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**DEPARTMENT OF ENERGY**
National Nuclear Security Administration
Los Alamos Field Office
Los Alamos, New Mexico 87544

DEC 05 2014

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CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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NMED
Hazardous Waste Bureau

Mr. John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Dear Mr. Kieling:

Subject: Formal Notification of Methane at 100 percent of the Lower Explosive Limit at Vent Risers along the North Edge of the Los Alamos Airport Landfill Cap for the Month of November 2014

This letter provides formal notification to the New Mexico Environment Department Hazardous Waste Bureau of methane at 100 percent of the Lower Explosive Limit at the vent risers along the north edge of the Los Alamos Airport Landfill cap. Enclosed are four monitoring Landfill Gas Monitoring Reports for the month of November 2014.

David S. Rhodes
Federal Project Director
Environmental Projects Office

Enclosures

36841

cc w/enclosures:
Dave Cobrain
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
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Official Contract File, NA-LA

EPO-32RM-697-604963

The Lakeworth Group, LLC

*146B East Gate Drive; PO Box 1232 / Los Alamos, NM 87544 / Telephone (505) 662-7275*

WEEKLY, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d GAS MONITORING

Date: 11-5-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T. Sena

Barometric Pressure: 30.35 Temperature: 53 Wind Direction: NE

Wind Speed: 12 Weather Conditions: Fair

Date and amount of last precipitation (within last 48 hours): None

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX2012 Calibration method and date: 9-18-14 RKI 4-Gas

Comments:

**Weekly Monitoring**

| Sample Location | Height (ft) | Time | Methane ($CH_4$) % LEL | Oxygen ($O_2$) % | Carbon Dioxide ($CO_2$) % |
|---|---|---|---|---|---|
| **Hangar Pads**: Samples will be collected on the east side of the pad along the expansion joint.* After a hangar is built, samples will be collected along the interior walls at 4 inches to 4 ft above pad. | | | | | |
| PS-01 | at spinner (4 ft above pavement) | 1351 | 0 | 20.9 | 0 |
| PS-02 | at spinner (4 ft above pavement) | 1354 | 100 | 13.7 | 0 |
| PS-03 | at spinner (4 ft above pavement) | 1355 | 0 | 20.9 | 0 |
| PS-04 | at spinner (4 ft above pavement) | 1356 | 0 | 20.9 | 0 |
| PS-05 | at spinner (4 ft above pavement) | 1358 | 100 | 16.7 | 0 |
| PS-06 | at spinner (4 ft above pavement) | 1400 | 0 | 20.9 | 0 |

Note:
Methane concentrations shall be measured in percent of the LEL. Other gases measured in %.
LEL = lower explosive limit
PS = Perimeter Spinner (wind turbine)
Form modified from http://www.nmenv.state.nm.us/swb/documents/ExampleMethaneFORM10-10-08.doc.

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WEEKLY, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d)
GAS MONITORING

Date: 11-13-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T. Sena

Barometric Pressure: 30.23 Temperature: 16 Wind Direction: S

Wind Speed: 3 Weather Conditions: Overcast

Date and amount of last precipitation (within last 48 hours): None

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX 2012 Calibration method and date: 9-18-14 RKI 4-Gas

Comments:

**Weekly Monitoring**

| Sample Location | Height (ft) | Time | Methane ($CH_4$) % LEL | Oxygen ($O_2$) % | Carbon Dioxide ($CO_2$) % |
|---|---|---|---|---|---|
| | | | | | |
| PS-01 | at spinner (4 ft above pavement) | 1045 | 0 | 20.9 | 0 |
| PS-02 | at spinner (4 ft above pavement) | 1047 | 100 | ~~100~~ 12.7 | 0 |
| PS-03 | at spinner (4 ft above pavement) | 1049 | 0 | 20.9 | 0 |
| PS-04 | at spinner (4 ft above pavement) | 1050 | 0 | 20.9 | 0 |
| PS-05 | at spinner (4 ft above pavement) | 1052 | 100 | 14.2 | 0 |
| PS-06 | at spinner (4 ft above pavement) | 1054 | 0 | 20.9 | 0 |

Note:
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WEEKLY, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d)
GAS MONITORING

Date: 11-19-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.29 Temperature: 33 Wind Direction: Calm

Wind Speed: 0 Weather Conditions: Fair

Date and amount of last precipitation (within last 48 hours): None

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX-2012 Calibration method and date: 9-18-14 RKI 4-Gas

Comments:

**Weekly Monitoring**

| Sample Location | Height (ft) | Time | Methane ($CH_4$) % LEL | Oxygen ($O_2$) % | Carbon Dioxide ($CO_2$) % |
|---|---|---|---|---|---|
| | | | | | |
| PS-01 | at spinner (4 ft above pavement) | 10:18 | 0 | 20.9 | 0 |
| PS-02 | at spinner (4 ft above pavement) | 10:21 | 100 | 14.2 | 0 |
| PS-03 | at spinner (4 ft above pavement) | 10:23 | 0 | 20.9 | 0 |
| PS-04 | at spinner (4 ft above pavement) | 10:25 | 0 | 20.9 | 0 |
| PS-05 | at spinner (4 ft above pavement) | 10:27 | 80 | 19.2 | 0 |
| PS-06 | at spinner (4 ft above pavement) | 10:29 | 0 | 20.9 | 0 |

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WEEKLY, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d)
GAS MONITORING

Date: 11/26/14

Inspector Printed Name: Felicia Aguilar

Inspector Signature: Felicia M. Aguilar

Barometric Pressure: 30.37 Temperature: 38°F Wind Direction: S

Wind Speed: 0 mph Weather Conditions: Fair

Date and amount of last precipitation (within last 48 hours): none

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX-2012 Calibration method and date: 9/18/14 RKI 4-Gas

Comments: Methane reading @ spinner 3 double checked @ 11.20 readings: 96% 18.8% 0% methane readings did not steadily rise, but jumped up and down.

**Weekly Monitoring**

| Sample Location | Height (ft) | Time | Methane ($CH_4$) % LEL | Oxygen ($O_2$) % | Carbon Dioxide ($CO_2$) % |
|---|---|---|---|---|---|
| | | | | | |
| PS-01 | at spinner (4 ft above pavement) | 11:06 | 0 | 20.9 | 0 |
| PS-02 | at spinner (4 ft above pavement) | 11:09 | 100 | 12.6 | 0 |
| PS-03 | at spinner (4 ft above pavement) | 11:12 | 56 | 18.2 | 0 |
| PS-04 | at spinner (4 ft above pavement) | 11:14 | 0 | 20.9 | 0 |
| PS-05 | at spinner (4 ft above pavement) | 11:16 | 96 | 17.3 | 0 |
| PS-06 | at spinner (4 ft above pavement) | 11:18 | 0 | 20.9 | 0 |

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