**COMMONWEALTH OF PENNSYLVANIA**

**Department of Environmental Protection**

**Bureau of Laboratories**

(717) 346-7200

May 12, 2015



**SUBJECT**: Analysis Report for April 27-30, 2015

**TO**: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

**FROM**: Linda Hreha, Supervisor

Mobile Laboratory Group

Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

The following text outlines results obtained from air analysis performed April 27-30, 2015 at and near the Keystone Landfill Facility. The instrumentation utilized in the testing was a RAM 2000 Open Path Fourier Transform Infrared Spectrometer (OPFTIR). The analytical method performed was EPA Compendium Method TO-16.

\*\*\*\*\*The results of the analysis provided in this laboratory report relate only to the sample(s) identified in the report. \*\*\*\*\*

Unless otherwise noted, the results presented on this laboratory report meet all the requirements of the NELAC Institutes (TNI).

\*\*\*\*\*This test report shall not be reproduced except in full without the written approval of the laboratory.\*\*\*\*\*

**Analytical Report**

**Sampling Locations and Weather Conditions for Analysis**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Sample**  **ID** | **Location** | **Time**  **(24 hr)** | **Average Wind Direction** | **Average**  **Wind**  **Speed (mph)** | **Weather**  **Conditions** |
| 4/27/2015 | 27APR15MLG1440 | St. Anthony’s field  Latitude: 41º24’46”  Longitude: 75º37’7” | 1423-1503 | S/SW | 10 | Cloudy |
| 4/28/2015 | 28APR15MLG0914 | Landfill – Leachate Pool  Latitude: 41º26’6”  Longitude: 75º35’46” | 0913-1300 | S/SW | 10 | Partly Cloudy |
| 4/28/2015 | 28APR15MLG1440 | Landfill – Working Face  Latitude: 41º25’31”  Longitude: 75º35’3” | 1439-1841 | W/NW | 18 | Partly Cloudy |
| 4/29/2015 | 29APR15MLG0726 | Sherwood Park  Latitude: 41º25’18”  Longitude: 75º36’56” | 0725-1130 | S/SW | 5 | Clear |
| 4/29/2015 | 29APR15MLG1212 | Neighborhood  Latitude: 41º25’25”  Longitude: 75º36’52” | 1211-1615 | SW | 6 | Partly Cloudy |
| 4/30/2015 | 30APR15MLG0751 | Mid Valley High School – Athletic Field  Latitude: 41º27’20”  Longitude: 75º36’1” | 0750-1200 | N/NE | 3 | Partly Cloudy |
| 4/30/2015 | 30APR15MLG1255 | Mid Valley High School – Parking Lot  Latitude: 41º26’51”  Longitude: 75º36’10” | 1254-1645 | N/NW | 5 | Partly Cloudy |

**Terms:**

Time Weighted Average(TWA)- the average concentration during the specified analysis time.

Max- Maximum concentration observed during the specified analysis time.

Time of Maximum- Specific time during the analysis session that the maximum concentration

was observed.

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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 27APR15MLG1440

Date of Analysis: 4/27/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: St Anthony’s Field

Latitude: 41º24’46”

Longitude: 75º37’7”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

\* The upwind spectrum obtained is representative of ambient atmospheric conditions near the analysis site but upwind of the specific analysis site. This upwind spectrum does not represent a zero concentration for constituents, only a representation of constituents in the air upwind of analysis site. All subsequent sampling was compared to this upwind spectrum. The format in which this upwind spectrum is obtained does not allow for concentration derivation. DEP Regional Staff directed the Mobile Laboratory Group Staff as to where this upwind spectrum was to be obtained.

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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 28APR15MLG0914

Date of Analysis: 4/28/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Landfill – Leachate Pool

Latitude: 41º26’6”

Longitude: 75º35’46”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

\* The upwind spectrum obtained is representative of ambient atmospheric conditions near the analysis site but upwind of the specific analysis site. This upwind spectrum does not represent a zero concentration for constituents, only a representation of constituents in the air upwind of analysis site. All subsequent sampling was compared to this upwind spectrum. The format in which this upwind spectrum is obtained does not allow for concentration derivation. DEP Regional Staff directed the Mobile Laboratory Group Staff as to where this upwind spectrum was to be obtained.

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**Analytical Report**

SAMPLE: 28APR15MLG0914

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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 28APR15MLG1440

Date of Analysis: 4/28/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Landfill – Working Face

Latitude: 41º25’31”

Longitude: 75º35’3”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

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**Analytical Report**

Sample ID: 28APR15MLG1440



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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 29APR15MLG0726

Date of Analysis: 4/28/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Sherwood Park

Latitude: 41º25’18”

Longitude: 75º36’56”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

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**Analytical Report**

Sample ID: 29APR15MLG0726



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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 29APR15MLG1212

Date of Analysis: 4/29/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Neighborhood

Latitude: 41º25’25”

Longitude: 75º36’52”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

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**Analytical Report**

Sample ID: 29APR15MLG1212



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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 30APR15MLG0751

Date of Analysis: 4/30/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Mid Valley High School – Athletic Field

Latitude: 41º27’20”

Longitude: 75º36’1”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

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**Analytical Report**

Sample ID: 30APR15MLG0751



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**Analytical Report**

DEP Bureau of Laboratories

P.O. Box 1467

Harrisburg, PA 17105

Sample ID: 30APR15MLG1255

Date of Analysis: 4/30/2015

Locations for sampling as determined by DEP Northeast Regional Office Staff

Upwind Spectrum\*: 27APR15MLG1440

Sampling Location: Mid Valley High School – Parking Lot

Latitude: 41º26’51”

Longitude: 75º36’10”

Client: Roger Bellas, Waste Management Program Manager

Northeast Regional Office

Department of Environmental Protection

2 Public Square

Wilkes-Barre, PA 18701-1915

Method: EPA Compendium Method TO-16 Atmospheric Gases

Sample medium: Atmospheric Gas

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**Analytical Report**

Sample ID: 30APR15MLG1255



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