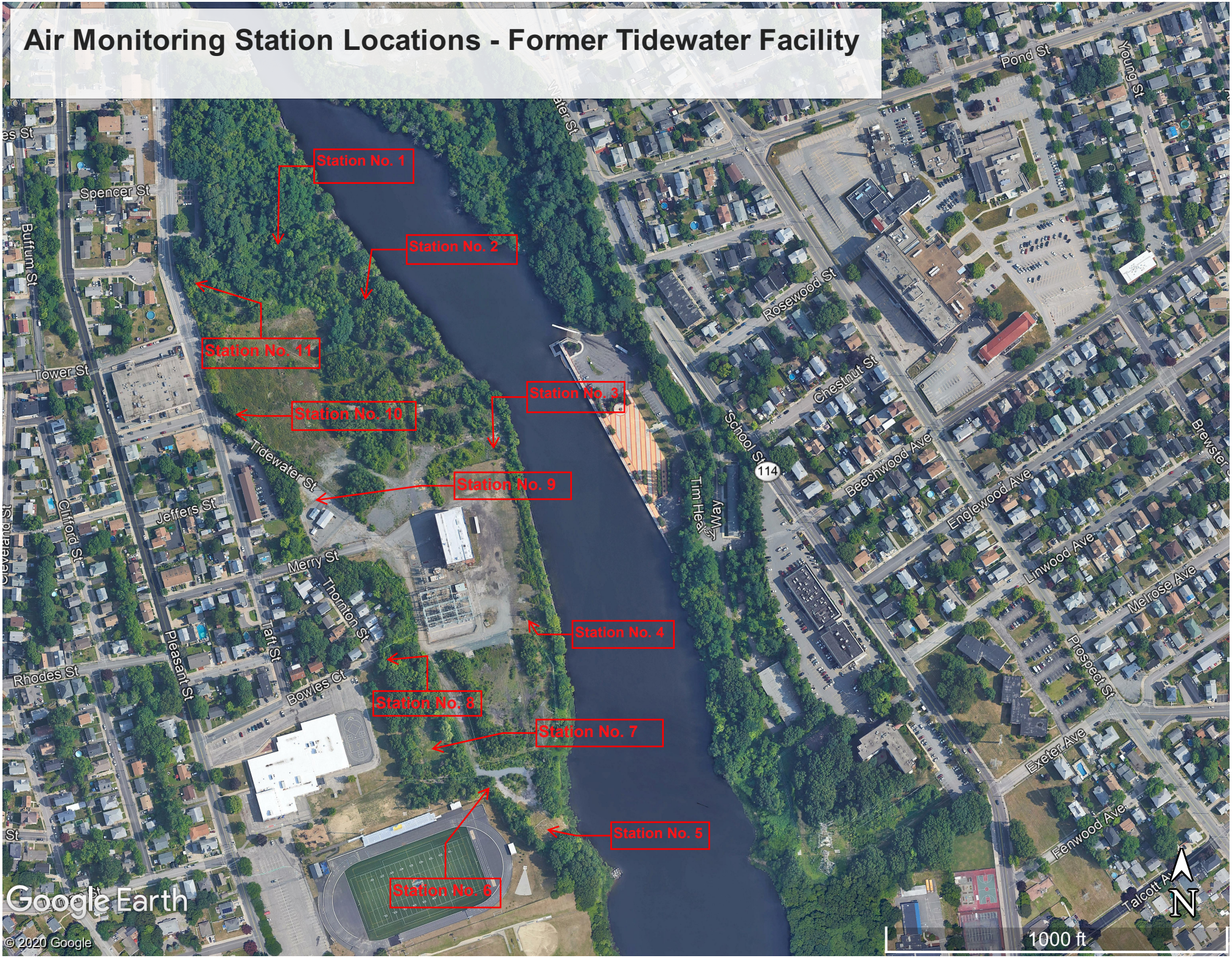


Air Monitoring Station Locations - Former Tidewater Facility



Prepared by National Grid for the Businesses and Residents Located Near the Former Tidewater Facility
Weekly Ambient Air Sampling Results

Sample Date	Compounds				
	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene
	(ppb v/v)				
12-3-20 UP STREAM	0.13	0.22	0.079	0.054	< 0.5
12-3-20 DOWN STREAM	0.13	0.2	0.073	0.05	< 0.5
12-10-20 UP STREAM	0.25	0.23	< 0.2	0.14	< 0.5
12-10-20 DOWN STREAM	0.17	0.2	< 0.2	< 0.7	< 0.5
12-16-20 UP STREAM	0.19	0.2	0.083	0.12	< 0.5
12-16-20 DOWN STREAM	0.13	0.16	0.078	0.094	< 0.5
12-23-20 UP STREAM	0.15	0.16	< 0.2	0.1	< 0.5
12-23-20 DOWN STREAM	0.13	0.11	< 0.2	< 0.7	< 0.5
12-30-20 UP STREAM	0.21	0.22	< 0.2	< 0.7	< 0.5
12-30-20 DOWN STREAM	0.089	< 0.2	< 0.2	< 0.7	< 0.5
1/7/21 UP STREAM	0.29	1.5	0.22	2.1	< 0.5
1/7/21 DOWN STREAM	0.16	0.27	0.086	0.42	< 0.5
1/14/21 UP STREAM	0.43	0.44	< 0.2	0.23	< 0.5
1/14/21 DOWN STREAM	0.4	0.52	0.076	0.3	< 0.5
1-21-21 UPSTREAM	0.15	0.28	0.1	< 0.7	0.24
1-21-21 DOWNSTREAM	0.18	0.23	0.11	0.1	< 0.5
1-28-21 UPSTREAM	0.21	0.19	< 0.2	< 0.7	< 0.5
1-28-21 DOWNSTREAM	0.21	0.17	< 0.2	< 0.7	< 0.5
2-4-21 UPSTREAM	0.2	1.1	0.23	1.4	0.18
2-4-21 DOWNSTREAM	0.23	0.29	0.26	0.29	< 1.1
2-11-21 UPSTREAM	0.19	0.12	< 0.2	< 0.7	< 0.5
2-11-21 DOWNSTREAM	0.17	< 0.2	< 0.2	< 0.7	< 0.5
2-18-21 UPSTREAM	0.46	2.8	0.11	0.25	< 0.5
2-18-21 DOWNSTREAM	0.31	0.42	0.13	0.45	< 0.5
2-25-21 UPSTREAM	< 0.2	0.16	< 0.2	0.16	< 0.5
2-25-21 DOWNSTREAM	0.13	< 0.2	0.081	0.3	< 0.5
3-4-21 UPSTREAM	0.2	0.21	< 0.2	0.18	0.27
3-4-21 DOWNSTREAM	0.15	0.12	< 0.2	0.16	< 0.5
3-11-21 UPSTREAM	0.18	0.17	< 0.2	0.23	0.3
3-11-21 DOWNSTREAM	0.18	0.22	0.23	1.0	< 0.5
3-18-21 DOWNSTREAM	0.44	1.6	0.19	0.67	< 0.5
3-25-21 UPSTREAM	0.17	0.32	0.85	4.1	0.53
3-25-21 DOWNSTREAM	0.33	0.67	0.16	0.57	0.27
4-1-21 UPSTREAM	0.22	0.17	< 0.2	< 0.7	< 0.5
4-1-21 DOWNSTREAM	0.12	0.11	< 0.2	< 0.7	< 0.5
4-8-21 UPSTREAM	0.096	0.12	1.5	8.0	< 0.5
4-8-21 DOWNSTREAM	0.086	0.14	0.086	0.38	0.19
4-15-21 UPSTREAM	0.85	0.57	0.1	0.44	< 0.5
4-15-21 DOWNSTREAM	0.11	0.11	0.26	1.20	< 0.5
4-22-21 UPSTREAM	0.11	< 0.2	< 0.2	< 0.7	< 0.5
4-22-21 DOWNSTREAM	0.11	0.16	< 0.2	< 0.7	< 0.5
4-29-21 UPSTREAM	0.14	0.34	0.11	0.32	0.26
4-29-21 DOWNSTREAM	0.19	0.39	0.11	0.37	0.27
5-6-21 UPSTREAM	0.086	0.15	< 0.2	< 0.7	0.38
5-6-21 DOWNSTREAM	1.0	8.4	0.21	0.69	< 0.5
5-13-21 UPSTREAM	< 0.2	0.36	< 0l2	0.19	0.34
5-13-21 DOWNSTREAM	0.12	< 0.2	< 0.2	< 0.7	< 0.5
Project Action Levels	**6.2**	**80**	**230**	**23**	**20**

Notes:

1. The Project Action Levels are consistent with the Air Quality Monitoring Plan developed for the Site.
2. Air samples are collected in stainless steel summa canisters over an approximately 8-hour period.
3. Air samples are analyzed by EuroFins TestAmerica of Burlington, VT.
4. Results and action levels are listed in parts per billion volume/volume (ppb v/v).
5. An upstream ambient air sample was not collected on March 18, 2021 due to a problem with the sampling equipment.