



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 9, 2021

Re: Site Response Action Report  
Period March 21, 2021 through April 3, 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 demolition of former concrete slabs and foundations and the bedrock outcrop in the northern portion of the Site and on-Site processing/sizing of the concrete debris for fill beneath the engineered cap.
  - Continued installation of the engineered cap proximate and beneath the transmission towers.
  - Regrading of the shoreline in the southern portion of the Site and initiation of the installation of the revetment engineered cap.
  - Excavation of Source Area #1 and temporary on-Site stockpiling of the excavated material prior to off-Site disposal.
  - Off-Site disposal of organic debris and stumps generated during grubbing of the Site.
- 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 (0.150  $\mu\text{g}/\text{m}^3$ ) perimeter threshold levels were noted during the period covered by this report. The isolated respirable dust perimeter threshold level exceedances were observed only on March 21, 2021 during non-working hours and were not sustained. With the exception of an isolated elevated TVOC concentration at Station 4 on March 30, 2021 at 1:44 pm, the isolated TVOC perimeter threshold exceedances were detected in the early evenings and mornings at solar powered



Stations 1, 3, and 4 located adjacent to the river and during non-working hours. 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 40% 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. We also note that the air samples screened by the 7 electrically powered air monitoring stations are pre-heated in the unit prior to measuring the TVOC concentrations and are not affected by humidity levels. Further supporting the effect of humidity levels on the 4 solar powered units, the TVOC concentrations measured by the 7 electrically powered air monitoring stations during this 2-week period were all below the sustained threshold levels. The isolated elevated TVOC concentration at Station 4 on March 30, 2021 at 1:44 pm decreased to below threshold levels before control measures were implemented. 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 March 25, 2021 and April 1, 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

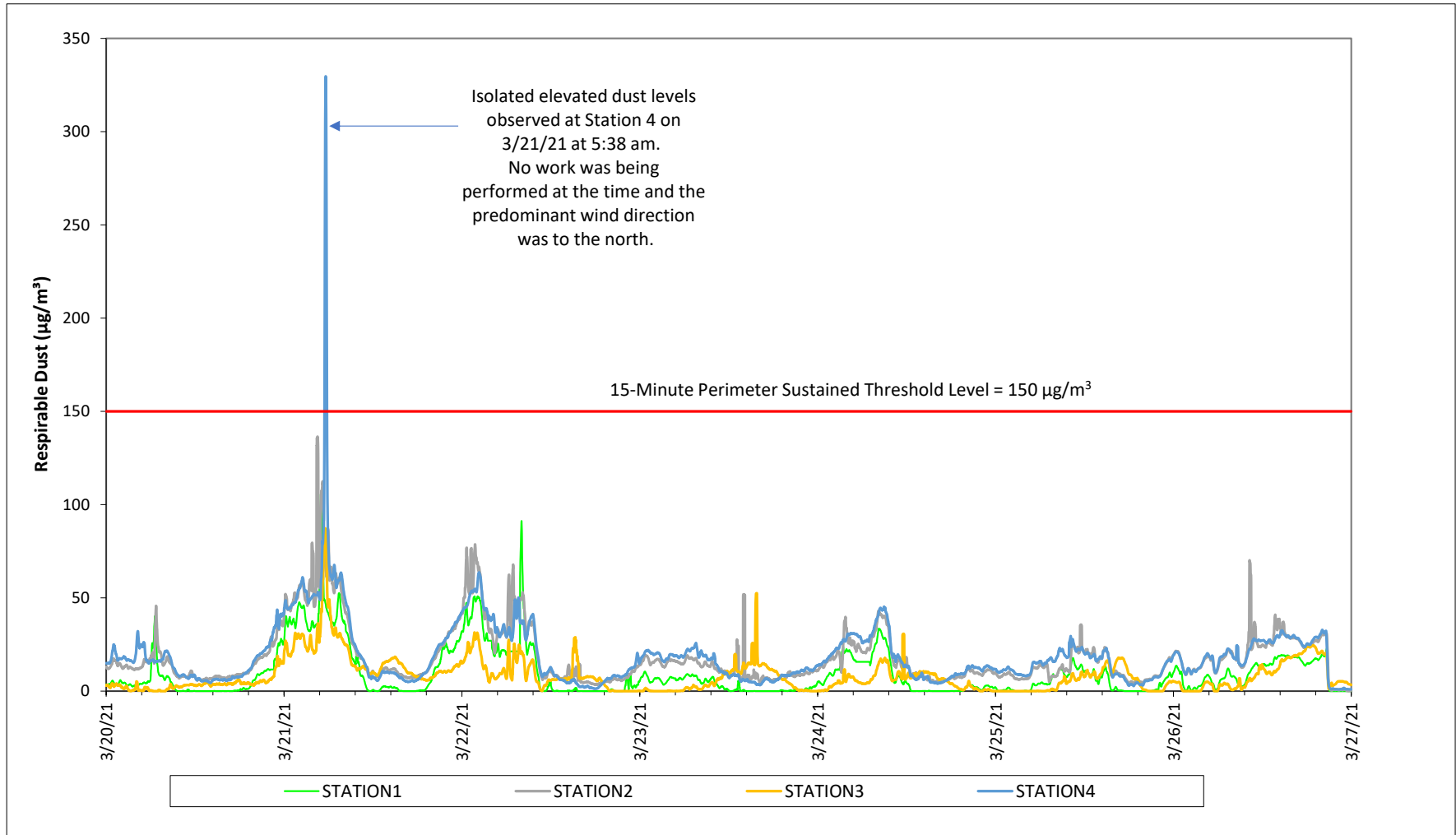
- Continued installation of the steel sheetpiles for the new containment wall.
- Continued on-Site processing of concrete debris.
- Construction of the revetment on the riverbank in the southern portion of the Site.
- Abandonment of the former screen well structure.
- Installation of the shallow and deep recovery wells within the revetments south of the transmission towers.
- Off-Site disposal of the materials from Source Area #1.

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

#### **Attachments:**

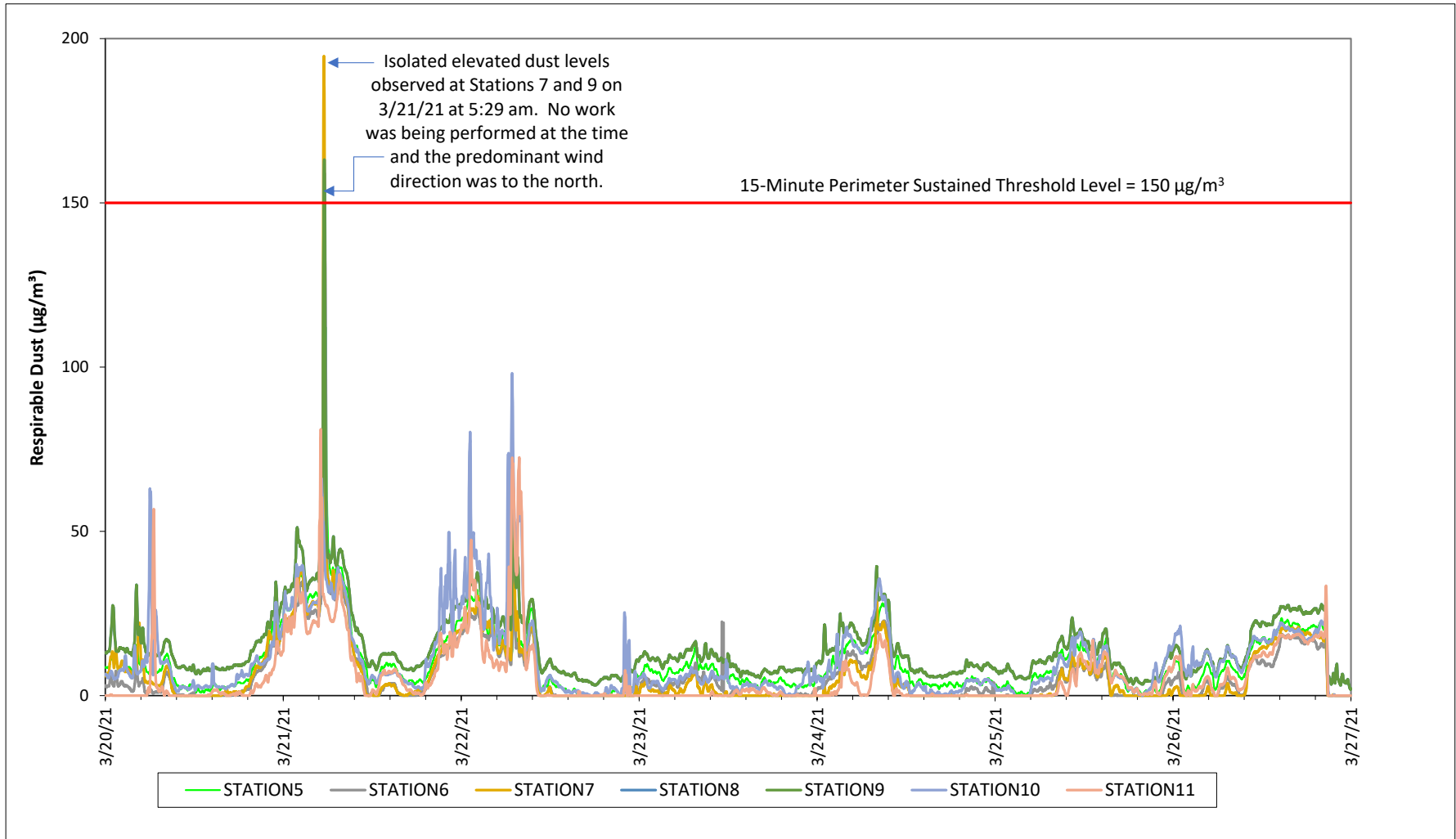
Weekly Perimeter Air Monitoring Results  
Air Monitoring Station Locations  
Weekly Ambient Air Sampling Results

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  
Tidewater Facility

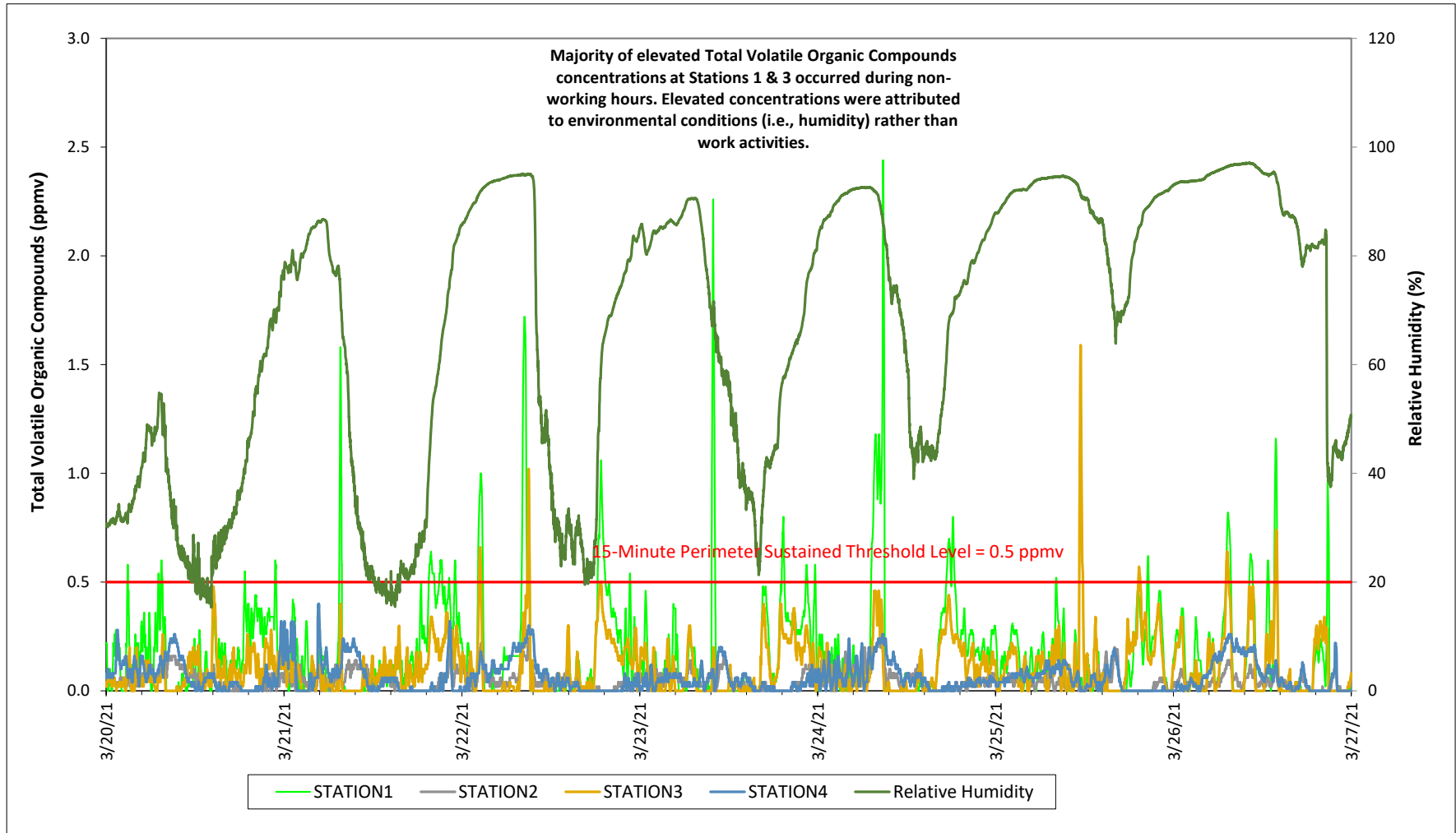
Air Quality Monitoring - Respirable Dust





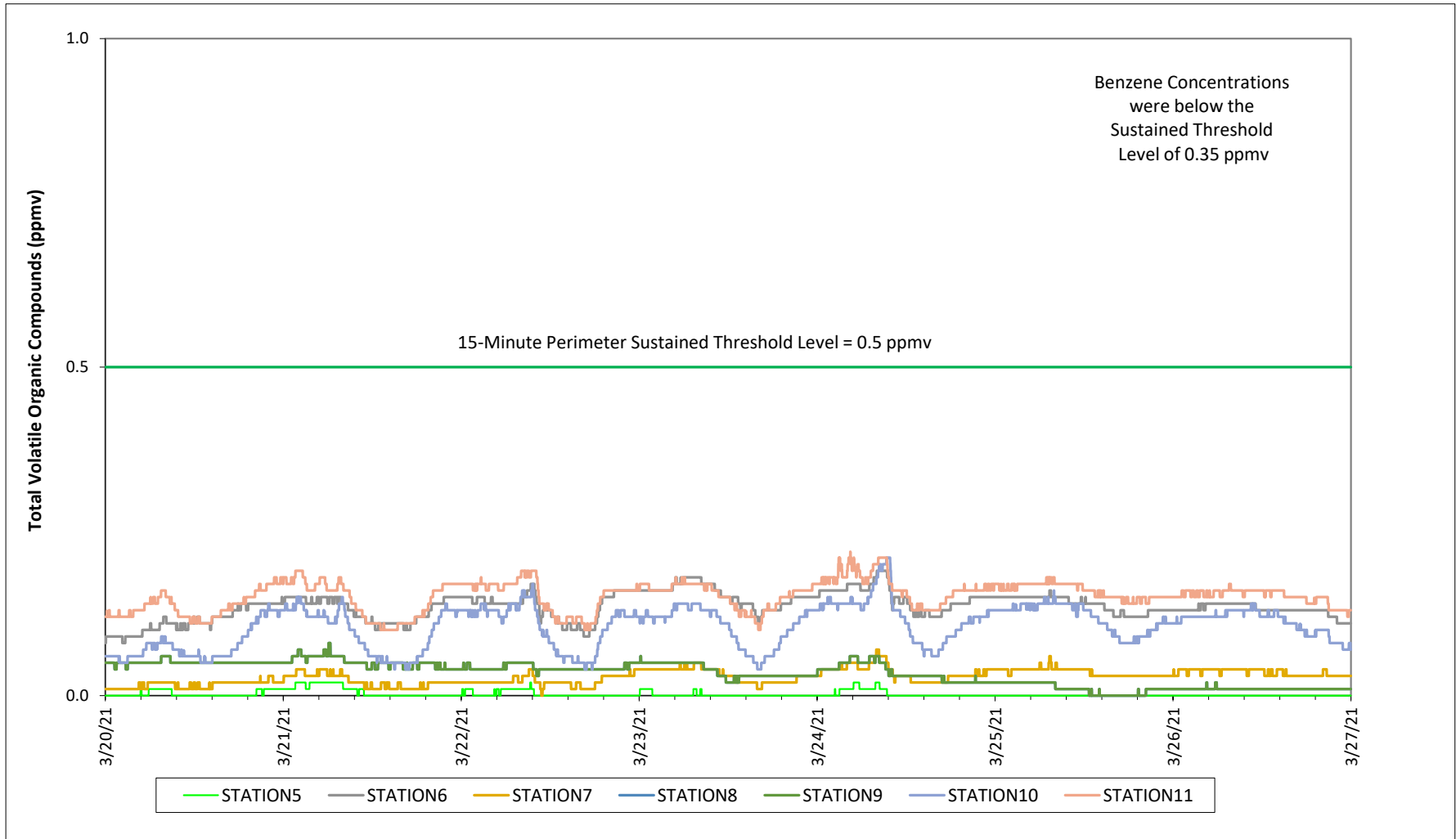
Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility

Air Quality Monitoring - Total Volatile Organic Compounds

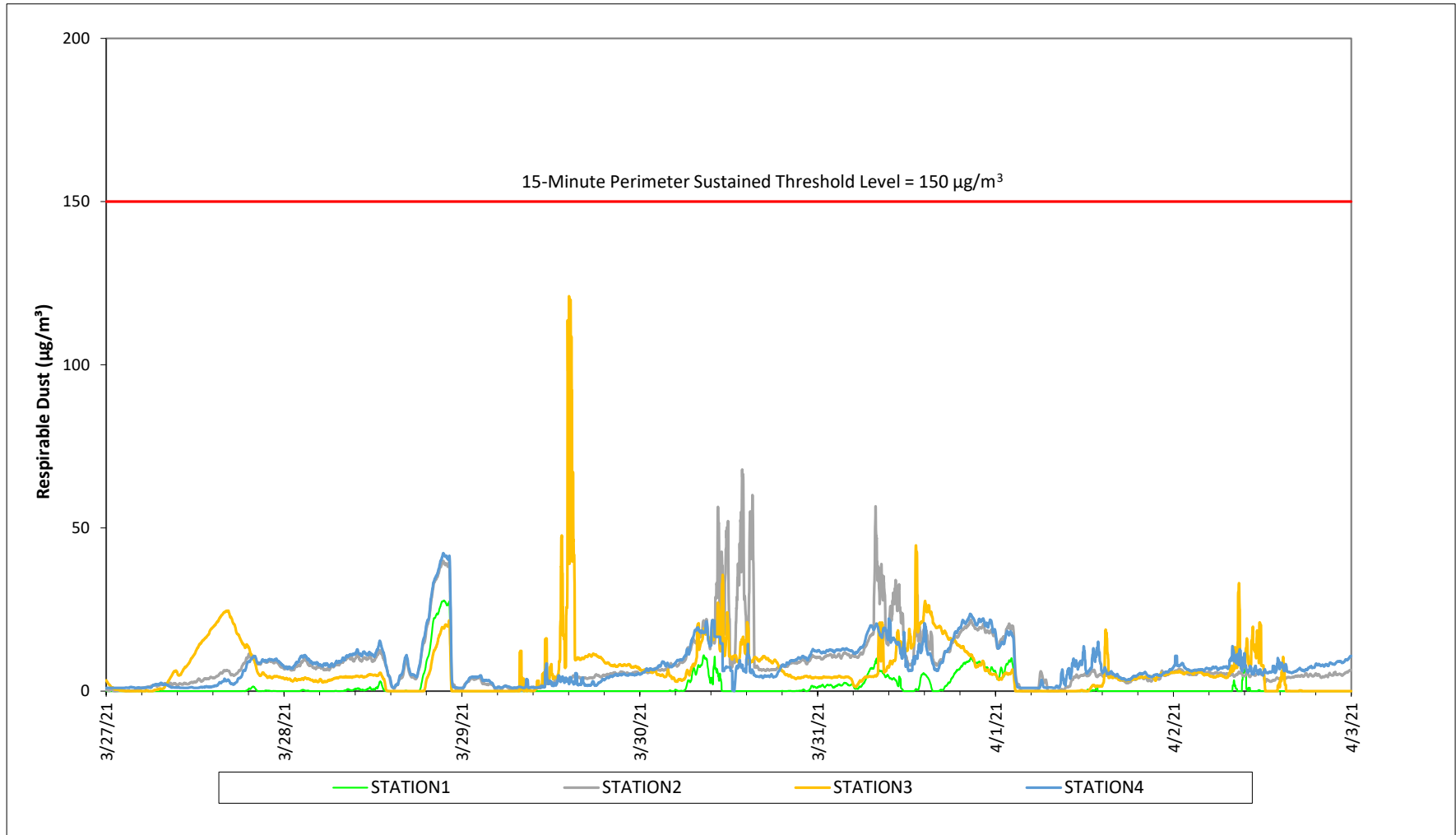


Prepared by National Grid for the Businesses and Residents Located Near the Former  
Tidewater Facility

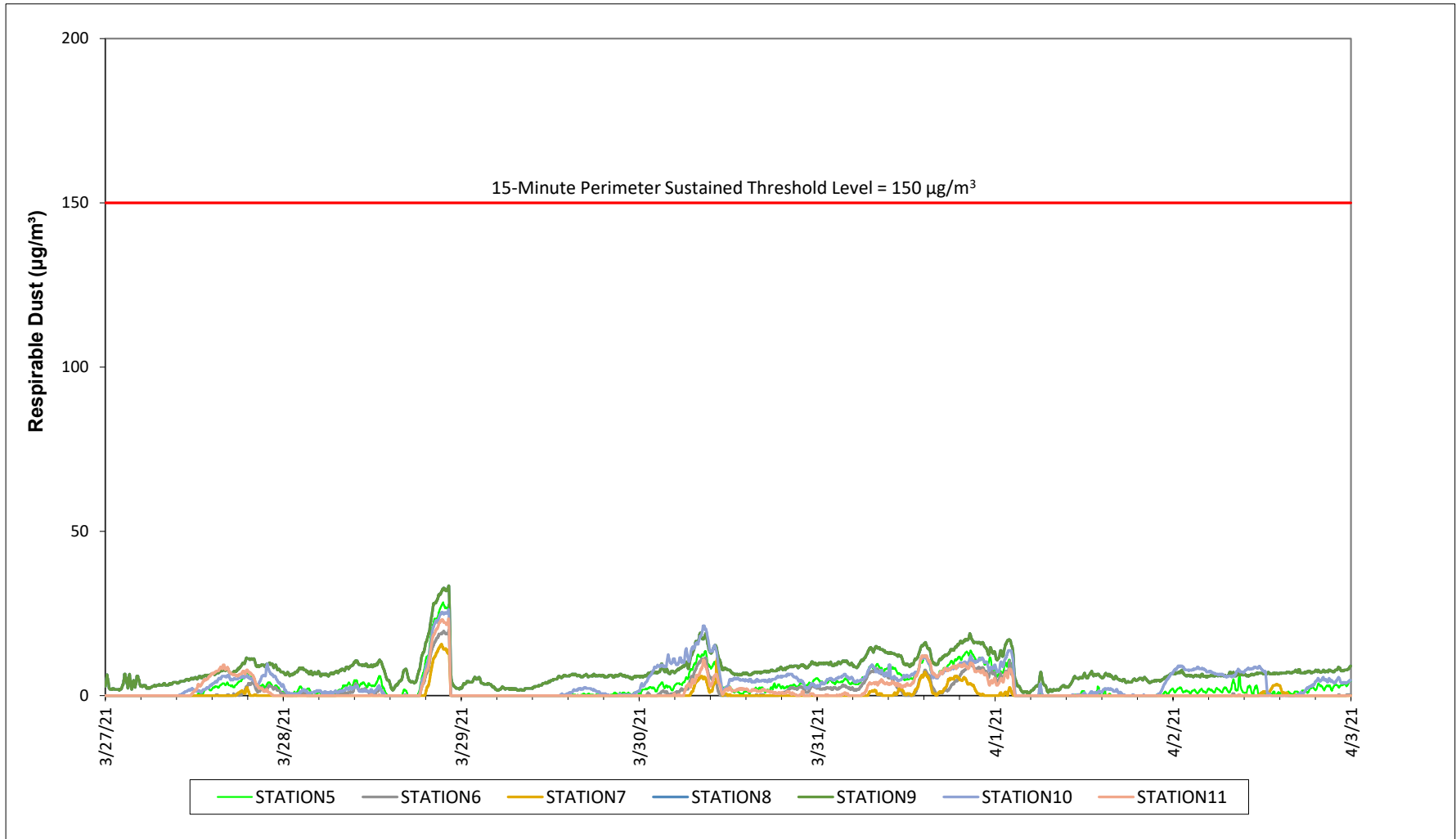
Air Quality Monitoring - Total Volatile Organic Compounds



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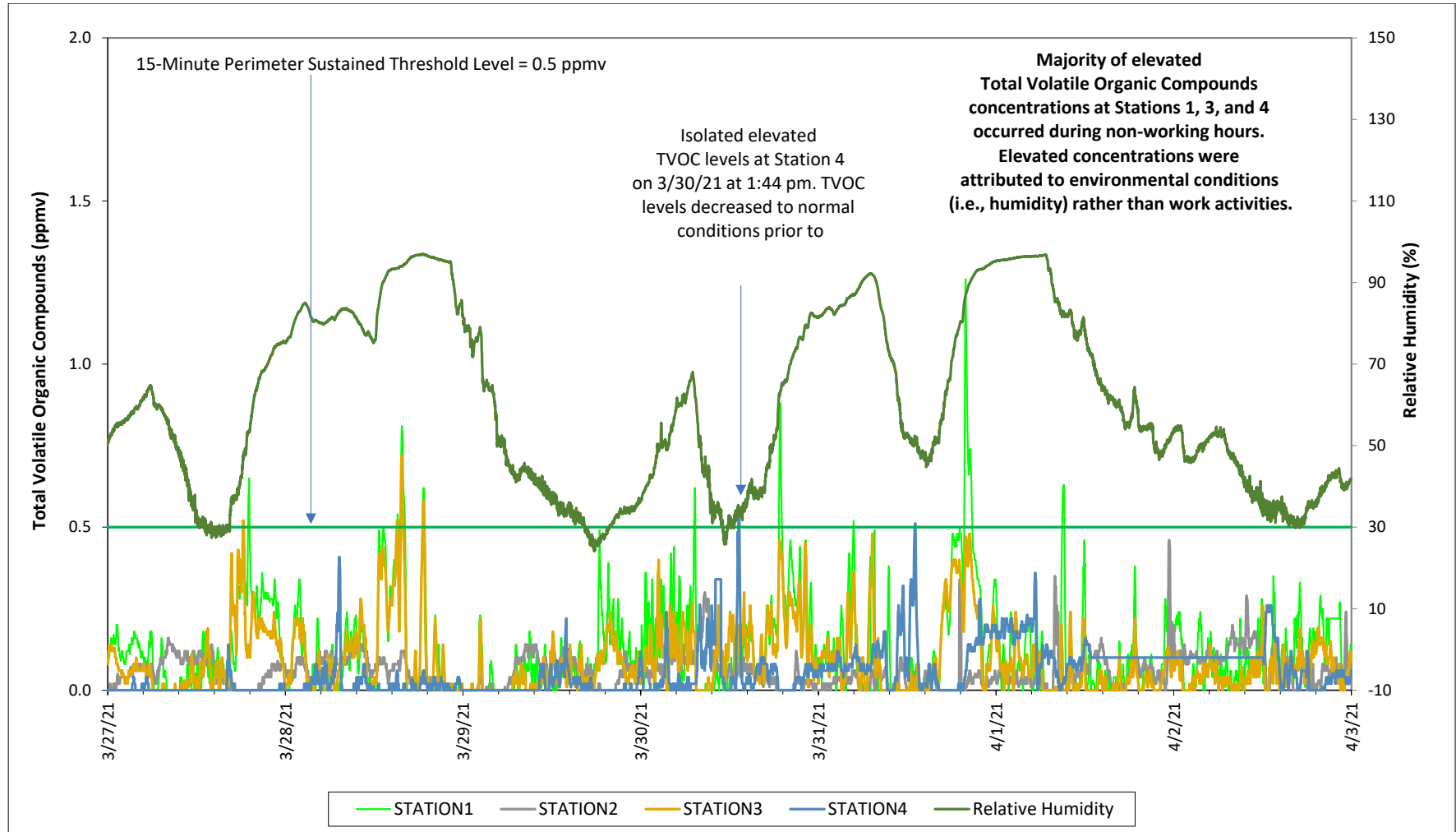


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Air Quality Monitoring - Respirable Dust



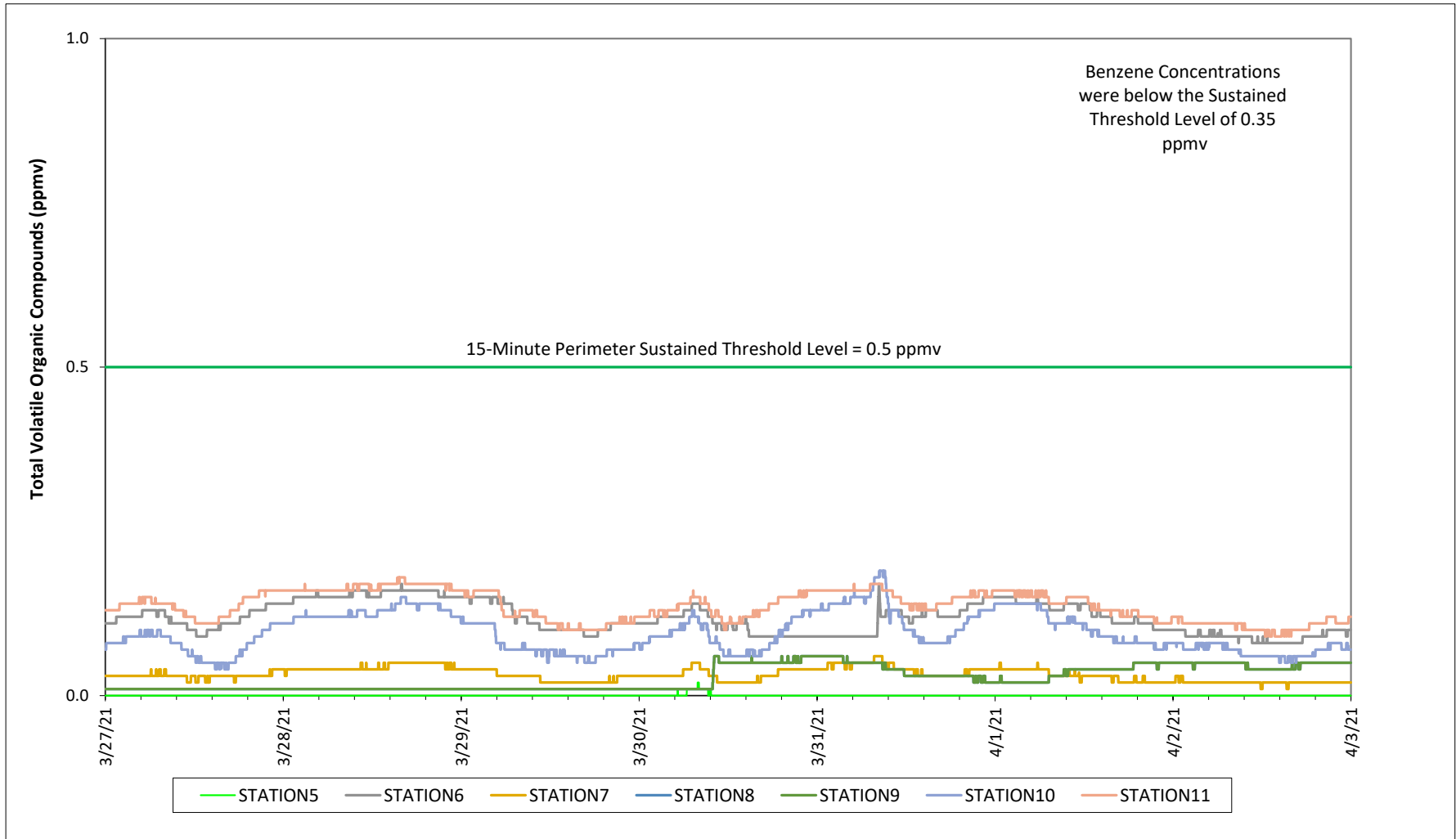
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Air Quality Monitoring - Total Volatile Organic Compounds



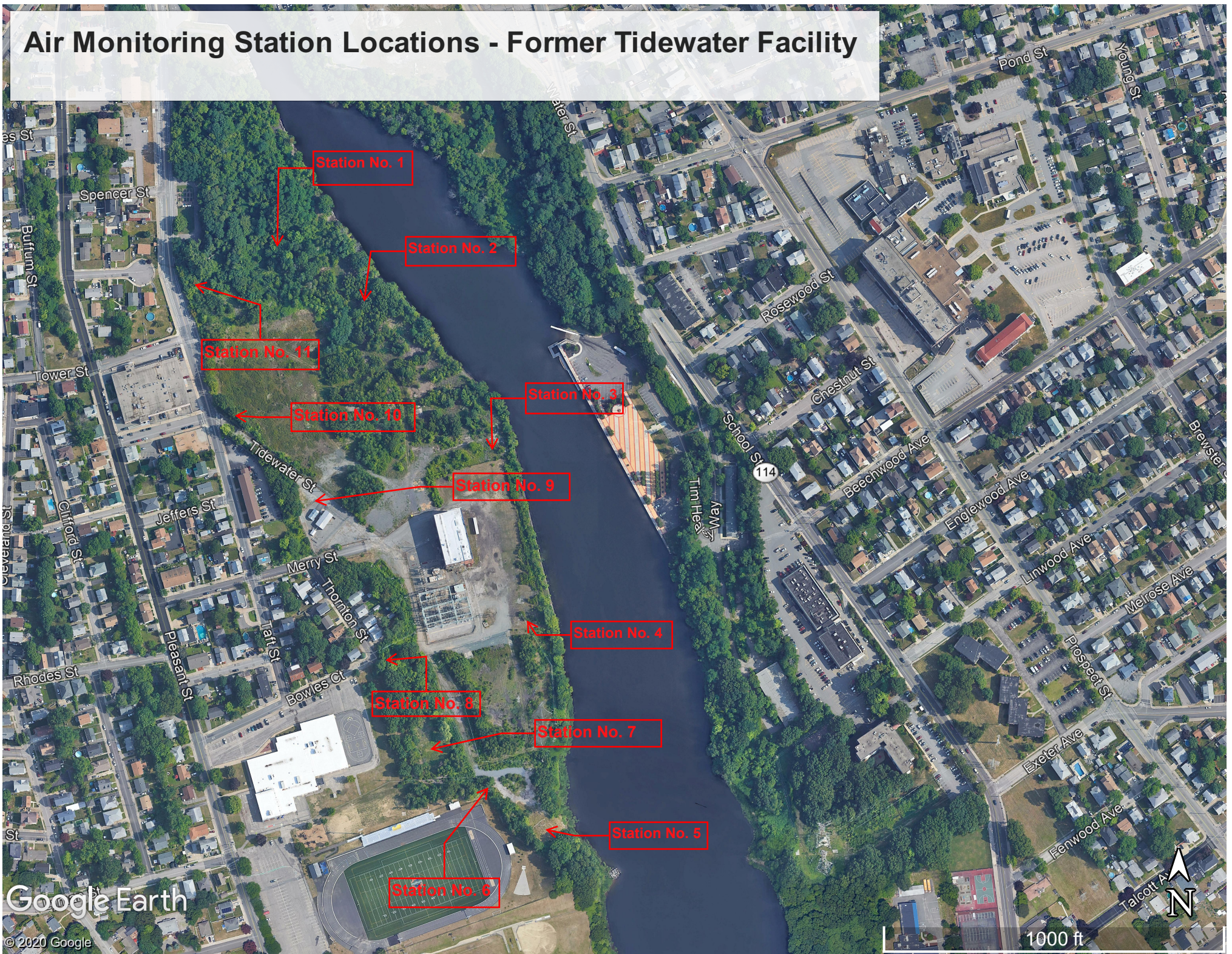
Prepared by National Grid for the Businesses and Residents Located Near the Former  
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Air Quality Monitoring - Total Volatile Organic Compounds





# Air Monitoring Station Locations - Former Tidewater Facility



Google Earth

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1000 ft





**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
<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.