TRANSMITTAL

GZA GeoEnvironmental, Inc.
188 Valley Street, Suite 300
Providence, Rhode Island 02909
401.421.4140  (fax) 401.751.8613

Date: 2/7/2022  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

To: Rhode Island Department of Environmental Management
   Office of Land Revitalization and Sustainable Materials
   Management
   235 Promenade Street
   Providence, Rhode Island 02908

We are sending you:

[ ] Shop Drawings  [X] Attached  [ ] Change Order  [ ] Samples

[ ] Copy of Letter  [ ] Prints  [ ] Plans  [ ] Specifications

[ ] Under Separate Cover, the following Items: via:

How Shipped:

[ ] Via Email  [ ] Courier  [ ] Regular Mail  [ ] Hand Delivered/Picked Up

Description
Air Quality Monitoring (AQM) Results – Week of 01/31/2022 (01/31/2022, 02/01/2022, 02/03/2022, 02/04/2022, and 02/06/2022)
AQM Station 1 Graph  AQM Station 4 Graph
AQM Station 2 Graph  AQM Station 5 Graph
AQM Station 3 Graph  AQM Station 6 Graph
Summary Figure

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[ ] For Review and Comment
[ ] FOR BIDS DUE: PRINTER RETURNED AFTER LOAN TO US

Comments:

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

If enclosures are not as noted, kindly notify us at once.
**Liquefaction Facility Project - STRAP Perimeter Air Quality Monitoring (AQM)**

121 Terminal Road / 642 Allens Avenue, Providence, Rhode Island

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### Data Summary Statistics

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOCs average concentration</td>
<td>0.08 ppmv</td>
</tr>
<tr>
<td>TVOCs maximum concentration</td>
<td>6.59 ppmv</td>
</tr>
<tr>
<td>TVOCs action level</td>
<td>1.0 ppmv</td>
</tr>
<tr>
<td>PM10 average concentration</td>
<td>18.02 µg/m³</td>
</tr>
<tr>
<td>PM10 maximum concentration</td>
<td>53.41 µg/m³</td>
</tr>
<tr>
<td>PM10 action level</td>
<td>150 µg/m³</td>
</tr>
</tbody>
</table>

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### 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.

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### Equipment Notes

2/2/2022 - Equipment error caused sustained action level exceedances. A handheld PID was utilized to confirm that the station’s readings were inaccurate, and the site was checked for odors. Troubleshooting was performed to resolve error. Equipment was removed from service and replaced.

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### Graphical Representation

- **TVOC Action Level = 1.0 ppmv**
- **PM10 Action Level = 150 µg/m³**

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### AQM Station 1

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.

**2/2/2022** 8:25 to 8:36, 1.56 to 4.72 ppmv; 8:44 to 9:01, 1.14 to 6.59 ppmv. Readings related to equipment error. Readings were sustained. Prevailing winds were from the northeast of the site. No odors noted. A handheld PID was used to confirm readings were inaccurate. Equipment was removed from service and replaced.

---

### Table: Observed Range of Sustained Readings

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2/2022</td>
<td>8:25 to 8:36</td>
<td>TVOC</td>
<td>1.56 to 4.72 ppmv</td>
<td>Equipment removed from service and recalibrated</td>
</tr>
<tr>
<td>2/2/2022</td>
<td>8:44 to 9:01</td>
<td>TVOC</td>
<td>1.14 to 6.59 ppmv</td>
<td>Equipment removed from service and recalibrated</td>
</tr>
<tr>
<td>2/2/2022</td>
<td>10:50 to 11:22</td>
<td>TVOC</td>
<td>1.10 to 4.95 ppmv</td>
<td>Equipment removed from service and recalibrated</td>
</tr>
</tbody>
</table>

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**TVOC Concentration (ppmv)**

**PM10 (respirable dust) Concentration (µg/m³)**

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**Monday, January 31, 2022**

**Tuesday, February 1, 2022**

**Wednesday, February 2, 2022**

**Thursday, February 3, 2022**

**Friday, February 4, 2022**

**Saturday, February 5, 2022**

**Sunday, February 6, 2022**

**Monday, February 7, 2022**

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No work conducted.
### TVOC Concentration (ppmv)

<table>
<thead>
<tr>
<th>Date</th>
<th>TVOC Concentration (ppmv)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### PM10 Concentration (µg/m³)

<table>
<thead>
<tr>
<th>Date</th>
<th>PM10 Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### 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.

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**AQM Station 2**

1-minute average concentrations

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Volatile Organic Compounds (TVOC)</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Respirable Dust (Particulate Matter less than 10 µm (PM10))</td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

TVOC Action Level = 1.0 ppmv

PM10 Action Level = 150 µg/m³

No work conducted

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**Data Summary Statistics**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Average</th>
<th>Maximum</th>
<th>Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOCs</td>
<td>0.04 ppm</td>
<td>0.64 ppm</td>
<td>1.0 ppmv</td>
</tr>
<tr>
<td>PM10</td>
<td>15.20 µg/m³</td>
<td>76.39 µg/m³</td>
<td>150 µg/m³</td>
</tr>
</tbody>
</table>

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**Equipment Notes**

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

---

**Date & Time Summary**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, January 31, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Tuesday, February 1, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Wednesday, February 2, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Thursday, February 3, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Friday, February 4, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Saturday, February 5, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sunday, February 6, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Monday, February 7, 2022</td>
<td>12:00 AM - 6:00 AM</td>
<td>TVOCs</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Prepared by GZA on behalf of National Grid LNG LLC
Liquefaction Facility Project -
STRAP Perimeter Air Quality Monitoring (AQM)
121 Terminal Road / 642 Allens Avenue, Providence, Rhode Island

**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

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2/2022</td>
<td>15:45 to 15:50</td>
<td>TVOC</td>
<td>1.04 to 1.25 ppmv</td>
<td>No actions taken because the readings were not related to site work.</td>
</tr>
</tbody>
</table>

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.

**Data Summary Statistics**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Average Concentration</th>
<th>Maximum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOCs</td>
<td>0.06 ppm</td>
<td>1.25 ppm</td>
</tr>
<tr>
<td>TVOCs action level</td>
<td>1 ppm</td>
<td>PM10 average concentration</td>
</tr>
<tr>
<td>PM10 action level</td>
<td>150 µg/m³</td>
<td>PM10 maximum concentration</td>
</tr>
</tbody>
</table>

**Equipment Notes**
None

**PM10 (respirable dust) Concentration (µg/m³)**
TVOC Concentration (ppmv)

- TVOC Action Level = 1.0 ppmv
- PM10 Action Level = 150 µg/m³
Prepared by GZA on behalf of National Grid LNG LLC
Liquefaction Facility Project -
STRAP Perimeter Air Quality Monitoring (AQM)
121 Terminal Road / 642 Allens Avenue, Providence, Rhode Island

**AQM Station 4**

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.

PM10 Action Level = 150 µg/m³
TVOC Action Level = 1.0 ppmv

**Equipment Notes**

- None

**Data Summary Statistics**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOCs average concentration</td>
<td>0.04 ppm</td>
<td>None</td>
</tr>
<tr>
<td>TVOCs maximum concentration</td>
<td>0.81 ppm</td>
<td>None</td>
</tr>
<tr>
<td>PM10 average concentration</td>
<td>17.76 µg/m³</td>
<td>None</td>
</tr>
<tr>
<td>PM10 maximum concentration</td>
<td>49.25 µg/m³</td>
<td>None</td>
</tr>
<tr>
<td>PM10 action level</td>
<td>150 µg/m³</td>
<td>None</td>
</tr>
</tbody>
</table>

**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.
Notes:
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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 6
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.

TVOC Action Level = 1.0 ppmv
PM10 Action Level = 150 µg/m³

No work conducted

Data Summary Statistics

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Observed Range of Sustained Readings</th>
<th>Response Actions Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOCs average concentration</td>
<td>0.07 ppmv</td>
<td>None</td>
</tr>
<tr>
<td>TVOCs maximum concentration</td>
<td>0.57 ppmv</td>
<td>None</td>
</tr>
<tr>
<td>TVOCs action level</td>
<td>1 ppmv</td>
<td>None</td>
</tr>
<tr>
<td>PM10 average concentration</td>
<td>9.47 µg/m³</td>
<td>No work conducted</td>
</tr>
<tr>
<td>PM10 maximum concentration</td>
<td>35.79 µg/m³</td>
<td>None</td>
</tr>
<tr>
<td>PM10 action level</td>
<td>150 µg/m³</td>
<td>None</td>
</tr>
</tbody>
</table>

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.
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LEGEND:

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

REFERENCE NOTES:
1. BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS PUBLISHED IN FEBRUARY 2018.
2. SITE BOUNDARIES ARE APPROXIMATE.
3. 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.

NATIONAL GRID LIQUEFACTION FACILITY
PERIMETER AIR MONITORING PROGRAM
PROVIDENCE, RHODE ISLAND

0 100 200 300 400'

SCALE IN FEET 1" = 200'

NATIONAL GRID LIQUEFACTION FACILITY
PERIMETER AIR MONITORING PROGRAM
PROVIDENCE, RHODE ISLAND

Summary Figure
Week of 01-31-2022