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John



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



OCT 09 2014

RECEIVED

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

OCT 16 2014
NMED
Hazardous Waste Bureau

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 September 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 vent risers along the north edge of the Los Alamos Airport Landfill cap. Enclosed are the four Landfill Gas Monitoring Reports for the month of September 2014.

If you have comments or questions, please contact Ramoncita N. Massey of my staff at (505) 665-7771.

David S. Rhodes
Federal Project Director
Environmental Projects Office

Enclosures



cc w/enclosures:

Dave Cobrain

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R. Massey, EPO, NA-LA

D. McInroy, CAP, LANS, MS-M992

Records Center, NA-LA

Official Contract File, NA-LA

EPO-32RM-678-597637

LANDFILL GAS WEEKLY MONITORING FORM

Landfill Name: Airport Landfill, SWMU 73-001(a) at the Los Alamos County Airport

Inspector Printed Name: Dave Dixson Inspector Signature: _____

Date: 9/4/14 Barometric Pressure: 30.22" Temperature: 66° F

Weather conditions: Fair Wind Direction: N/A Wind Speed: 0

Date and amount of last precipitation (within last 48 hours): 0.00"

Instrument: MSA Altair 5X #1411 Calibration method and date: Pentane gas 9/19/14

Week of September 1, 2014

Sample Location	Height (ft)	Time (Approx.)	CH ₄ % LEL	O ₂ %	CO %
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.					
HP-01	2 inches above expansion joint*	0945	0	20.8	0
HP-02	2 inches above expansion joint*	0946	0	20.8	0
HP-03	2 inches above expansion joint*	0947	NM	NM	NM
HP-04	2 inches above expansion joint*	0948	NM	NM	NM
HP-05	2 inches above expansion joint*	0949	0	20.8	0
HP-06	2 inches above expansion joint*	0950	0	20.8	0
HP-07	2 inches above expansion joint*	0951	0	20.8	0
HP-08	2 inches above expansion joint*	0952	0	20.8	0
HP-09	2 inches above expansion joint*	0953	0	20.8	0
HP-10	2 inches above expansion joint*	0954	0	20.8	0
HP-11	2 inches above expansion joint*	0956	0	20.8	0
HP-12	2 inches above expansion joint*	0957	0	20.8	0
HP-13	2 inches above expansion joint*	0958	0	20.8	0
HP-14	2 inches above expansion joint*	0960	0	20.8	0
HP-15	2 inches above expansion joint*	1001	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1003	0	20.8	0
TD-02	4 inches below trench grate	1004	0	20.8	0
TD-03	4 inches below trench grate	1005	0	20.8	0
TD-04	4 inches below trench grate	1006	0	20.8	0
TD-05	4 inches below trench grate	1008	0	20.8	0
TD-06	4 inches below trench grate	1009	0	20.8	0
TD-07	4 inches below trench grate	1010	0	20.8	0
TD-08	4 inches below trench grate	1011	0	20.8	0
TD-09	4 inches below trench grate	1012	0	20.8	0
TD-10	4 inches below trench grate	1013	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1040	0	20.8	0
DC-02	4 inches below grate	1039	0	20.8	0
DC-03	4 inches below grate	1037	0	20.8	0
DC-04	4 inches below grate	1037	0	20.8	0
DC-05	4 inches below grate	1036	0	20.8	0
DC-06	4 inches below grate	1035	0	20.8	0
DC-07	4 inches below grate	1034	0	20.8	0
DC-08	4 inches below manhole lid	1033	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1016	0	20.8	0
PG-02	2 inches above ground surface	1017	0	20.8	0
PG-03	2 inches above ground surface	1018	0	20.8	0
PG-04	2 inches above ground surface	1018	0	20.8	0
PG-05	2 inches above ground surface	1019	0	20.8	0
PG-06	2 inches above ground surface	1020	0	20.8	0
PG-07	2 inches above ground surface	1022	0	20.8	0
PG-08	2 inches above ground surface	1023	0	20.8	0

PG-09	2 inches above ground surface	1024	0	20.8	0
PG-10	2 inches above ground surface	1025	0	20.8	0
PG-11	2 inches above ground surface	1026	0	20.8	0
PG-12	2 inches above ground surface	1028	0	20.8	0
PG-13	2 inches above ground surface	1029	0	20.8	0
PG-14	2 inches above ground surface	1032	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0940	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0941	100%	17.6	0
PS-03	at spinner (4 ft above pavement)	0942	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0942	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0943	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0944	0	20.8	0

Note:

Methane concentrations shall be measured in percent of the LEL. Other gases measured in %.

DC = Drainage Culvert (inlet)

HP = Hangar Pad

LEL = lower explosive limit

PG = Perimeter Ground

PS = Perimeter Spinner (wind turbine)

TD = Trench Drain

Methane = CH₄

Oxygen = O₂

Carbon dioxide = CO₂

Hydrogen Sulfide = H₂S

Comments:

NM – Not measured, standing water in trench drain or hangar pad boundary.

Form modified from <http://www.nmenv.state.nm.us/swb/documents/ExampleMethaneFORM10-10-08.doc>.

LANDFILL GAS WEEKLY MONITORING FORM

Landfill Name: Airport Landfill, SWMU 73-001(a) at the Los Alamos County Airport

Inspector Printed Name: John Wilcox Inspector Signature: _____

Date: 9/11/14 Barometric Pressure: 30.27" Temperature: 72° F

Weather conditions: Partly cloudy Wind Direction: SE Wind Speed: 10

Date and amount of last precipitation (within last 48 hours): 0.00"

Instrument: MSA Altair 5X #1547 Calibration method and due date: Pentane gas 10/5/14

Week of September 7, 2014

Sample Location	Height (ft)	Time (Approx.)	CH ₄ % LEL	O ₂ %	CO %
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.					
HP-01	2 inches above expansion joint*	1248	0	20.8	0
HP-02	2 inches above expansion joint*	1249	0	20.8	0
HP-03	2 inches above expansion joint*	1250	0	20.8	0
HP-04	2 inches above expansion joint*	1243	0	20.8	0
HP-05	2 inches above expansion joint*	1244	0	20.8	0
HP-06	2 inches above expansion joint*	1245	0	20.8	0
HP-07	2 inches above expansion joint*	1238	0	20.8	0
HP-08	2 inches above expansion joint*	1239	0	20.8	0
HP-09	2 inches above expansion joint*	1240	0	20.8	0
HP-10	2 inches above expansion joint*	1233	0	20.8	0
HP-11	2 inches above expansion joint*	1233	0	20.8	0
HP-12	2 inches above expansion joint*	1234	0	20.8	0
HP-13	2 inches above expansion joint*	1230	0	20.8	0
HP-14	2 inches above expansion joint*	1230	0	20.8	0
HP-15	2 inches above expansion joint*	1231	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1249	0	20.8	0
TD-02	4 inches below trench grate	1248	0	20.8	0
TD-03	4 inches below trench grate	1246	0	20.8	0
TD-04	4 inches below trench grate	1245	0	20.8	0
TD-05	4 inches below trench grate	1241	0	0	0
TD-06	4 inches below trench grate	1241	0	20.8	0
TD-07	4 inches below trench grate	1236	NM	NM	NM
TD-08	4 inches below trench grate	1235	0	20.8	0
TD-09	4 inches below trench grate	1232	0	20.8	0
TD-10	4 inches below trench grate	1231	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1250	0	20.8	0
DC-02	4 inches below grate	1251	0	20.8	0
DC-03	4 inches below grate	1251	2%	20.8	0
DC-04	4 inches below grate	1251	0	20.8	0
DC-05	4 inches below grate	1252	0	20.8	0
DC-06	4 inches below grate	1252	0	20.8	0
DC-07	4 inches below grate	1253	8%	20.8	0
DC-08	4 inches below manhole lid	1255	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1249	0	20.8	0
PG-02	2 inches above ground surface	1247	0	20.8	0
PG-03	2 inches above ground surface	1242	0	20.8	0
PG-04	2 inches above ground surface	1237	0	20.8	0
PG-05	2 inches above ground surface	1233	0	20.8	0
PG-06	2 inches above ground surface	1258	0	20.8	0
PG-07	2 inches above ground surface	1258	0	20.8	0
PG-08	2 inches above ground surface	1257	0	20.8	0

PG-09	2 inches above ground surface	1257	0	20.8	0
PG-10	2 inches above ground surface	1300	0	20.8	0
PG-11	2 inches above ground surface	1302	0	20.8	0
PG-12	2 inches above ground surface	1256	0	20.8	0
PG-13	2 inches above ground surface	1304	0	20.8	0
PG-14	2 inches above ground surface	1256	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1249	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1248	100%	17.2	0
PS-03	at spinner (4 ft above pavement)	1243	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1237	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1233	100%	17.6	0
PS-06	at spinner (4 ft above pavement)	1229	0	20.8	0

Note:

Methane concentrations shall be measured in percent of the LEL. Other gases measured in %.

DC = Drainage Culvert (inlet)

HP = Hangar Pad

LEL = lower explosive limit

PG = Perimeter Ground

PS = Perimeter Spinner (wind turbine)

TD = Trench Drain

Methane = CH₄

Oxygen = O₂

Carbon dioxide = CO₂

Hydrogen Sulfide = H₂S

Comments:

NM – Not measured, standing water in trench drain or hangar pad boundary.

Form modified from <http://www.nmenv.state.nm.us/swb/documents/ExampleMethaneFORM10-10-08.doc>.

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: 9/25/14

Inspector Printed Name: Joseph Sena

Inspector Signature: [Signature]

Barometric Pressure: 30.42 in Temperature: 61°F Wind Direction: NA

Wind Speed: calm Weather Conditions: mostly cloudy

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 RKL 4-gas

Comments: none

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. <u>THA</u>					
PS-01	at spinner (4 ft above pavement)	825	0	20.9	0
PS-02	at spinner (4 ft above pavement)	827	100	18.3	0
PS-03	at spinner (4 ft above pavement)	828	0	20.9	0
PS-04	at spinner (4 ft above pavement)	830	0	20.9	0
PS-05	at spinner (4 ft above pavement)	832	0	20.9	0
PS-06	at spinner (4 ft above pavement)	835	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: 9/19/14

Inspector Printed Name: Joseph Sera

Inspector Signature: *Joseph Sera*

Barometric Pressure: 30.21 in Temperature: 63°F Wind Direction: NE

Wind Speed: 3 mph Weather Conditions: calm

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 - RKL 4-gas

Comments: none

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)	10:22	0	20.9	0
PS-02	at spinner (4 ft above pavement)	10:25	29	20.1	0
PS-03	at spinner (4 ft above pavement)	10:29	0	20.9	0
PS-04	at spinner (4 ft above pavement)	10:32	0	0	0
PS-05	at spinner (4 ft above pavement)	10:35	93	18.1	0
PS-06	at spinner (4 ft above pavement)	10:40	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>.