



Proactive by Design

GEOTECHNICAL  
ENVIRONMENTAL  
ECOLOGICAL  
WATER  
CONSTRUCTION  
MANAGEMENT



## MEMORANDUM

To: Joseph Martella, RIDEM

From: Dave Rusczyk, GZA

CC: Kenneth Lento, National Grid

Date: April 27, 2021

Re: Site Response Action Report  
Period April 4, 2021 through April 17, 2021  
Former Tidewater Facility  
Pawtucket, Rhode Island  
RIDEM Case No. 95-022 / Site Remediation File No. SR-26-0934

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### 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.
  - Regrading of the shoreline in the southern portion of the Site and continued installation of the revetment engineered cap.
  - Installation of a portion of the shallow and deep recovery well pairs south of the transmission towers.
  - On-Site chipping of the timber piles from the former wharf and off-Site disposal of the associated organic waste.
  - Initiation of regrading the southern portion of the Site to engineered cap subgrade.
- 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) perimeter threshold level were noted during the period covered by this report. With the exception of an isolated elevated TVOC concentration at Station 6 on April 8, 2021, the isolated TVOC perimeter threshold exceedances were 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 approximately 35% to 100% and 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 isolated elevated TVOC concentrations at Station 6 on April 8, 2021 were attributed to organic vapors from a stockpile of wood chips generated after chipping the timber piles associated with a former wharf at the Site. The stockpile of wood chips was covered with polyethylene sheeting and the organic vapor concentrations subsequently decreased to background levels. 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 April 8, 2021 and April 15, 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

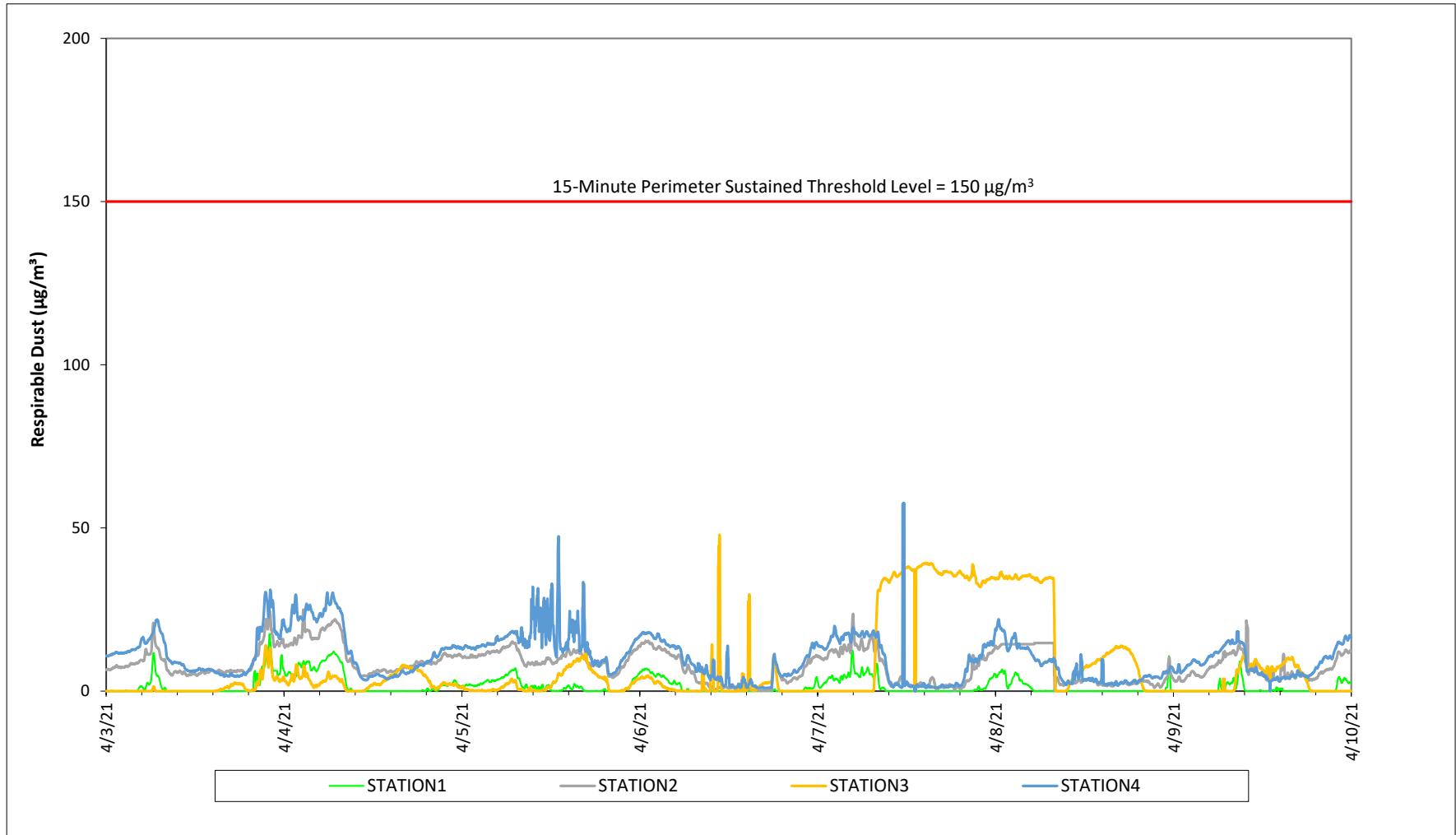
- Continued installation of the steel sheetpiles for the new containment wall.
- Continued on-Site processing of concrete debris.
- Construction of the revetment on the riverbank in the southern portion of the Site.
- Off-Site disposal of the materials from Source Area #1.
- Continued regrading of the southern portion of the Site to subgrade elevations for the engineered cap.

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

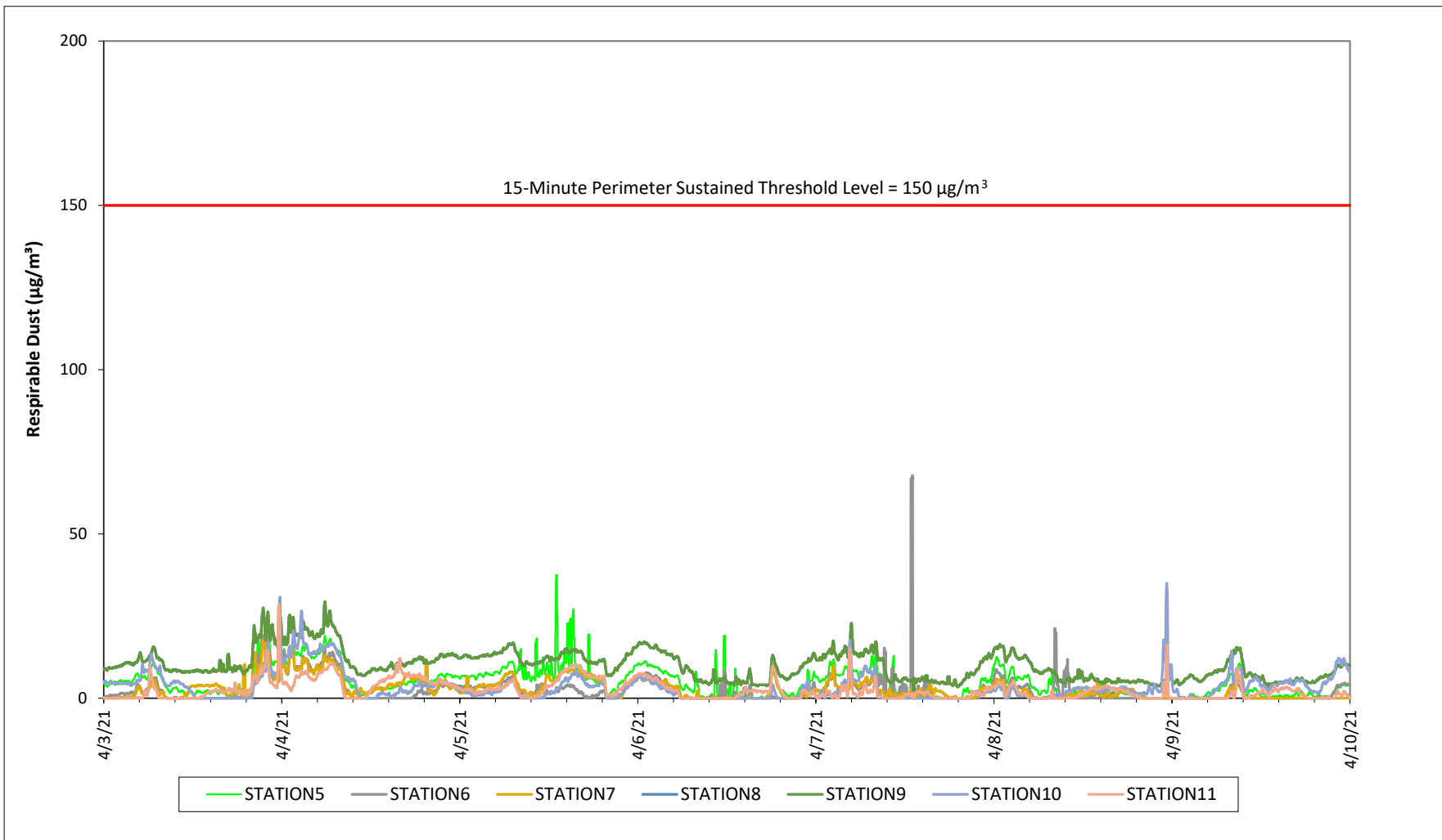
#### **Attachments:**

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

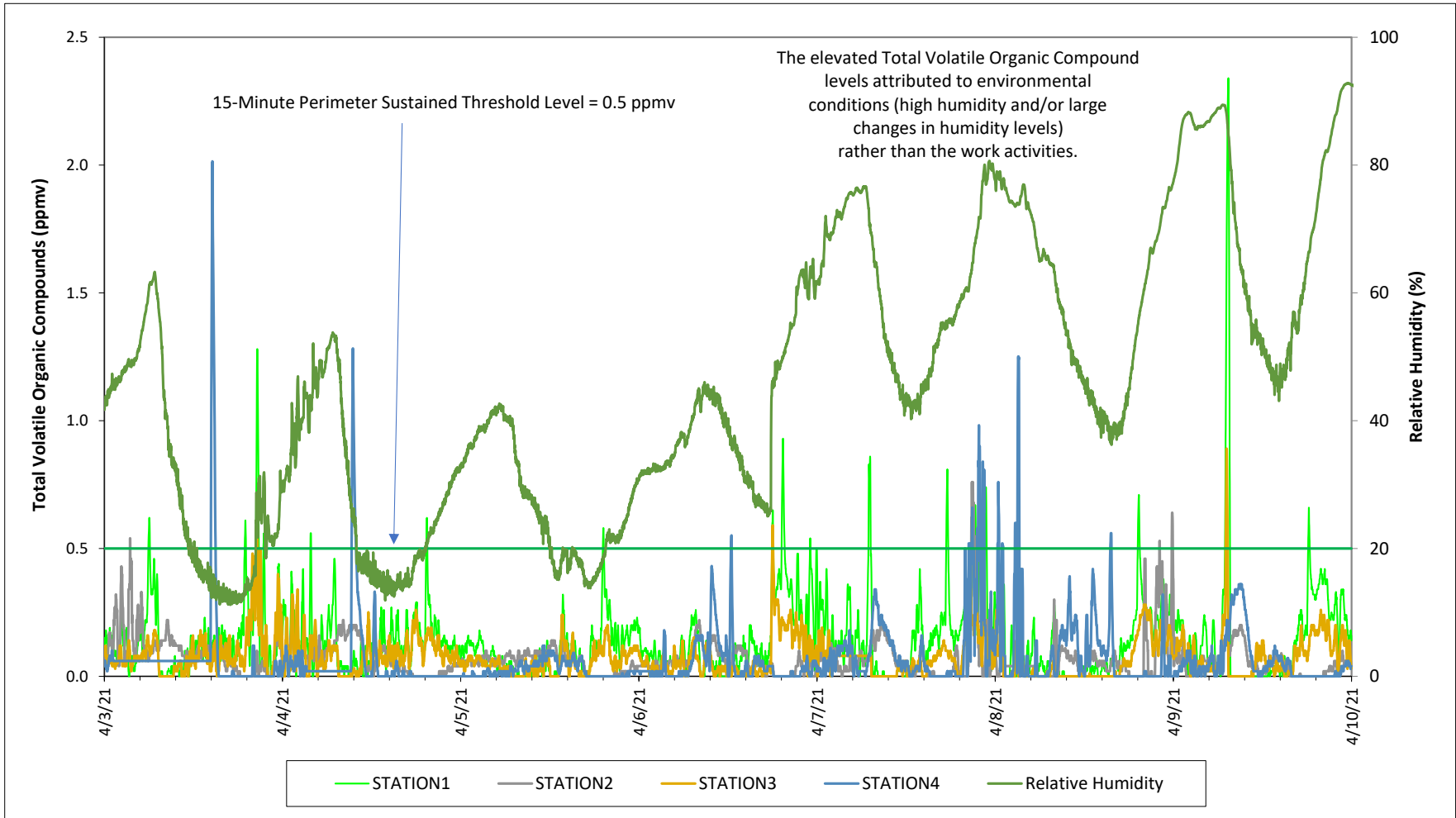
Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility  
Air Quality Monitoring - Respirable Dust



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

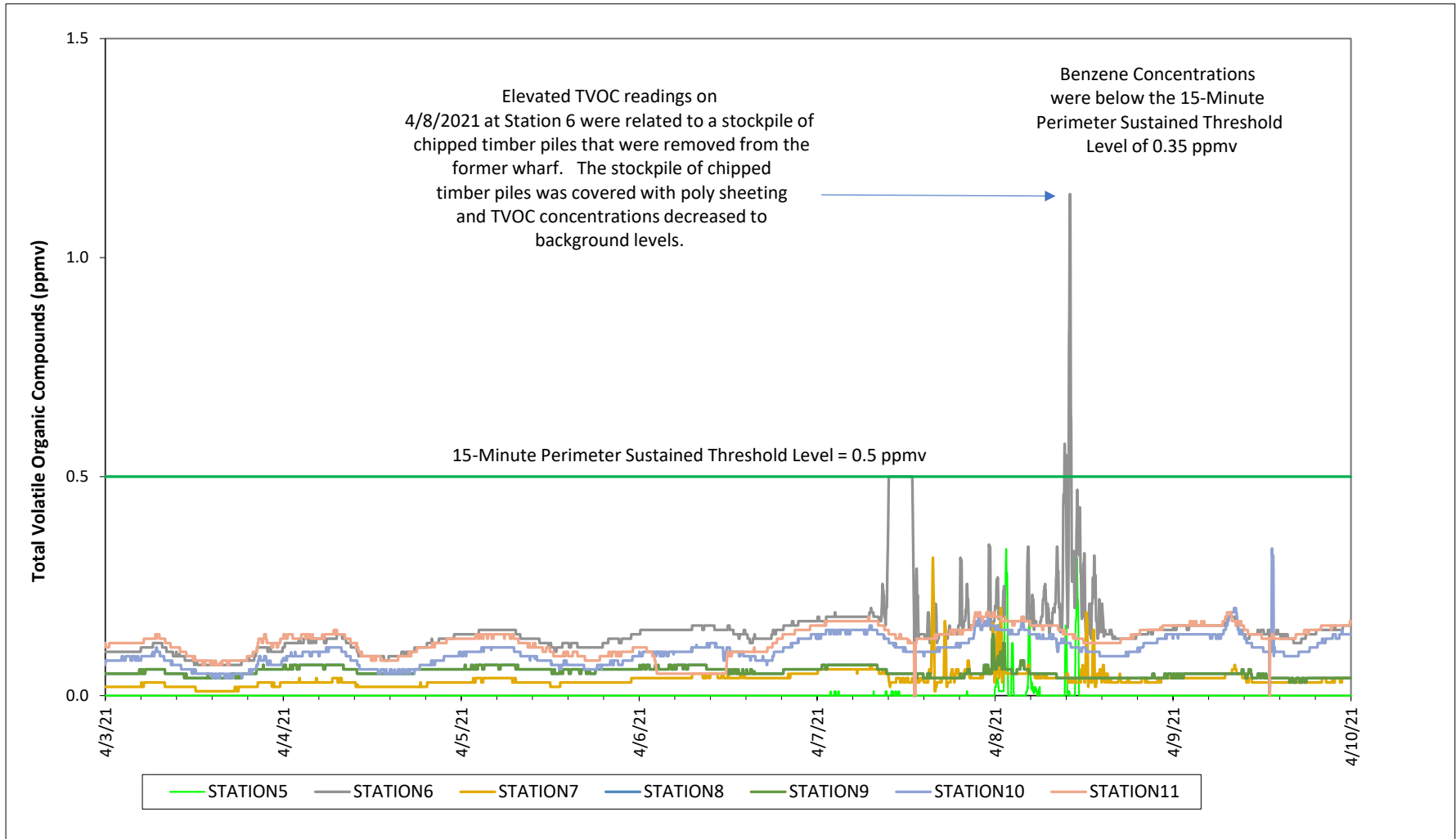


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Tidewater Facility  
Air Quality Monitoring - Total Volatile Organic Compounds

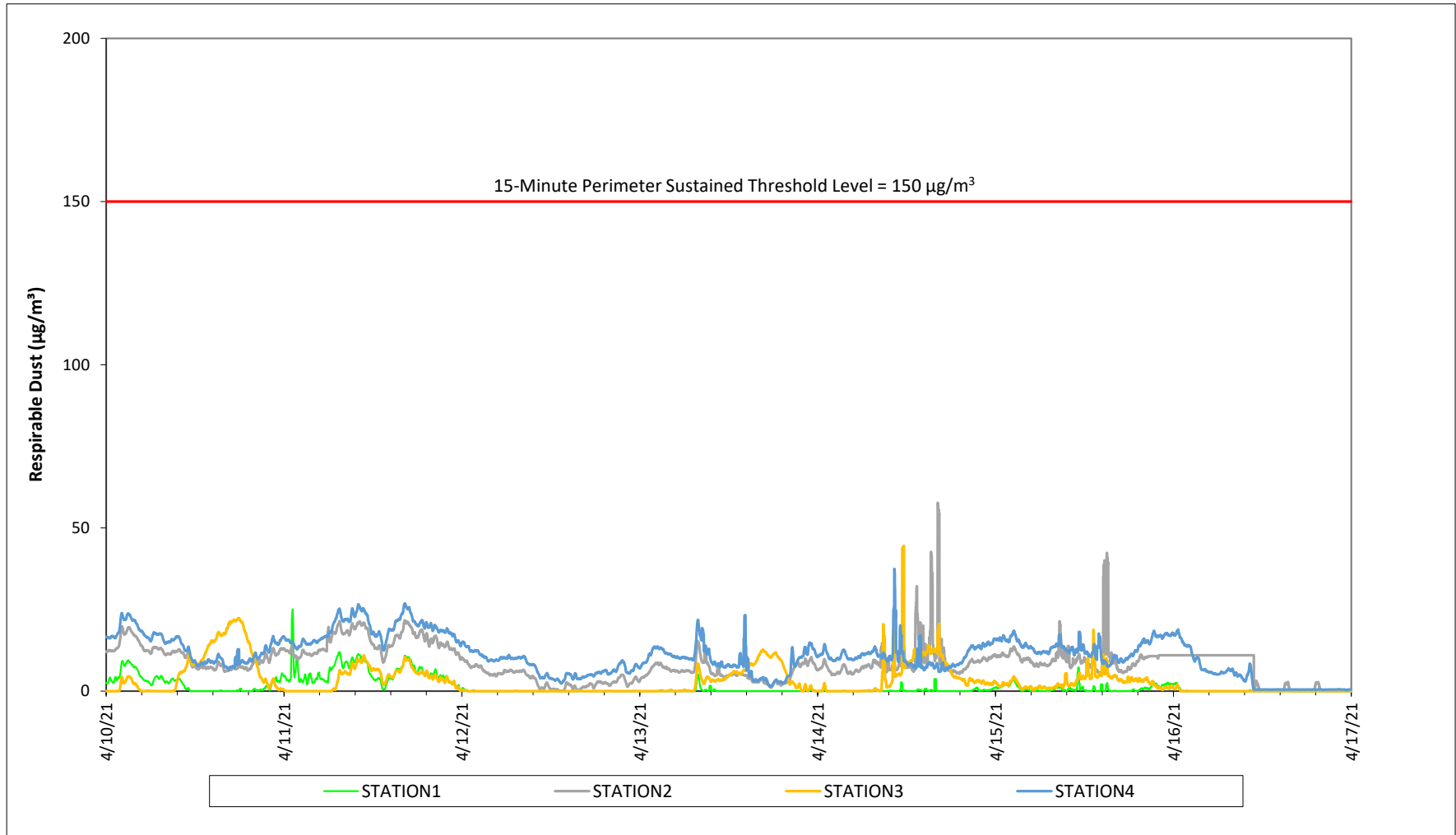


# Prepared by National Grid for the Businesses and Residents Located Near the Former Tidewater Facility

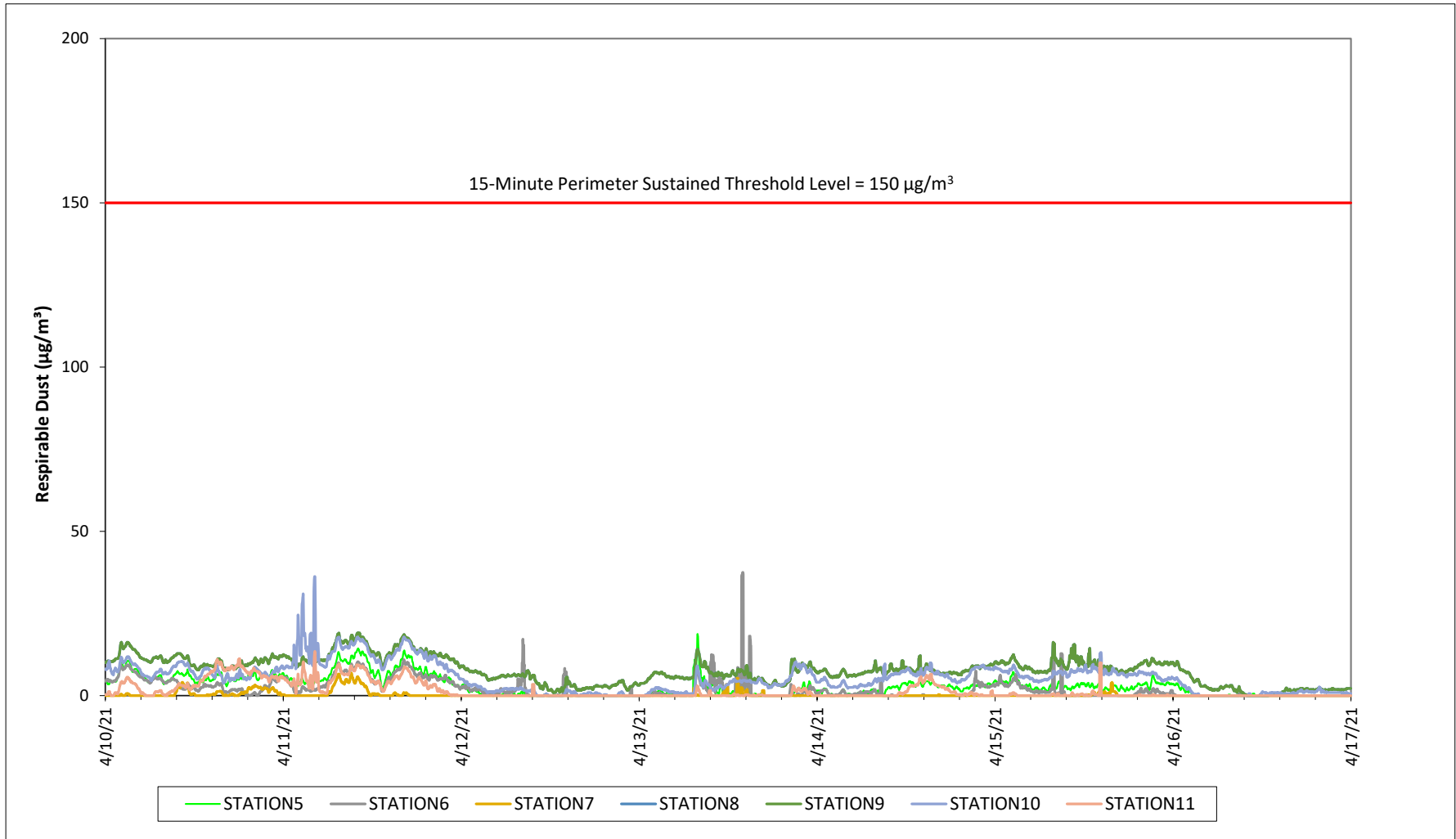
## Air Quality Monitoring - Total Volatile Organic Compounds



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

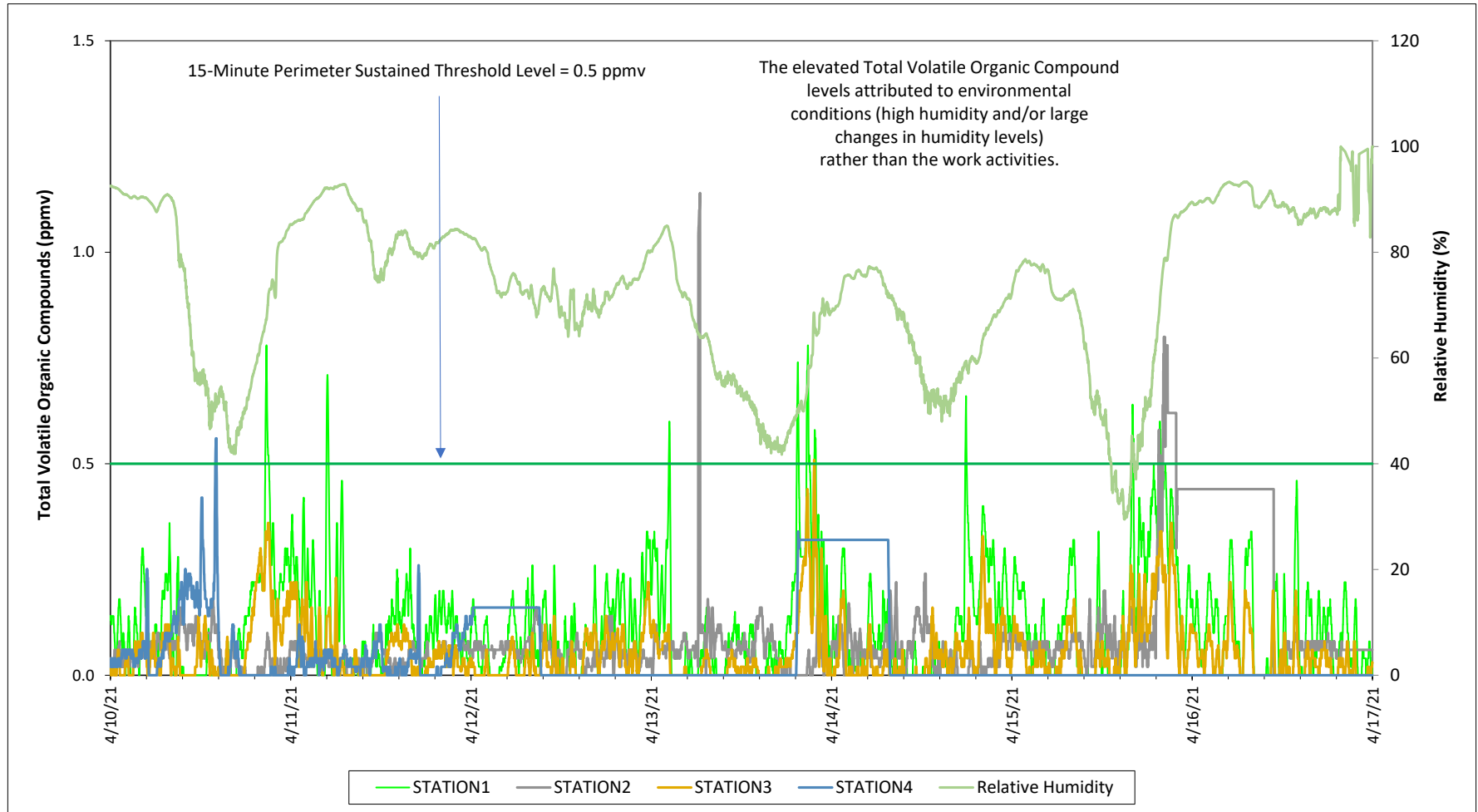


Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility  
Air Quality Monitoring - Respirable Dust



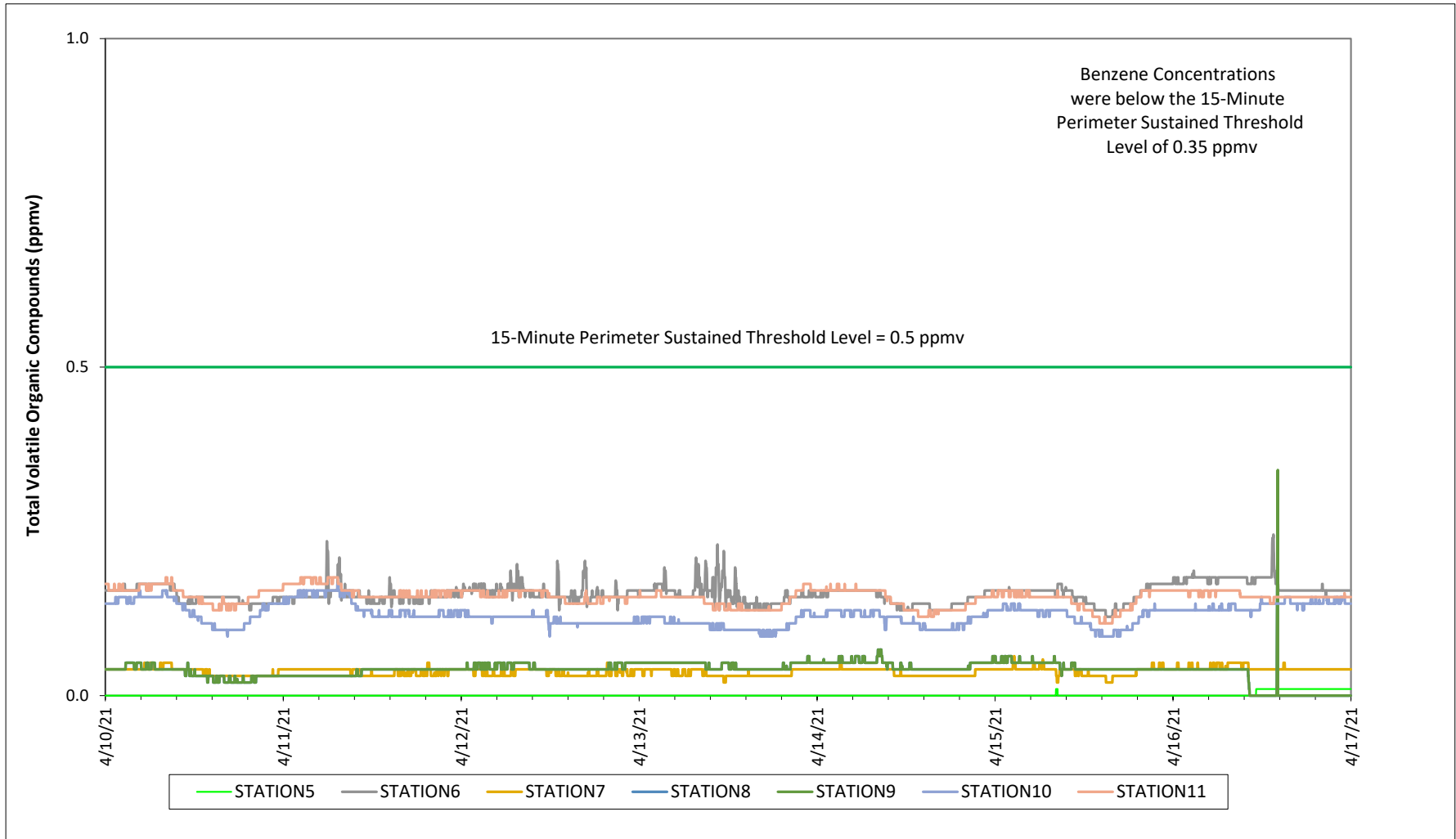


Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility  
Air Quality Monitoring - Total Volatile Organic Compounds

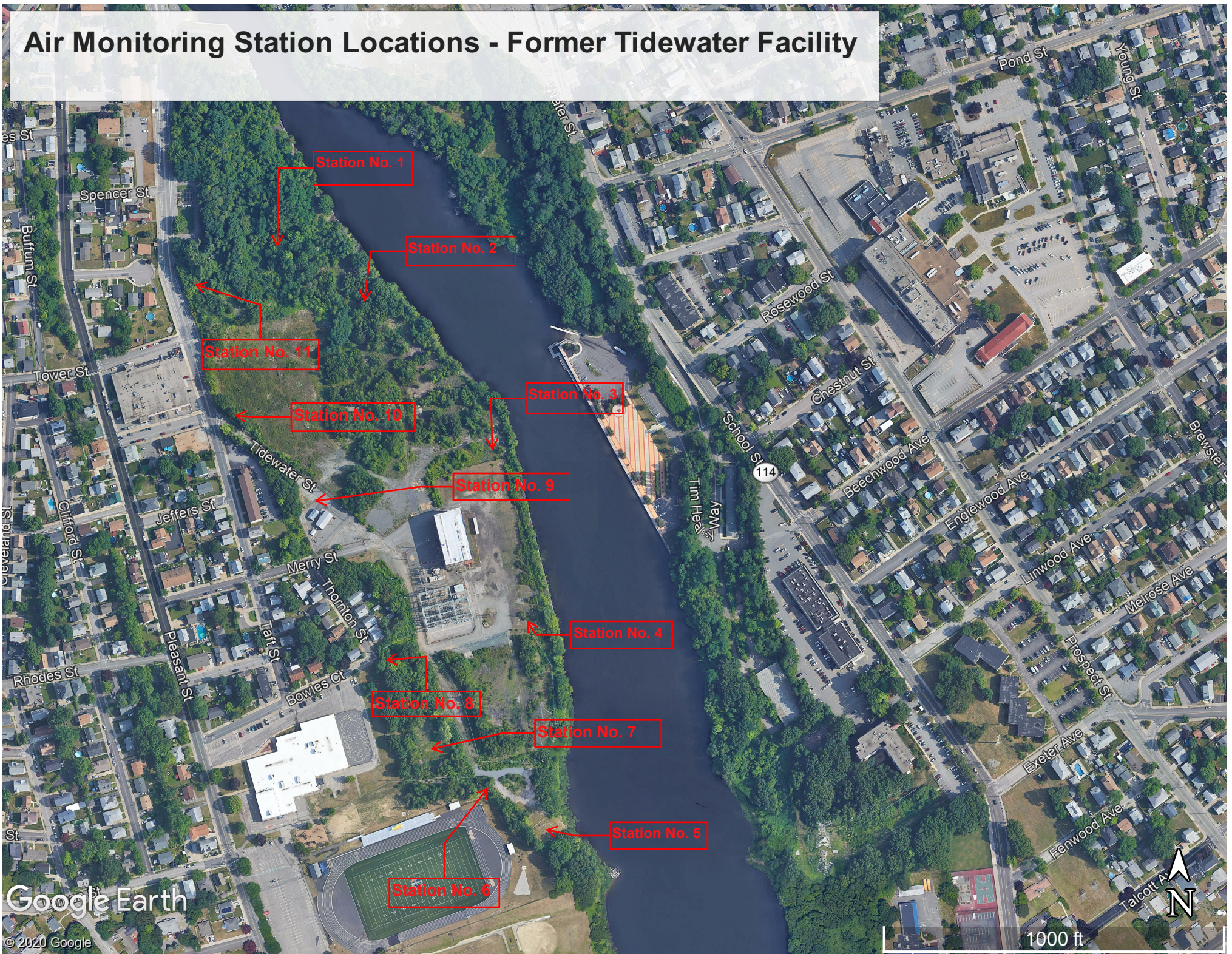


Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility

Air Quality Monitoring - Total Volatile Organic Compounds



# 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
<b>Project Action Levels</b>	<b>6.2</b>	<b>80</b>	<b>230</b>	<b>23</b>	<b>20</b>

**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.