



**GZA GeoEnvironmental, Inc.**  
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Providence, Rhode Island 02909  
401.421.4140 (fax) 401.751.8613

## TRANSMITTAL

To:	Rhode Island Department of Environmental Management
	Office of Waste Management
	235 Promenade Street
	Providence, Rhode Island 02908

Date: 7/22/19	Job No. 03.0033554.04
Attention: Mr. Joseph Martella	
Re: Liquefaction Facility Project	
STRAP Perimeter Air Quality Monitoring (AQM)	
121 Terminal Road/ 642 Allens Avenue	
Providence, Rhode Island	
Site Remediation File No. SR-28-1152	

### We are sending you:

<input type="checkbox"/> Shop Drawings	<input checked="" type="checkbox"/> Attached	<input type="checkbox"/> Change Order	<input type="checkbox"/> Samples
<input type="checkbox"/> Copy of Letter	<input type="checkbox"/> Prints	<input type="checkbox"/> Plans	<input type="checkbox"/> Specifications
<input type="checkbox"/> Under Separate Cover, the following Items:		via:	

### How Shipped:

<input checked="" type="checkbox"/> Via Email	<input type="checkbox"/> Courier	<input type="checkbox"/> Regular Mail	<input type="checkbox"/> Hand Delivered/Picked Up
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Description
Air Quality Monitoring (AQM) Results – Week of 7/15/19 (7/15/19, 7/16/19, 7/17/19, 7/18/19 and 7/19/19) AQM Station 1 Graph AQM Station 2 Graph AQM Station 3 Graph Roving Air Monitoring Unit Graph Summary Figure

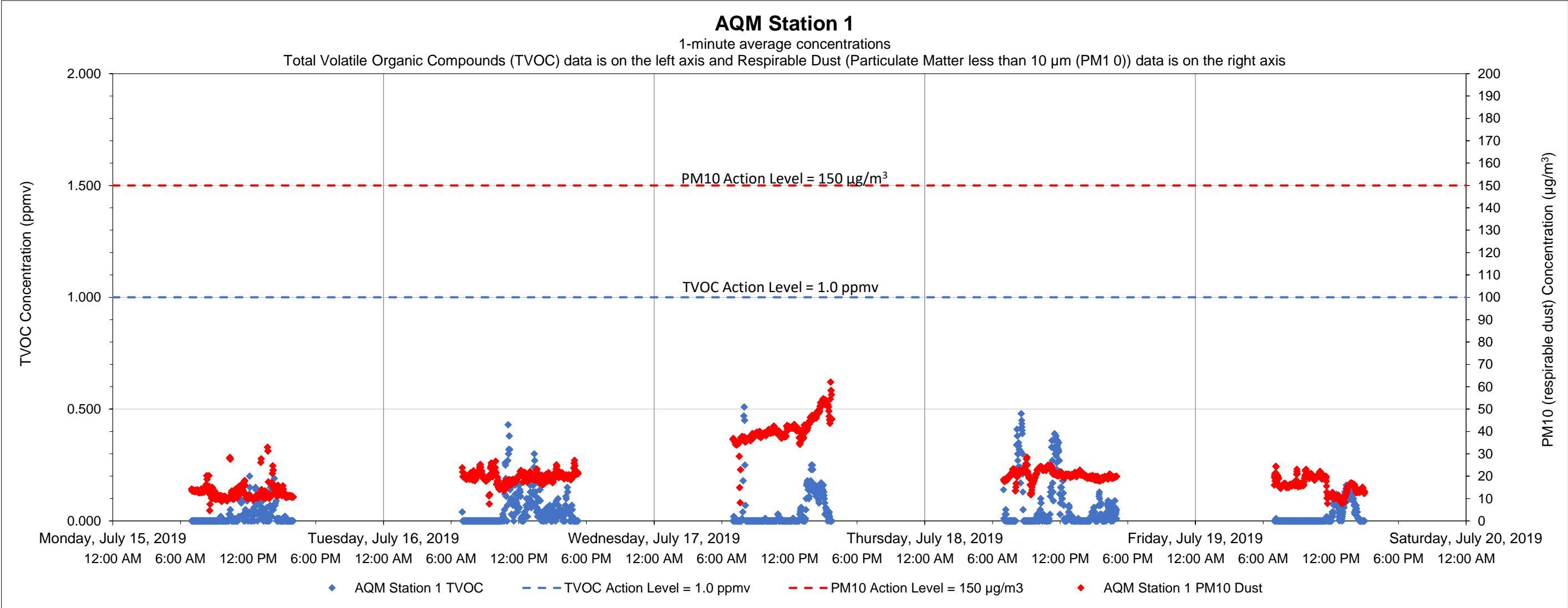
### THESE ARE TRANSMITTED as Checked Below:

<input type="checkbox"/> For Approval	<input type="checkbox"/> Approved as Submitted	<input type="checkbox"/> Resubmit Copies for Approval
<input checked="" type="checkbox"/> For Your Use	<input type="checkbox"/> Approved as Noted	<input type="checkbox"/> Submit Copies for Distribution
<input type="checkbox"/> As Requested	<input type="checkbox"/> Returned for Corrections	<input type="checkbox"/> Return Corrected Prints
<input type="checkbox"/> For Review and Comment		<input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US
<input type="checkbox"/> FOR BIDS DUE:		

### Comments:

Copy To:	Amy Willoughby - National Grid LNG LLC	Signed:	Sophia Narkiewicz, P.E.
	William Howard - National Grid LNG LLC		Project Manager

*If enclosures are not as noted, kindly notify us at once.*



Date	Time	Constituent	Observed Range of Sustained Readings	Response Actions Performed
None				

Equipment Notes
None

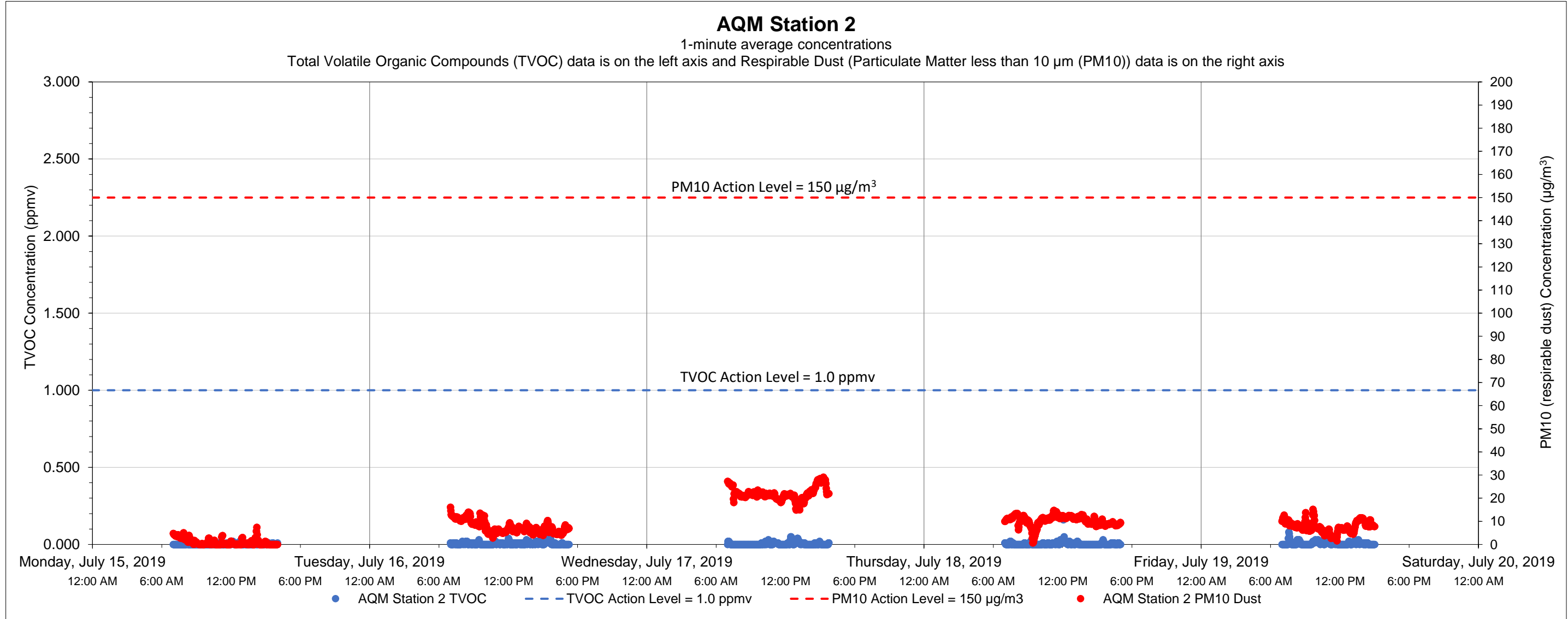
Data Summary Statistics		
TVOCs average concentration	0.04	ppm
TVOCs maximum concentration	0.51	ppm
TVOCs action level	1	ppm
PM10 average concentration	21.84	µg/m³
PM10 maximum concentration	62.11	µg/m³
PM10 action level	150	µg/m³

**Notes:**

1) Transient readings were conducted over a one minute time period. A reading is sustained if it is held for over a five minute time period.

2) The location of each AQM Station is presented on the attached summary figure.

3) Air quality monitoring performed in accordance with the May 12, 2017 Short Term Response Action Plan (STRAP), the October 11, 2017 STRAP Addendum (including Attachment N - Clarifications to the Proposed Air Monitoring Program for STRAP Activities) and the October 27, 2017 Short Term Response Action Approval Letter issued by RIDEM. Monitoring conducted during active STRAP activities.



Date	Time	Constituent	Observed Range of Sustained Readings	Response Actions Performed
None				

Equipment Notes
None

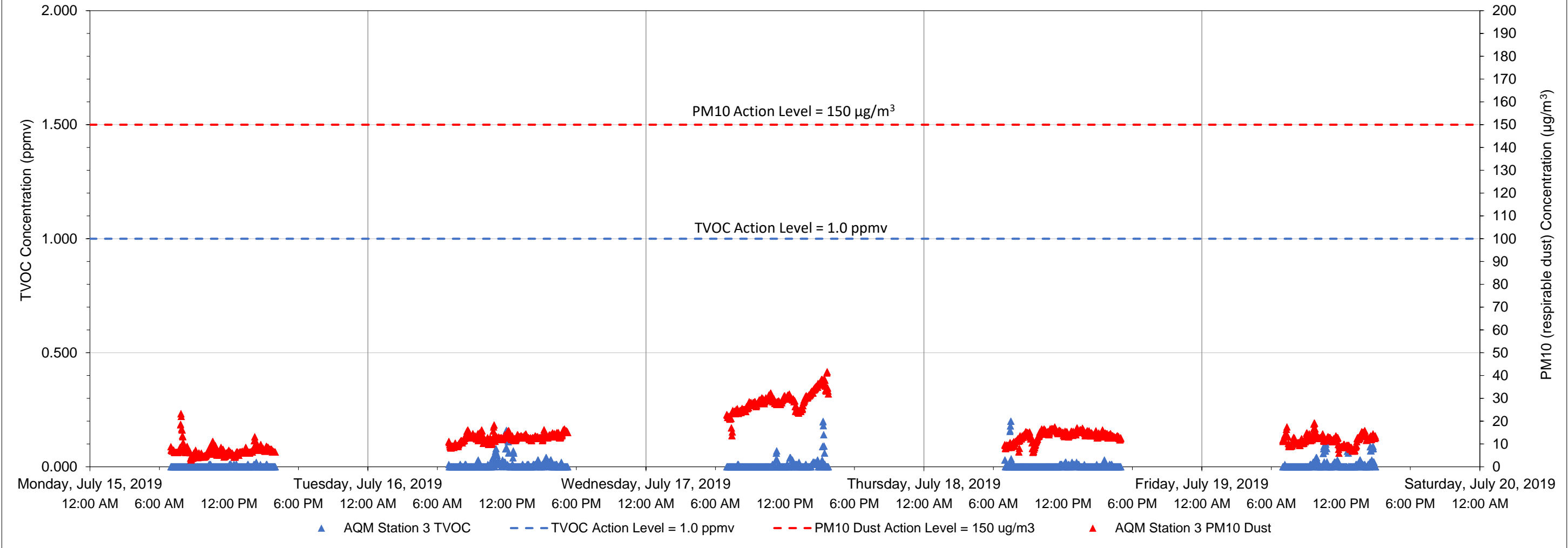
Data Summary Statistics		
TVOCs average concentration	0.01	ppm
TVOCs maximum concentration	0.18	ppm
TVOCs action level	1	ppm
PM10 average concentration	9.56	µg/m³
PM10 maximum concentration	29.11	µg/m³
PM10 action level	150	µg/m³

- Notes:**
- 1) Transient readings were conducted over a one minute time period. A reading is sustained if it is held for over a five minute time period.
  - 2) The location of each AQM Station is presented on the attached summary figure.
  - 3) Air quality monitoring performed in accordance with the May 12, 2017 Short Term Response Action Plan (STRAP), the October 11, 2017 STRAP Addendum (including Attachment N - Clarifications to the Proposed Air Monitoring Program for STRAP Activities) and the October 27, 2017 Short Term Response Action Approval Letter issued by RIDEM. Monitoring conducted during active STRAP activities.

AQM Station 3

1-minute average concentrations

Total Volatile Organic Compounds (TVOC) data is on the left axis and Respirable Dust (Particulate Matter less than 10 µm (PM10)) data is on the right axis



Date	Time	Constituent	Observed Range of Sustained Readings	Response Actions Performed
None				

Equipment Notes
None

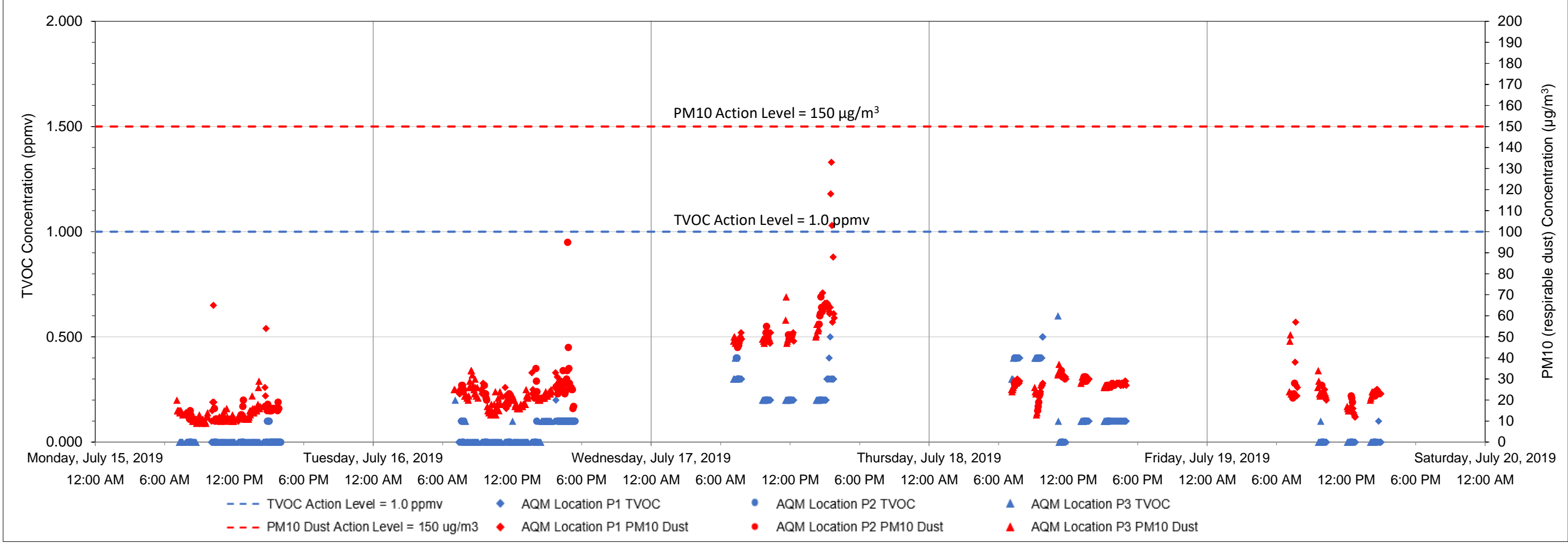
Data Summary Statistics		
TVOCs average concentration	0.01	ppm
TVOCs maximum concentration	0.20	ppm
TVOCs action level	1	ppm
PM10 average concentration	14.70	µg/m <sup>3</sup>
PM10 maximum concentration	41.72	µg/m <sup>3</sup>
PM10 action level	150	µg/m <sup>3</sup>

- Notes:**
- 1) Transient readings were conducted over a one minute time period. A reading is sustained if it is held for over a five minute time period.
  - 2) The location of each AQM Station is presented on the attached summary figure.
  - 3) Air quality monitoring performed in accordance with the May 12, 2017 Short Term Response Action Plan (STRAP), the October 11, 2017 STRAP Addendum (including Attachment N - Clarifications to the Proposed Air Monitoring Program for STRAP Activities) and the October 27, 2017 Short Term Response Action Approval Letter issued by RIDEM. Monitoring conducted during active STRAP activities.

Roving Air Monitoring Unit

3-minute average concentrations

Total Volatile Organic Compounds (TVOC) data is on the left axis and Respirable Dust (Particulate Matter less than 10 µm (PM10)) data is on the right axis



Date	Time	Constituent	Observed Range of Sustained Readings	Response Actions Performed
None				

Equipment Notes
None

Data Summary Statistics		
TVOCs average concentration	0.08	ppm
TVOCs maximum concentration	0.60	ppm
TVOCs action level	1	ppm
PM10 average concentration	25.93	µg/m <sup>3</sup>
PM10 maximum concentration	133	µg/m <sup>3</sup>
PM10 action level	150	µg/m <sup>3</sup>

- Notes:**
- 1) Transient readings were conducted over a three minute time period. A reading is sustained if it is held for over a five minute time period.
  - 2) The location of each AQM location is presented on the attached summary figure. This graph depicts data collected by the roving unit.
  - 3) Air quality monitoring performed in accordance with the May 12, 2017 Short Term Response Action Plan (STRAP), the October 11, 2017 STRAP Addendum (including Attachment N - Clarifications to the Proposed Air Monitoring Program for STRAP Activities) and the October 27, 2017 Short Term Response Action Approval Letter issued by RIDEM. Monitoring conducted during active STRAP activities.



2018 - GZA GeoEnvironmental, Inc. GZA-J:\ENV\33554.60.MSK\FIGURES\CAD\DWGS\33554.60\_11X17 AERIAL.DWG ANSI B - 17X11 DECEMBER 19, 2018 USA THERIAULT



**LEGEND:**

- 642 ALLENS AVENUE FORMER MGP SITE
- PROJECT WORK SITE
- STRAP AREA (LIMITS OF GROUNDWATER AND SOIL DISTURBANCE)
- AIR QUALITY MONITORING (AQM) STATION
- HANDHELD MONITORING LOCATION

- REFERENCE NOTES:**
- BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS PUBLISHED IN FEBRUARY 2018.
  - SITE BOUNDARIES ARE APPROXIMATE.
  - PERIMETER AIR MONITORING PROGRAM CONDUCTED AS DESCRIBED IN THE MAY 12, 2017 SHORT TERM RESPONSE ACTION PLAN (STRAP) AND OCTOBER 11, 2017 STRAP ADDENDUM, WHICH WERE APPROVED BY RIDEM WITH THE OCTOBER 27, 2017 STRAP APPROVAL.

0100'200'400'

SCALE IN FEET 1" = 200'

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NATIONAL GRID LIQUEFACTION FACILITY PERIMETER AIR MONITORING PROGRAM PROVIDENCE, RHODE ISLAND			
Summary Figure Week of 7-15-19			
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: nationalgrid	
PROJ MGR: SDN	REVIEWED BY: MSK	CHECKED BY: MSK	FIGURE
DESIGNED BY: SDN	DRAWN BY: LDT	SCALE: AS NOTED	1
DATE: W/O 7-15-19	PROJECT NO. 33554.04	REVISION NO. 0	SHEET NO.