



455 Winding Brook Drive
Suite 201
Glastonbury, CT 06033

Ph: (860) 368-5300
Fax: (860) 368-5307

Memorandum

To: Andrew Prophete (National Grid NY)

From: Brian Skelly

Copy to: Richard Dana and R. Scott Deyette (NYSDEC)
Chris Schroer (EA Engineering)
Andrew Rizk (Louis Berger)
Stephanie Selmer (NYSDOH)
Dave Boram and Thor Helgason (de maximis)
Ted Leissing (National Grid NY)
Shail Pandya (AECOM)
Ronell Marshall and Clayton John (GEI Consultants, Inc.)

Date: March 25, 2013

Regarding: Weekly Community Air Monitoring Report
Clifton Former MGP Site - Operable Unit 2 (OU-2)
March 16, 2013 through March 22, 2013

Dear Andrew:

This report includes a summary of data collected during implementation of the Community Air Monitoring Plan (CAMP) at the Clifton Former MGP Site Operable Unit 2 (OU-2) in Staten Island, New York. Data collected are discussed in relation to remediation activities that occurred between March 16, 2013 and March 22, 2013.

There were no fifteen-minute exceedances of the Total Volatile Organic Compounds (TVOC), Particulate Matter (PM-10) [dust], or odor action levels associated with ground intrusive site activities during this reporting period. The tables and figures accompanying this report summarize air monitoring results related to the action levels described by the CAMP Work Plan (AECOM, 2011 and GEI, 2012).

The following information is summarized in this report:

- Site construction activities
- Daily maximum 15-minute average concentrations of TVOC and PM-10 (dust) at each fixed station
- Elevated concentrations (if any)
- Meteorological data

Site Construction Activities

Construction activities during this reporting period included:

- Disassembled Temporary Fabric Structure (TFS)
- Disassembled waste water treatment plant in OU1
- Emptied waste drums into tarped roll off dumpster
- Fueled construction Vehicles with fuel truck onsite
- Installed NAPL recovery wells
- Installed perimeter fence around OU2
- Removed construction vehicle offsite via flatbed truck
- Cut jersey barriers using circular saw
- Removed jersey barriers along Willow Avenue
- Removed jersey barriers along Bay Street
- Stockpiled former perimeter fence
- Relocated CAMP unit FAM#4

Data collection

Real-time fixed station monitoring for TVOC and PM-10 (dust) was performed on the OU-2 site perimeter at six locations (FAM#1 through FAM#6. Four AirLogics Classic stations equipped with gas chromatographs (GCs) were operated at FAM#2, FAM#3, FAM#4, and FAM#5 and two AirLogics Light stations were operated at FAM#1 and FAM#6.

Table 1 summarizes the target concentrations for action levels and Site Conditions described by the CAMP. Table 2 provides a daily summary of maximum fifteen-minute average ambient air concentrations from each station. The daily reports appended to this report depict more detailed and time-specific comparison of upwind and downwind measurements and site activities that is needed to determine the Site Condition.

Upwind and downwind ambient air verification samples were collected on March 20, 2013. Meteorological data collected at the on-site weather station are included in this report as Figures 1 through 4 which show a directional wind rose for the period and temperature, relative humidity, and wind speed time series for the period.

If you have any questions regarding the information in this report, please contact me.

Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2 (OU-2)
March 16, 2013 through March 22, 2013
March 25, 2013
Page 3

References

AECOM (2011). Appendix A of CERP Community Air Monitoring Plan (CAMP) Former Manufactured Gas Plant Operable Unit - 2 Remediation. Clifton, New York. August.

GEI Consultants, Inc (2012). Community Air Monitoring Plan: Clifton Former Manufactured Gas Plant Site – Operable Unit 2, Borough of Staten Island, New York. February.

New York State Department of Environmental Conservation (2010). DER-10 / Technical Guidance for Site Remediation and Investigation. Washington: Division of Environmental Remediation, December. Appendix 1-A. May.

Table 1 - Action Levels and Site Conditions
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

| | Alert Level | Action Level | Site Condition 1 | Site Condition 2 | Site Condition 3 |
|----------------------------|-----------------------|-----------------------|-------------------------|--|-----------------------------|
| TVOC (15-minute) | 3.7 ppm | 5.0 ppm | < 3.7 ppm | ≥ 3.7 ppm, < 5.0 ppm | ≥ 5.0 ppm |
| TVOC (1-minute) | NA | 25 ppm | < 25 ppm | NA | ≥ 25 ppm |
| PM-10 (15-minute) | 100 ug/m ³ | 150 ug/m ³ | < 100 ug/m ³ | ≥ 100 ug/m ³ , < 150 ug/m ³ | ≥ 150 ug/m ³ |
| Odor (15-minute) | Odors / Complaints | NA | No odors | NA | 3 (n-butanol) |
| HCN (15-minute) | Visual Detection | NA | < 0.6 ppm | ≥ 0.6 ppm (4-gas meter) | ≥ 0.6 ppm (Draeger tube) |
| Naphthalene (15-minute) | NA | NA | < 440 ug/m ³ | ≥ 330 ug/m ³ , < 440 ug/m ³ | ≥ 440 ug/m ³ |

Notes:

¹ Alert Levels are not established by the NYSDOH or NYSDEC and are internally established concentration levels for total volatile organic compounds. Alert Levels are set below the levels established by the NYSDOH so that actions can be taken prior to exceeding a NYSDOH threshold. An Alert Level serves as a screening tool to trigger contingent measures if necessary, to assist in minimizing off-site transport of contaminants during remedial activities

² Response Levels and Action Levels are not defined in Appendix 1A of the New York State Department of Environmental Conservation *DER-10 / Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010)

ug/m³ - micrograms per cubic meter

ppmv - parts per million by volume

TVOC - total volatile organic compounds

PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter

HCN - hydrogen cyanide

NA - not applicable

Table 2. Daily Maximum 15-Minute Average Concentrations of TVOC and PM-10
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

| Date | TVOC | | | | | | PM-10 | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|-------|
| | (ppm) | | | | | | (ug/m ³) | | | | | |
| | FAM#1 | FAM#2 | FAM#3 | FAM#4 | FAM#5 | FAM#6 | FAM#1 | FAM#2 | FAM#3 | FAM#4 | FAM#5 | FAM#6 |
| 3/16/2013 | 0.4 | 0.2 | 0.1 | ND | 0.2 | 0.1 | 48 | 17 | 9 | 10 | 20 | 12 |
| 3/17/2013 | 0.2 | 0.2 | 0.0 | ND | 0.2 | 0.2 | 42 | 18 | 10 | 13 | 21 | 11 |
| 3/18/2013 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 18 | 19 | 3 | 12 | 13 | 10 |
| 3/19/2013 | 0.0 | 0.5 | 0.1 | 0.1 | 0.4 | 0.1 | 37 | 13 | 4 | 11 | 14 | 13 |
| 3/20/2013 | 0.0 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 28 | 11 | 3 | 5 | 19 | 41 |
| 3/21/2013 | 0.0 | 0.3 | 0.1 | 0.4 | 0.2 | 0.2 | 44 | 13 | 4 | 6 | 12 | 31 |
| 3/22/2013 | 0.0 | 0.4 | 0.1 | 0.3 | 1.0 | 0.3 | 32 | 15 | 2 | 7 | 19 | 34 |
| Average | 0.1 | 0.3 | 0.1 | 0.2 | 0.4 | 0.2 | 36 | 15 | 5 | 9 | 17 | 22 |
| Maximum | 0.4 | 0.5 | 0.2 | 0.4 | 1.0 | 0.3 | 48 | 19 | 10 | 13 | 21 | 41 |

Notes:

FAM - fixed air monitoring station location

ug/m³ - micrograms per cubic meter

ppmv - parts per million by volume

TVOC - total volatile organic compounds

PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter

ND: No Data recorded for TVOC at FAM#4 due to equipment malfunction

Figures 1-4
Meteorological Data
Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

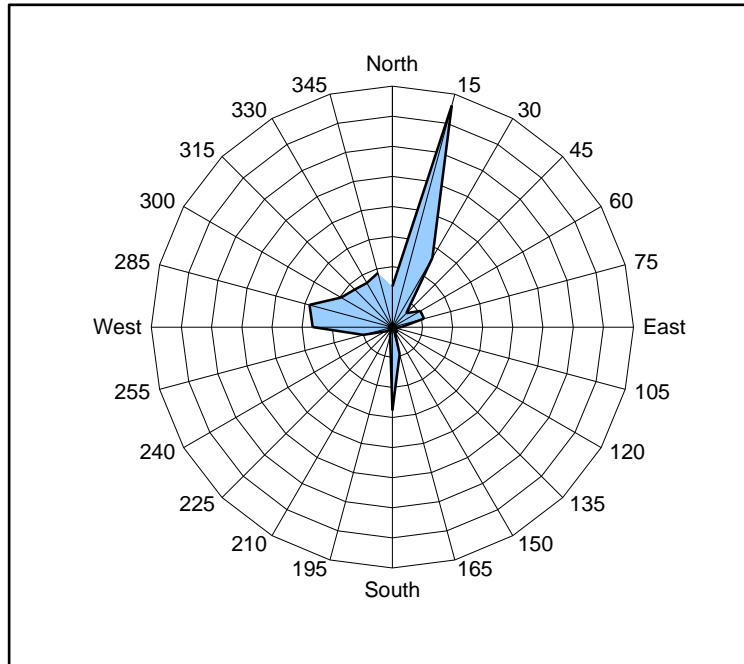


Figure 1. Wind rose for the period 03/16/13 through 03/22/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Wind direction data used to create the wind rose were calculated from 1-minute data.

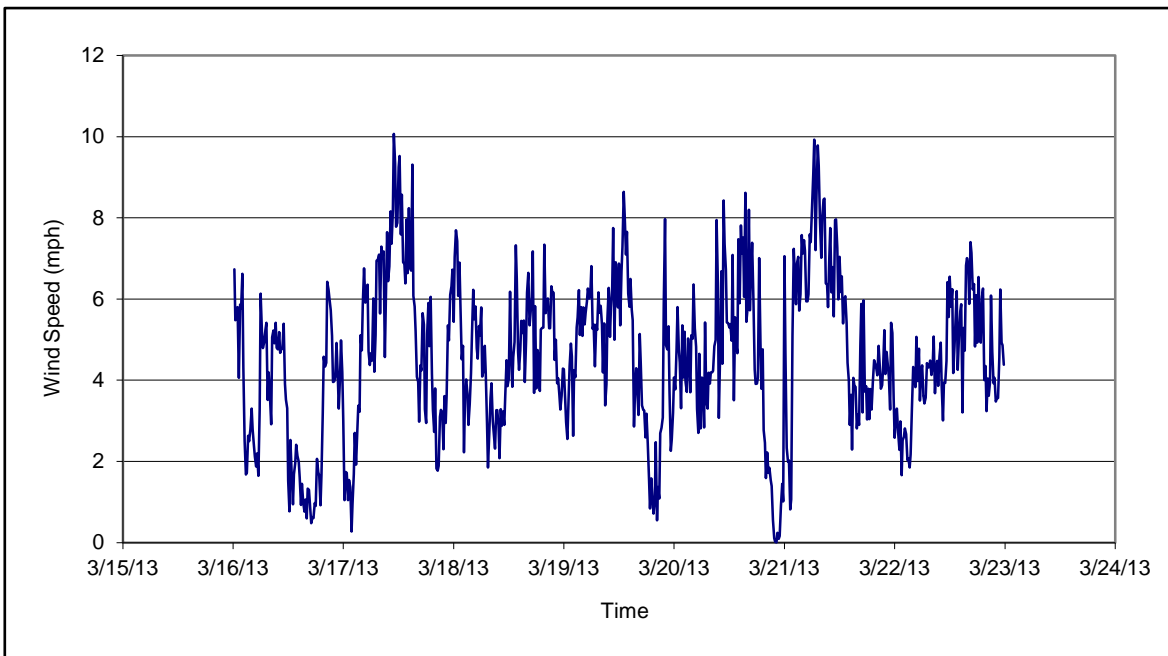


Figure 2. Wind speed for the period 03/16/13 through 03/22/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

Figures 1-4
Meteorological Data
Weekly Community Air Monitoring Report
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

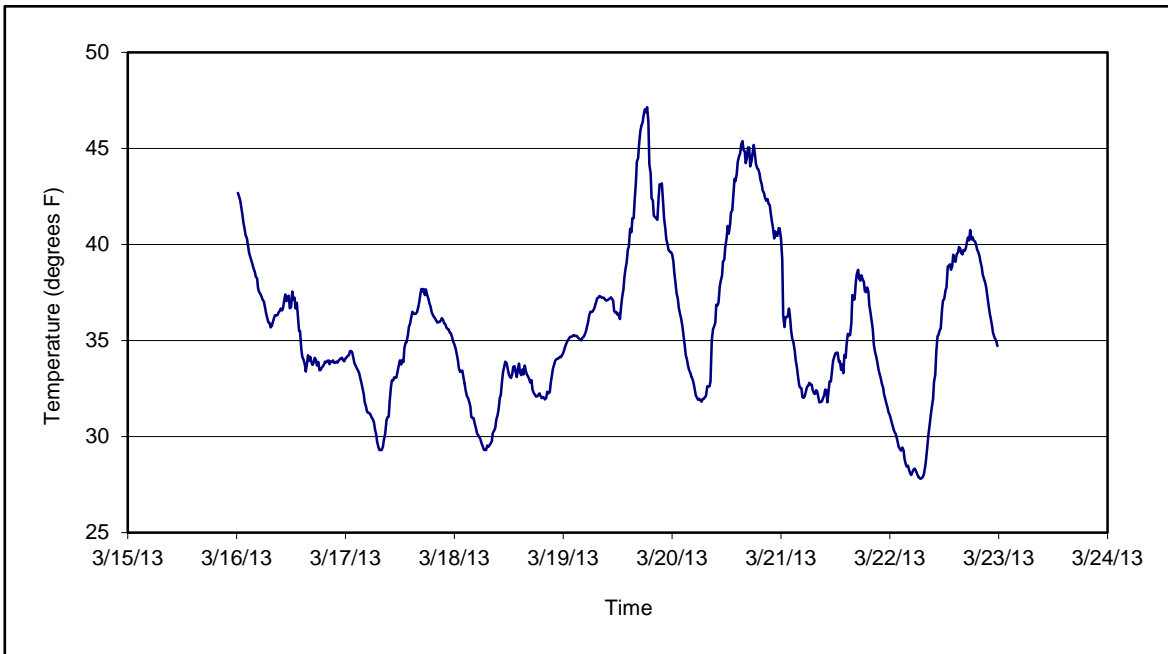


Figure 3. Temperature for the period 03/16/13 through 03/22/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

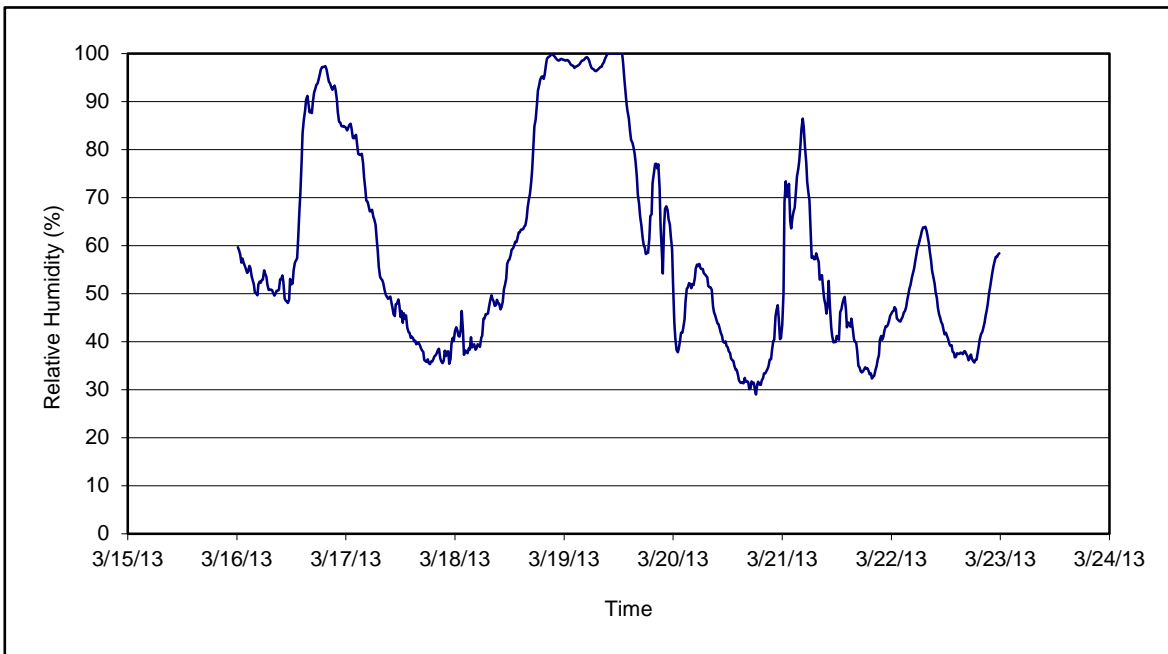


Figure 4. Relative humidity for the period 03/16/13 through 03/22/13 collected during CAMP implementation at the Clifton Former MGP Site - Operable Unit 2. Data are 15-minute averages.

Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

| System Operations | | | | | | General Observations | | | | | | | | |
|---|----------------|--|------------|---|-----------------------|----------------------|---------------------|---|---|-----------------------|----------------|---|---------------|--|
| Sampling Date: 3/18/2013 System Start Time: continuous System Stop Time: continuous Total Hrs Monitored: 24 System Calibrations (Time/Status): Ok 1021-1143 | | General Weather Conditions: Clear - - 30°F - -34°F General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Disassembled Temporary Fabric Structure (TFS) Installed NAPL recovery wells Installed perimeter fence around OU2 | | | | | | | | | | | | |
| Date | Alert Trigger | Station | Start Time | End Time | # of 15-min Periods | Wind Dir. | Upwind/Downwind | Upwind Station(s) | 15-Minute Downwind-Upwind Concentration | | Site Condition | Site Activity During the Period (if applicable) | Actions Taken | |
| 3/18/13 | No exceedances | | | | | | | | Min** | Max** | | | None taken | |
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| Comments: | | | | | | | | | | | | | | |
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| | | | | | PM-10 (15-min) | TVOC (15-min) | TVOC (1-min) | Odor Intensity (15-min) | | | | | | |
| Alert Limit: | | | | | 100 ug/m ³ | 3.7 ppm | - | - | | | | | | |
| Action Limit: | | | | | 150 ug/m ³ | 5.0 ppm | 25 ppm | 3 (n-butanol scale) | | | | | | |
| Notes: | | | | | | | | | | | | | | |
| * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). | | | | ** Upwind minus downwind concentrations are a time specific comparison. | | | | PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter | | | | | | |
| FAM - Fixed Air Monitoring station location | | | | ug/m ³ - micrograms per cubic meter | | | | TVOC - total volatile organic compounds | | | | | | |
| ppmv - parts per million by volume | | | | NA - not applicable | | | | ND - no data available | | | | | | |
| | | | | | | | | | | Field Representative: | R. Marshall | | | |
| | | | | | | | | | | Date: | 3/18/2013 | | | |



Daily Field Report
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

| System Operations | | | | | General Observations | | | | | | | | |
|--|----------------|-----------------|------------|----------|--|-----------|---|-------------------|--|--|--------------------------------|---|---------------|
| Sampling Date | | 3/19/2013 | | | General Weather Conditions: Overcast - ~ 32°F - ~43°F | | | | | | | | |
| System Start Time | | continuous | | | General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Fueled construction Vehicles with fuel truck onsite Installed NAPL recovery wells Installed perimeter fence around OU2 Emptied waste drums into tarped roll off dumpster | | | | | | | | |
| System Stop Time | | continuous | | | | | | | | | | | |
| Total Hrs Monitored | | 24 | | | | | | | | | | | |
| System Calibrations (Time/Status) | | Ok 0708-0835 | | | | | | | | | | | |
| Date | Alert Trigger | Station | Start Time | End Time | # of 15-min Periods | Wind Dir. | Upwind/Downwind | Upwind Station(s) | 15-Minute Downwind-Upwind Concentration Min** Max** | | Site Condition | Site Activity During the Period (if applicable) | Actions Taken |
| 3/19/13 | No exceedances | | | | | | | | | | | | None taken |
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| Comments: | | | | | | | | | | | | | |
| | | | | | PM-10 (15-min) | | TVOC (15-min) | | TVOC (1-min) | | Odor Intensity (15-min) | | |
| | | | | | Alert Limit: 100 ug/m ³ | | 3.7 ppm | | - | | - | | |
| | | | | | Action Limit: 150 ug/m ³ | | 5.0 ppm | | 25 ppm | | 3 (n-butanol scale) | | |
| Notes: | | | | | | | | | | | | | |
| * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). | | | | | | | PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter | | | | | | |
| ** Upwind minus downwind concentrations are a time specific comparison. | | | | | | | TVOC - total volatile organic compounds | | | | | | |
| FAM - Fixed Air Monitoring station location | | | | | | | NA - not applicable | | | | | | |
| ug/m ³ - micrograms per cubic meter | | | | | | | ND - no data available | | | | | | |
| ppmv - parts per million by volume | | | | | | | Field Representative: R. Marshall | | Date: 3/19/2013 | | | | |



Daily Field Report
 Community Air Monitoring Program
 Clifton Former MGP Site Operable Unit 2
 Borough of Staten Island, New York

| System Operations | | | | | General Observations | | | | | | | | | | |
|--|----------------|---------|------------|----------|---|---|----------------------|-------------------|--|--|--------------------------------|---|---------------|--|--|
| Sampling Date: 3/20/2013 System Start Time: continuous System Stop Time: continuous Total Hrs Monitored: 24 System Calibrations (Time/Status): Ok 0804-0910 | | | | | General Weather Conditions: Clear -- 32°F -- ~49°F General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Fueled construction Vehicles with fuel truck onsite Installed NAPL recovery wells Installed perimeter fence around OU2 Removed jersey barriers along Bay Street Disassembled waste water treatment plant in OU1 Removed construction vehicle offsite via flatbed truck | | | | | | | | | | |
| Date | Alert Trigger | Station | Start Time | End Time | # of 15-min Periods | Wind Dir. | Upwind/Downwind | Upwind Station(s) | 15-Minute Downwind-Upwind Concentration Min** Max** | | Site Condition | Site Activity During the Period (if applicable) | Actions Taken | | |
| 3/20/13 | No exceedances | | | | | | | | | | | | None taken | | |
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| Comments: | | | | | | | | | | | | | | | |
| | | | | | PM-10 (15-min) | | TVOC (15-min) | | TVOC (1-min) | | Odor Intensity (15-min) | | | | |
| | | | | | Alert Limit: 100 ug/m ³ | | 3.7 ppm | | - | | - | | | | |
| | | | | | Action Limit: 150 ug/m ³ | | 5.0 ppm | | 25 ppm | | 3 (n-butanol scale) | | | | |
| Notes: | | | | | | | | | | | | | | | |
| * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). ** Upwind minus downwind concentrations are a time specific comparison. FAM - Fixed Air Monitoring station location ug/m ³ - micrograms per cubic meter ppmv - parts per million by volume | | | | | | PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter TVOC - total volatile organic compounds NA - not applicable ND - no data available | | | | | | | | Field Representative: R. Marshall Date: 3/20/2013 | |



Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

| System Operations | | | | | | General Observations | | | | | | | |
|--|----------------|------------|------------|--|---------------------|---|------------------|--------------------------|--|-------------------|----------------|---|---------------|
| Sampling Date | | 3/21/2013 | | General Weather Conditions: | | | | | | | | | |
| System Start Time | | continuous | | Overcast - ~ 32°F - ~35°F | | | | | | | | | |
| System Stop Time | | continuous | | General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Cut jersey barriers using circular saw Installed NAPL recovery wells Installed perimeter fence around OU2 Removed jersey barriers along Bay Street | | | | | | | | | |
| Total Hrs Monitored | | 24 | | | | | | | | | | | |
| System Calibrations | | Ok | | | | | | | | | | | |
| (Time/Status) 0650-0850 | | | | | | | | | | | | | |
| Disassembled waste water treatment plant in OU1 | | | | | | | | | | | | | |
| Date | Alert Trigger | Station | Start Time | End Time | # of 15-min Periods | Wind Dir. | Upwind/ Downwind | Upwind Station(s) | 15-Minute Downwind-Upwind Concentration Min** Max** | | Site Condition | Site Activity During the Period (if applicable) | Actions Taken |
| 3/21/13 | No exceedances | | | | | | | | | | | | None taken |
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| Comments: | | | | | | | | | | | | | |
| Alert Limit: | | | | | | PM-10 (15-min) 100 ug/m ³ | | TVOC (15-min) 3.7 ppm | | TVOC (1-min) - | | Odor Intensity (15-min) - | |
| Action Limit: | | | | | | 150 ug/m ³ | | 5.0 ppm | | 25 ppm | | 3 (n-butanol scale) | |
| Notes: | | | | | | | | | | | | | |
| * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). | | | | | | PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter | | | | | | | |
| ** Upwind minus downwind concentrations are a time specific comparison. | | | | | | TVOC - total volatile organic compounds | | | | | | | |
| FAM - Fixed Air Monitoring station location | | | | | | NA - not applicable | | | | | | Field Representative: R. Marshall | |
| ug/m ³ - micrograms per cubic meter | | | | | | ND - no data available | | | | | | Date: 3/21/2013 | |
| ppmv - parts per million by volume | | | | | | | | | | | | | |



Daily Field Report
Community Air Monitoring Program
Clifton Former MGP Site Operable Unit 2
Borough of Staten Island, New York

| System Operations | | | | | General Observations | | | | | | | | |
|--|----------------|--------------|------------|----------|---|-----------|----------------------|-------------------|--|-----------------------------------|--------------------------------|---|---------------|
| Sampling Date | | 3/22/2013 | | | General Weather Conditions: Clear -- 30°F -- ~37°F | | | | | | | | |
| System Start Time | | continuous | | | General Description of Site Activities: Health & Safety Meeting Continuous Air Monitoring Stockpiled former perimeter fence Installed NAPL recovery wells Installed perimeter fence around OU2 Removed jersey barriers along Bay Street | | | | | | | | |
| System Stop Time | | continuous | | | | | | | | | | | |
| Total Hrs Monitored | | 24 | | | Disassembled waste water treatment plant in OU1 | | | | | | | | |
| System Calibrations (Time/Status) | | Ok 0707-0816 | | | | | | | | | | | |
| Date | Alert Trigger | Station | Start Time | End Time | # of 15-min Periods | Wind Dir. | Upwind/ Downwind | Upwind Station(s) | 15-Minute Downwind-Upwind Concentration Min** Max** | | Site Condition | Site Activity During the Period (if applicable) | Actions Taken |
| 3/22/13 | No exceedances | | | | | | | | | | | | None taken |
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| Comments: | | | | | | | | | | | | | |
| | | | | | PM-10 (15-min) | | TVOC (15-min) | | TVOC (1-min) | | Odor Intensity (15-min) | | |
| Alert Limit: | | | | | 100 ug/m ³ | | 3.7 ppm | | - | | - | | |
| Action Limit: | | | | | 150 ug/m ³ | | 5.0 ppm | | 25 ppm | | 3 (n-butanol scale) | | |
| Notes: | | | | | | | | | | | | | |
| * Wind directions are presented by octant (i.e. N, NE, E, SE, S, SW, W, NW). | | | | | PM-10 - particulate matter (i.e. dust) less than 10 microns in diameter | | | | | | | | |
| ** Upwind minus downwind concentrations are a time specific comparison. | | | | | TVOC - total volatile organic compounds | | | | | | | | |
| FAM - Fixed Air Monitoring station location | | | | | NA - not applicable | | | | | Field Representative: R. Marshall | | | |
| ug/m ³ - micrograms per cubic meter | | | | | ND - no data available | | | | | Date: 3/22/2013 | | | |
| ppmv - parts per million by volume | | | | | | | | | | | | | |

