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

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Hazardous Waste Bureau

Mr. John Kieling
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Dear Mr. Kieling:

Subject: Submittal of the 2014 Annual Inspection Report for Los Alamos County Airport Landfill, Solid Waste Management Units 73-001(a) and 73-001(d), Technical Area 73

Enclosed please find two hard copies with electronic files of the 2014 Annual Inspection Report for Los Alamos County Airport Landfill, Solid Waste Management Units 73-100(a) and 73-100(d), Technical Area 73.

If you have any questions, please contact Ramoncita N. Massey at (505) 665-7771.

Hais for

David S. Rhodes
Federal Project Director
Environmental Projects Office

Enclosures

36896

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Official Contract File, NA-LA

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February 2015

2014 Annual Inspection Report for Los Alamos County Airport Landfill, Solid Waste Management Units 73-001(a) and 73-001(d), Technical Area 73

Prepared for the
U.S. Department of Energy (DOE)
Los Alamos Field Office

Prepared by:

The Lakeworth Group, LLC

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2014 Annual Inspection Report for Los Alamos County Airport Landfill, Solid Waste Management Units 73-001(a) and 73-001(d), Technical Area 73

February 2015

Ramoncita N. Massey Date: 2/4/15

Ramoncita N. Massey
Federal Project Director
Environmental Projects Office

Date: 2-6-2015

David Rhodes
Supervisory Federal Project Director
Environmental Projects Office

EXECUTIVE SUMMARY

This report summarizes activities and data collected from the landfill inspections conducted for the Los Alamos County Airport Technical Area 73 landfill for calendar year 2014, as part of the post closure monitoring plan requirements.

Routine site inspections and quarterly landfill gas monitoring were conducted throughout the year.

In December 2013, at the direction of the U.S. Department of Energy, Los Alamos National Laboratory began weekly gas monitoring and it continued throughout 2014.

In February 2014, fencing along the east edge of the site was repaired.

In May 2014, cracks in the MatCon asphalt and concrete hangar pads were sealed.

Three significant precipitation event inspections were completed during 2014.

In October 2014, geoprobe drilling was conducted to evaluate the waste depth on the western end of the landfill and to estimate the volume of soil available under the paved area (i.e., soil backfill below the pavement/stone layer and above the waste) for possible ET cover construction use.

In December 2014, construction activities began to further stabilize the eastern perimeter ground.

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1.0 INTRODUCTION

This landfill cover inspection report, prepared by the U.S. Department of Energy (DOE) Los Alamos Field Office, summarizes the findings of inspection activities conducted at the Los Alamos County (LAC) Airport at Technical Area 73 (TA-73), Solid Waste Management Unit (SWMU) 73-001(a), a landfill, and SWMU 73-001(d), a debris disposal area (DDA), for calendar year 2014.

Post closure inspection and reporting requirements are described in the "Final Implementation Strategy for Post Closure Inspection and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico" (CE2 Corporation 2009, 111600) and the "Post-Closure Care and Monitoring Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 2" (North Wind Inc. 2006, 111707). The final implementation strategy was developed to update the 2006 post closure plan to include minor changes reflected in the 2007 final remedy and to include specific activities necessary for a comprehensive approach to maintaining and monitoring the landfill for 30 years following closure.

2.0 BACKGROUND

Two inactive solid waste disposal sites [the airport landfill, SWMU 73-001(a), and the DDA, SWMU 73-001(d)] are located at the LAC Airport (Figure 2.0-1). The airport landfill operated from 1943 to 1973 for the disposal of solid waste consisting of household trash from the Los Alamos townsite and office trash from Los Alamos Scientific Laboratory. Prior to 1965, some of the waste was burned and subsequently buried in the airport landfill. Approximately 489,500 yd3 of waste was disposed of in the landfill.

From 1984 to 1986, approximately 126,000 yd3 of burned debris were excavated from the western end of the airport landfill and reburied in two parallel trenches at the DDA.

In late 2006 and early 2007, the DOE installed the final remedy landfill cover system at the airport landfill through a contract with North Wind, Inc. The final remedy design and completion activities for the landfill and the DDA are provided in the "Remedy Completion Report, DOE-LASO TA-73 Airport Landfill, SWMUs 73-001(a) and 73-001(d)" (North Wind Inc. 2007, 096333).

Approximately 50,000 yd3 of waste was relocated within the SWMU 73-001(a) boundary during the 2006 final remedy completion activities. With the exception of a single container of Freon-113, uncovered and subsequently managed off-site, no other hazardous or radioactive materials were discovered.

After waste relocation, compaction, and re-grading were conducted, the following features were installed for the airport landfill cover (Figure 2.0-2):

- Approximately six acres of MatCon (Modified Asphalt Technology for Containment) asphalt pavement,
- Five concrete hangar pads within the MatCon pavement area,

- Turf reinforcement matting (TRM),
- A landfill-gas collection system,
- Two rock retaining walls,
- A concrete retaining wall,
- Re-vegetation with native grasses of approximately 4 acres, and
- A storm water collection system consisting of 5 trench drains, 13 drain inlets, approximately 1950 ft of associated buried concrete storm-sewer lines, an 18-in.-diameter high-density polyethylene outfall pipe approximately 110 ft in length, and 3 riprap drainage channels.

In 2009 and 2010, erosion features (rills and small gullies) and subsidence associated with storm water runoff from the paved areas above the vegetated slopes was repaired. In addition, the curb along the runway was repaired and extended to redirect storm water away from the main vegetated slope. Cracks in the concrete at hangar pads 2 and 3 were repaired using polyurethane sealants. These repairs and enhancements are detailed in the "Final Construction Report for Los Alamos Airport Landfill TA-73, SWMU 73-001(a) Cover Improvements, Los Alamos, New Mexico" (LANL 2011, 111750, Appendix A).

In 2011, cracks in the MatCon pavement and areas of separation between the concrete hangar pads and MatCon pavement were cleaned and filled with a hot seal mixture.

In 2012, stub outs at gas-vent riser locations PS-2, PS-3, and PS-5 were opened, and risers with turbines (spinners) were installed. New cracks in the MatCon pavement and any new areas of separation between the concrete hangar pads and MatCon pavement were cleaned and filled with a hot seal mixture.

On September 30, 2013, the Los Alamos Field Office awarded a contract for maintenance activities at the Los Alamos Airport landfill. This contract provided the Los Alamos Field Office with a mechanism to generate a design for a new landfill cover at the Los Alamos Airport landfill. It is anticipated that this design should be completed this calendar year (CY) and that construction of the new landfill cover is will begin in CY15.

The week of February 28, 2014, fencing along the east edge of the site was repaired. The fence had been damaged in September 2013 by heavy rains.

The week of May 19, 2014, cracks in the MatCon asphalt and concrete hangar pads were sealed.

In November 2013, the Los Alamos Field Office verbally notified New Mexico Environment Department (NMED) of methane levels at 100% of the Lower Explosive Limit (LEL) at vent risers along the north edge of the Los Alamos Airport Landfill cap. NMED directed Los Alamos National Security, LLC, on November 22, 2013, to

immediately implement a weekly air monitoring program in open air at the landfill. At that time, the monitoring frequency could change to six months, based upon a review of the data. Per the Los Alamos Field Office, the weekly air monitoring was to continue until the methane levels dropped below the 100% LEL.

On December 12, 2013, the Los Alamos Field Office formally notified NMED of methane levels at 100% of the LEL at vent risers along the north edge of the Los Alamos Airport Landfill cap and requested a waiver of the implementation of an active gas collection system using blowers, as required in the 2006 "Post-Closure Care and Monitoring Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 2" (North Wind Inc. 2006, 111707).

The Los Alamos Field Office received a denial to the waiver request from NMED dated July 25, 2014.

The Los Alamos Field Office provided a response to the waiver denial which included a Pre-Design Work Plan for the Los Alamos County Airport Landfill on September 26, 2014 and is currently awaiting a reply from NMED. Weekly monitoring continued through 2014.

In October 2014, seventy soil borings were installed, per the Pre-Design Work Plan, to evaluate the waste depth on the western end of the landfill and to estimate the volume of soil available under the paved area (i.e., soil backfill below the pavement/stone layer and above the waste) for possible Evapo-Transpiration (ET) cover construction use. An additional four soil borings were added based upon field conditions, resulting in a total of seventy-four soil borings being installed. In addition to the soil index properties and characteristics, the following samples were collected and analyzed per NMEDs request.

- At six soil boring locations soil samples were collected and analyzed for Volatile Organic Compounds (VOCs) by Gas Chromatograph Mass Spectrometry (GCMS),
- In addition, at the same six locations air samples were collected and analyzed for VOCs, Carbon Dioxide Thermal Conductivity (TCD), Nitrogen, Methane (TCD), and Hydrogen Sulfide.

The analytical report for these analyses is provided in Appendix A.

In December 2014, construction activities began to further stabilize the eastern perimeter ground of the Airport Landfill.

The NMED's approval with modifications for the remedy completion report requires monitoring of storm water runoff from the site (NMED 2007, 098285). This monitoring is being performed under the Laboratory's National Pollutant Discharge Elimination System Individual Permit for storm water discharges from SWMUs and areas of concern.

3.0 INSPECTION ACTIVITIES

During calendar year 2014, inspection activities were conducted in accordance with the

"Final Implementation Strategy for Post Closure Inspection and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico" (CE2 Corporation 2009, 111600) and the "Post-Closure Care and Monitoring Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 2" (North Wind, Inc. 2006, 111707). In addition, weekly and quarterly air monitoring was implemented in response to the elevated air monitoring results measured at the end of 2013.

Inspection activities at SWMU 73-001(a) focused on evaluating the condition and overall integrity of each individual feature of the landfill cover system. The SWMU 73-001(d) DDA, located at the eastern end of the airport runway (Figure 2.0-1), was inspected for evidence of erosion or reduced vegetation.

In accordance with Section 7 of the implementation strategy (CE2 Corporation 2009, 111600), the following field inspections and landfill gas monitoring activities were completed during 2014.

The annual inspection of the gas-collection system, TRM, the vegetated areas, wattle area, concrete and rock retaining walls, storm water–collection system, outfall pipe, and DDA was conducted on December 19, 2014. See Appendix B for the completed annual checklist.

Monthly Inspections of MatCon pavement, concrete hangar pads, and survey benchmarks were conducted on the following dates. See Appendix C for the completed monthly checklists and photos of landfill features.

- January 28, 2014
- March 3, 2014
- March 26, 2014
- April 23, 2014
- May 28, 2014
- June 27, 2014
- August 21, 2014
- August 28, 2014
- September 25, 2014
- October 29, 2014
- December 1, 2014
- December 19, 2014

Quarterly landfill-gas measurements were conducted on the following dates. See Appendix D for the quarterly landfill-gas measurements.

- April 3, 2014
- June 26, 2014
- September 25, 2014
- December 19, 2014

Weekly landfill-gas measurements were conducted weekly throughout the year. See Appendix E for the weekly landfill-gas measurements.

Significant rainfall inspections of the MatCon pavement, hangar pads, vegetated areas, wattle area, retaining walls, and the storm water–collection system were conducted on the following dates. See Appendix F for the completed after significant rainfall checklists.

- July 16, 2014
- August 1, 2014
- September 8, 2014

Inspection and monitoring activities and findings are described below.

3.1 MatCon Pavement and Concrete Hangar Pads

Monthly inspection surveys of the MatCon asphalt pavement were conducted by walking along transects along the western, eastern, and southern areas of the pavement and between each hangar pad (Figures 2.0-1 and 2.0-2). The inspection survey looked for evidence of cracking, subsidence, or separation of the pavement.

Cracking of the hot seal repairs completed in 2011 and 2012 was noted at approximately 50% of the previously repaired locations. In addition, extension cracks were noted at many of the previously identified locations. New cracks were observed between hangar pads 3 and 4, and pads 4 and 5 along a subsidence hinge line.

Cracks and gaps between the MatCon pavement and the concrete hangar pads were sealed May 19, 2014. Continued expansion of joints and previously sealed cracks was noted in monthly reports, this was more visible as temperatures dropped below freezing. Subsidence of the pavement was noted and is primarily associated with the northern third of the site.

Monthly inspection surveys of the five concrete hangar pads were conducted by walking along the perimeter of each hangar pad and along a transect down the center of each pad. The inspection survey looked for evidence of cracking, subsidence, and/or separation between expansion joints and separation/subsidence between the concrete pads and the MatCon pavement.

Visual observations at hangar pad 1 indicate that the northern third of the pad has uplifted and tilted slightly to the south. Visible subsidence was observed on the northern half of hangar pads 2, 3, 4, and 5. Cracking associated with the subsidence of the pads was also observed throughout the central portion of each pad. Separation of the expansion joints was observed at hangar pads 1, 2, 3, and 4, see Figure 3.1-1. Separation or subsidence of joints between the hangar pads and the MatCon pavement was noted at pads 1, 2, 3, and 4.

3.2 Vegetated (Seeded) Areas

Inspections of the vegetated areas conducted annually and after significant rainfall events focused on evidence of erosion, subsidence, sparse vegetation, and animal burrows.

The vegetated areas are well populated with various grasses, some shrubs, and seasonal weeds. A few areas have sparse vegetation but are covered with TRM. No animal burrows were noted.

In September 2013, the airport received over seven inches of rain. Rill erosion was noted within the vegetated slope area, and a channel cut formed from runoff associated with the mid-slope riprap runoff channel. This area is being addressed with the construction activities that began in December 2014.

3.3 Storm Water-Collection System

Inspection of the visible components of the storm water–collection system was completed annually and after significant rainfall events. The components consist of 6 grated trench drains (5 of which run next to each of the 5 hangar pads), 13 drain inlets, a manhole, and the outfall pipe. The length of each trench drain was inspected for standing water, cracking, excessive sedimentation, and displacement of grates. The integrity of the drain inlet grates and concrete structures was inspected for cracking or displacement. The outfall pipe was inspected for damage and/or displacement.

Cracking and displacement of the concrete channels associated with hangar pad subsidence were noted in the trench drains at hangar pads 1, 2, 3, 4, and 5. Standing water has been observed in the northern half of trench drains associated with pads 2, 3, 4, and 5. Ponding of water has been observed at the northern end of hangar pads 2 and 3. Concrete drain inlets associated with pads 1, 2, and 3 are cracking or flaking. The remaining ten drain inlets, manhole, and outfall appear to be in good working condition.

3.4 Riprap Drainage Channels

The riprap drainage channels were inspected annually and after significant rainfall events. Two riprap gravel drainage channels are located along the eastern and southeastern edges of the MatCon cover; a third riprap gravel channel is located mid-slope on the sloped portion of the landfill cover.

The length of each drainage channel was inspected for evidence of subsidence, erosion, vegetation, or excessive sedimentation. Areas below each end of the mid-slope drainage channel that receive flow from the channels were also inspected for signs of subsidence, erosion, and sedimentation.

The drainage channels adjacent to the MatCon cover are in good working condition, with no evidence of subsidence, erosion, sedimentation, or excessive vegetation.

The mid-slope rip-rap channel within the vegetated slope area has some minor

sedimentation. The far eastern end of the channel has contributed to the erosion channel cut into the vegetated slope. The riprap has failed and the liner is exposed. This area is being addressed with the construction activities that began in December 2014, see figure 3.4-1

3.5 Retaining Walls

The retaining walls and porous retention areas were inspected annually and after significant rainfall events. The concrete retaining wall and the two rock retaining (rock basket/gabion) walls are located at the toe of the sloped portion of the landfill cover (Figure 2.0-2). The top and face of each wall were inspected for areas of cracking, separation, rotation, erosion/sedimentation, or slumping.

Based upon visual observations, all retaining walls are in good working condition, with no evidence of cracking, separation, rotation, erosion/sedimentation, or slumping.

Three small retention areas are located east of the concrete retaining wall to enhance sediment removal and reduce storm water velocity from the adjacent slopes. At two of the retention areas, the retention berm failed after the September 2013 rain events.

During three significant rainfall events in July, August, and September 2014 a total of 2.35 inches of rain fell. It was noted during inspections that sediment was being carried off the site east of the retention areas through the chain link fence.

The retention areas are being addressed with construction activities that began in December 2014, see Figure 3.5-1.

3.6 Temporary Erosion-Control Features

Temporary erosion-control features installed during the remedy implementation included straw wattles, hay bales, and erosion fencing. During the December 2014 construction activities permanent erosion control features were installed to further stabilize the eastern perimeter ground of the Airport Landfill, see Figures 3.4-1, and 3.5-1.

3.7 Landfill-Gas Monitoring

Landfill-gas monitoring was conducted quarterly at hangar pad, trench drain, drainage culvert, perimeter ground, and perimeter spinner locations. Landfill-gas monitoring was conducted weekly at perimeter spinner locations. Monitoring entailed measuring combustible gases, oxygen, and carbon monoxide at 47 locations along the hangar pads, trench drains, and drain inlets and within the northern and eastern vegetated areas. In addition, monitoring was completed at the six landfill-gas collection system riser vent (spinner) locations. In accordance with the implementation plan (CE2 Corporation 2009, 111600) no landfill-gas monitoring was conducted at the DDA. Landfill-gas monitoring locations are shown in Figure 2.0-2.

Concentrations of combustible gases, oxygen, and carbon monoxide were measured in

percent values using a calibrated GX-2012 multigas detector calibrated by Essential Safety Products of Albuquerque, New Mexico. This instrument is designed to detect the minimum concentration of a combustible gas in air that can ignite, or the lower explosive limit (LEL), as well as oxygen and carbon monoxide levels. The combustible alarm was calibrated at 2.5% by volume for methane. Toxic alarm #1 was calibrated at 50 parts per million (ppm) for carbon monoxide and toxic alarm #2 was calibrated at 25 ppm for hydrogen sulfide. The oxygen alarm was calibrated at 12% by volume. Overall combustibility was calibrated using methane at 50% by volume.

Gas monitoring was conducted two inches above the expansion joints for the hangar pad (HP) locations, four in. below the trench grate for trench drain (TD) locations, 4 in. below the grate for drainage culvert (DC) locations, two inches. above ground surface for perimeter ground (PG) locations, and at the spinner for perimeter spinner (PS) vent pipe locations.

Quarterly gas-monitoring results are presented in Table 3.7-1. Results of the quarterly landfill-gas monitoring for hangar pad, trench drain, drainage culvert, and perimeter ground locations indicated background values or as noted in the table, not measured due to standing water at two trench locations, TD-01 and TD-02 in the 2nd quarter of 2014. Perimeter spinner locations are discussed in the next section.

3.8 Weekly Landfill-Gas Monitoring

Weekly landfill-gas monitoring was conducted in the same manner as the quarterly landfill-gas monitoring. Weekly gas-monitoring results are presented in Table 3.8-1.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-01 indicated background values.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-02 indicated background values 9 weeks out of 52. Readings ranged from 7% to 100% for methane, from 12.6% to 20.8% oxygen, and there was one 1% carbon monoxide reading recorded at the end of July. Results are plotted on a line chart in Figure 3.8-1.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-03 indicated background values 39 weeks out of 52. Readings ranged from 0% to 100% for methane, from 8.5% to 20.9% oxygen. No readings above 0% were recorded for carbon monoxide. Results are plotted on a line chart in Figure 3.8-2.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-04 indicated background values 45 weeks out of 52. Readings ranged from 0% to 100% for methane, from 0% to 20.9% oxygen. No readings above 0% were recorded for carbon monoxide. Results are plotted on a line chart in Figure 3.8-3.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-05 indicated background values 23 weeks out of 52. Readings ranged from 0% to 100% for

methane, from 11.3% to 20.9% oxygen. No readings above 0% were recorded for carbon monoxide. Results are plotted on a line chart in Figure 3.8-4.

Results of the weekly landfill-gas monitoring for perimeter spinner location PS-06 indicated background values 49 weeks out of 52. Readings ranged from 0% to 100% for methane, from 19.9% to 20.9% oxygen. No readings above 0% were recorded for carbon monoxide. Results are plotted on a line chart in Figure 3.8-5.

3.9 Debris Disposal Area

Inspections of the DDA were conducted after significant rainfall events. The DDA has a well established vegetative cover with no evidence of erosion. The DDA was snow covered in December and therefore not inspected as part of the annual inspection.

4.0 REFERENCES

The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority.

Documents previously submitted to the administrative authority are not included.

CE2 Corporation, July 2009. "Final Implementation Strategy for Post Closure Inspection and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico," report prepared for U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Los Alamos, New Mexico. (CE2 Corporation 2009, 111600)

LANL (Los Alamos National Laboratory), February 2011. "Inspection Report for Technical Area 73, Los Alamos County Airport Landfill, Solid Waste Management Units 73-001(a) and 73-001(d)," Los Alamos National Laboratory document LA-UR-11-0772, Los Alamos, New Mexico. (LANL 2011, 111750)

NMED (New Mexico Environment Department), August 8, 2007. "Notice of Approval, Remedy Completion Report SWMUs 73-001(a) and 73-001(d)," New Mexico

Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2007, 098285)

North Wind Inc., April 2006. "Post-Closure Care and Monitoring Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 2," report prepared for the U.S. Department of Energy, Los Alamos Site Office, North Wind report no. NW-ID-2004-027, Los Alamos, New Mexico. (North Wind, Inc., 2006, 111707)

North Wind Inc., April 2007. "Remedy Completion Report, DOE-LASO TA-73 Airport Landfill, SWMUs 73-001(a) and 73-001(d)," report prepared for U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, North Wind report no. NWI-4212-001,Los Alamos, New Mexico. (North Wind, Inc., 2007, 096333)

5.0 FIGURES

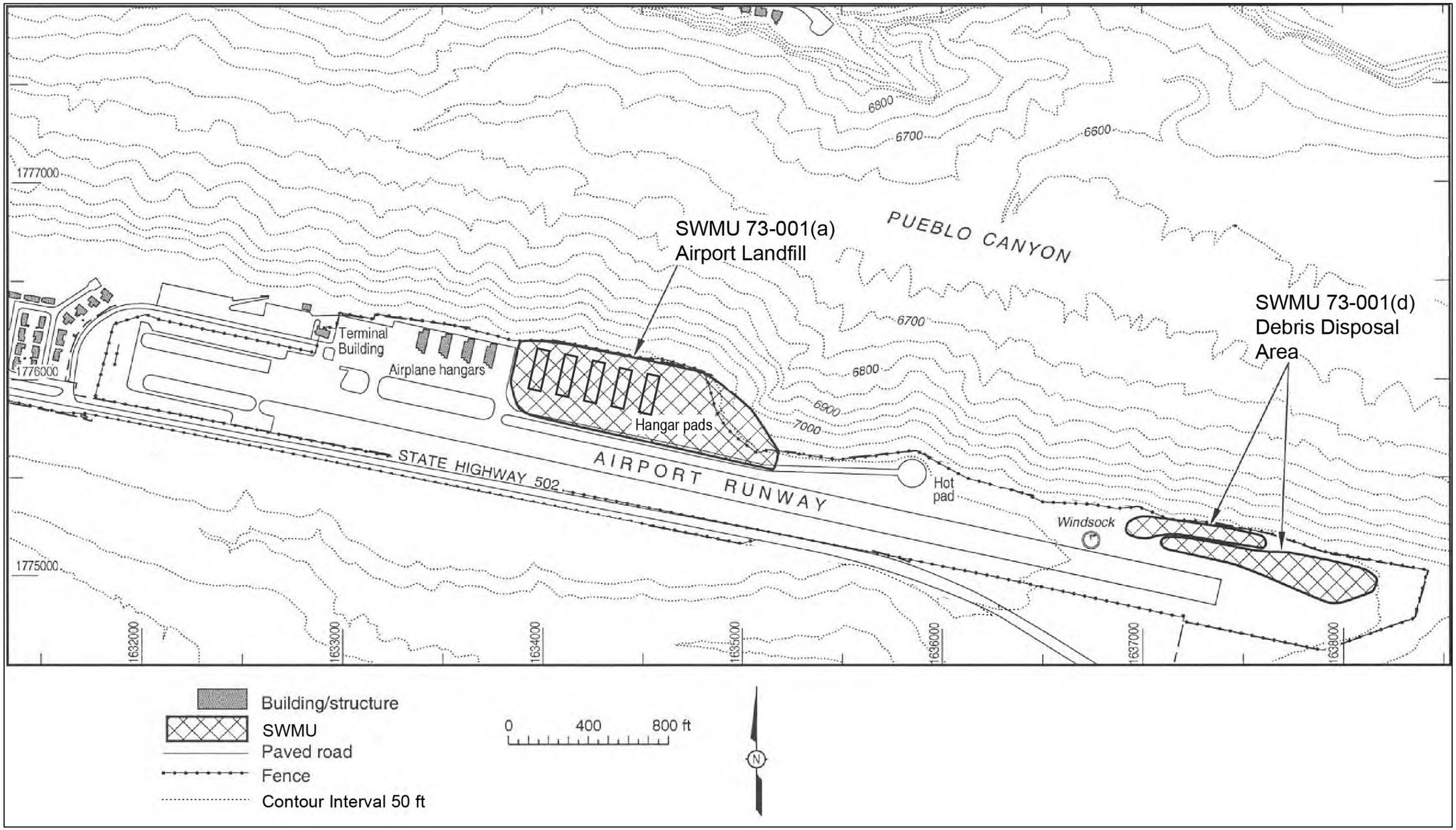

Figure 2.0-1 Locations of the airport landfill and DDA

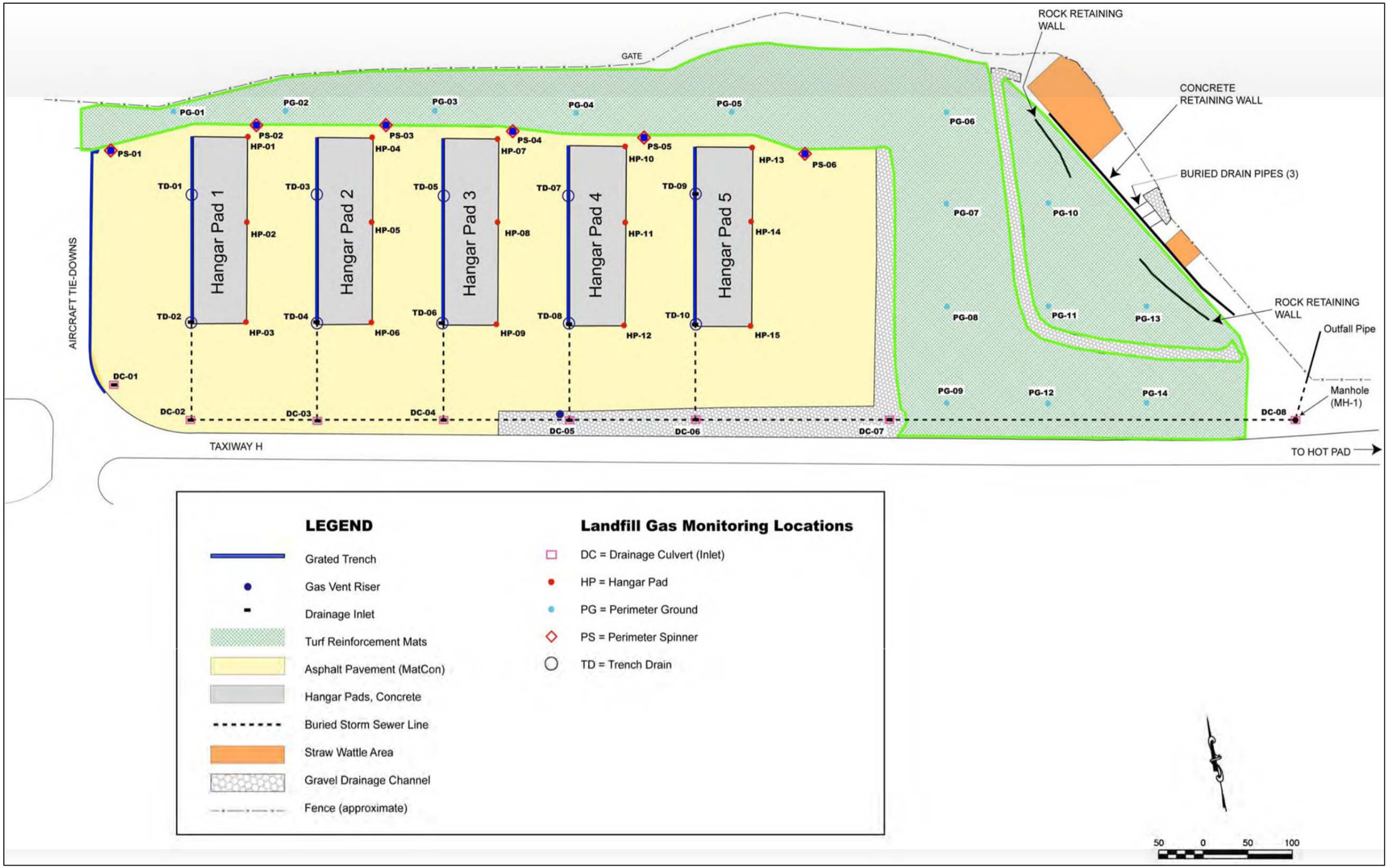

Figure 2.0-2 Airport landfill features

Figure 3.1-1 Separation of expansion joints on concrete pads

Figure 3.4-1 New Rip-Rap on far eastern end of vegetated slope

Figure 3.5-1 Retention area construction activities

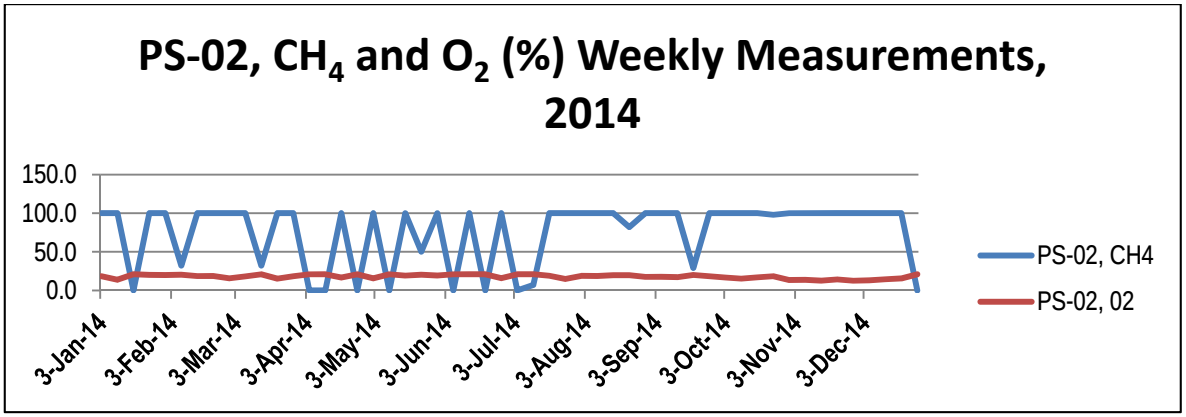

Figure 3.8-1 PS-02, CH4 and O2 (%) Weekly Measurements, 2014

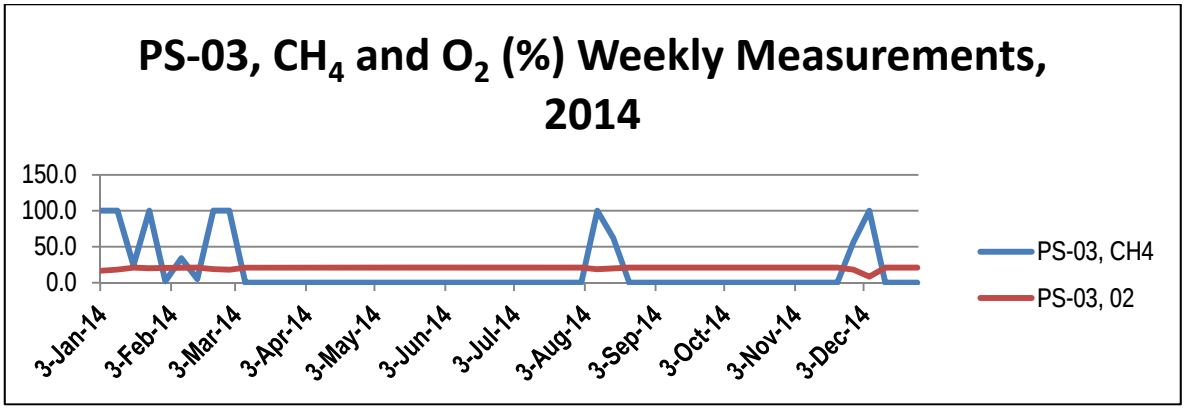

Figure 3.8-2 PS-03, CH4 and O2 (%) Weekly Measurements, 2014

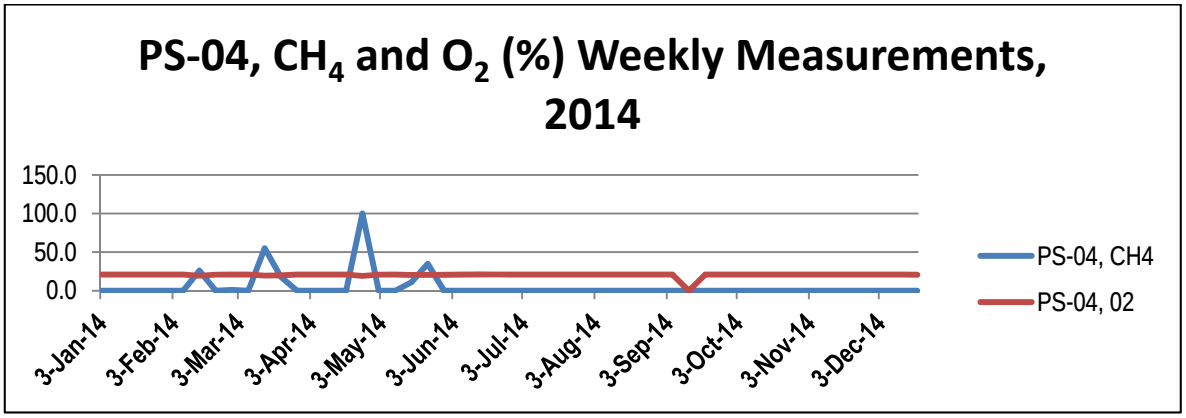

Figure 3.8-3 PS-04, CH4 and O2 (%) Weekly Measurements, 2014

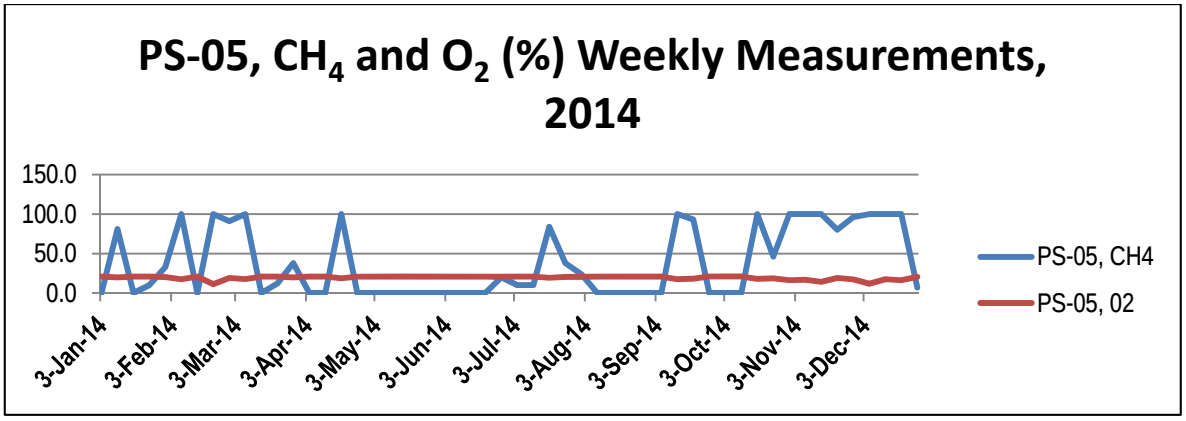

Figure 3.8-4 PS-05, CH4 and O2 (%) Weekly Measurements, 2014

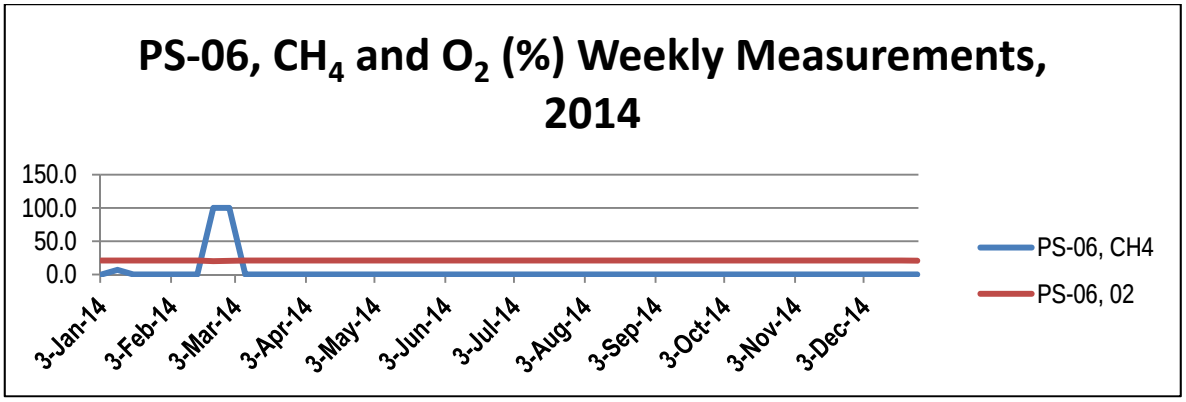

Figure 3.8-5 PS-06, CH4 and O2 (%) Weekly Measurements, 2014

6.0 TABLES

Table 3.7-1 Quarterly Landfill-Gas Monitoring Results (%), 2014

DATE	PS-01, CH_4	PS-01, O_2	PS-01, CO	PS-02, CH_4	PS-02, O_2	PS-02, CO	PS-03, CH_4	PS-03, O_2	PS-03, CO	PS-04, CH_4	PS-04, O_2	PS-04, CO	PS-05, CH_4	PS-05, O_2	PS-05, CO	PS-06, CH_4	PS-06, O_2	PS-06, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	100	16	2 (H2S)	0	20.8	0	0	20.8	0	20	20.4	0	0	20.8	0
26-Sep-14	0	20.9	0	100	18.3	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	100	15.4	0	0	20.9	0	0	20.9	0	100	16.3	0	0	20.9	0
	HP-01, CH_4	HP-01, O_2	HP-01, CO	HP-02, CH_4	HP-02, O_2	HP-02, CO	HP-03, CH_4	HP-03, O_2	HP-03, CO	HP-04, CH_4	HP-04, O_2	HP-04, CO	HP-05, CH_4	HP-05, O_2	HP-05, CO	HP-06, CH_4	HP-06, O_2	HP-06, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	HP-07, CH_4	HP-07, O_2	HP-07, CO	HP-08, CH_4	HP-08, O_2	HP-08, CO	HP-09, CH_4	HP-09, O_2	HP-09, CO	HP-10, CH_4	HP-10, O_2	HP-10, CO	HP-11, CH_4	HP-11, O_2	HP-11, CO	HP-12, CH_4	HP-12, O_2	HP-12, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	HP-13, CH_4	HP-13, O_2	HP-13, CO	HP-14, CH_4	HP-14, O_2	HP-14, CO	HP-15, CH_4	HP-15, O_2	HP-15, CO	TD-01, CH_4	TD-01, O_2	TD-01, CO	TD-02, CH_4	TD-02, O_2	TD-02, CO	TD-03-15, CH_4	TD-03, O_2	TD-03, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	NM	NM	NM	NM	NM	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14																		
	TD-04, CH_4	TD-04, O_2	TD-04, CO	TD-05, CH_4	TD-05, O_2	TD-05, CO	TD-06, CH_4	TD-06, O_2	TD-06, CO	TD-07, CH_4	TD-07, O_2	TD-07, CO	TD-08, CH_4	TD-08, O_2	TD-08, CO	TD-09-15, CH_4	TD-09, O_2	TD-09, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	TD-10, CH_4	TD-10, O_2	TD-10, CO	DC-01, CH_4	DC-01, O_2	DC-01, CO	DC-02, CH_4	DC-02, O_2	DC-02, CO	DC-03, CH_4	DC-03, O_2	DC-03, CO	DC-04, CH_4	DC-04, O_2	DC-04, CO	DC-05-15, CH_4	DC-05, O_2	DC-05, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	3	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	DC-06, CH_4	DC-06, O_2	DC-06, CO	DC-07, CH_4	DC-07, O_2	DC-07, CO	DC-08, CH_4	DC-08, O_2	DC-08, CO	PG-01, CH_4	PG-01, O_2	PG-01, CO	PG-02, CH_4	PG-02, O_2	PG-02, CO	PG-03, CH_4	PG-03, O_2	PG-03, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	PG-04, CH_4	PG-04, O_2	PG-04, CO	PG-05, CH_4	PG-05, O_2	PG-05, CO	PG-06, CH_4	PG-06, O_2	PG-06, CO	PG-07, CH_4	PG-07, O_2	PG-07, CO	PG-08, CH_4	PG-08, O_2	PG-08, CO	PG-09, CH_4	PG-09, O_2	PG-09, CO
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
	PG-10, CH_4	PG-10, O_2	PG-10, CO	PG-11, CH_4	PG-11, O_2	PG-11, CO	PG-12, CH_4	PG-12, O_2	PG-12, CO	PG-13, CH_4	PG-13, O_2	PG-13, CO	PG-14, CH_4	PG-14, O_2	PG-14, CO			
3-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0			
26-Jun-14	0	20.8	0	0	20.8	0	NM	NM	NM	0	20.8	0	0	20.8	0			
26-Sep-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0			
19-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0			

Table 3.8-1 Weekly Landfill-Gas Monitoring Results (%), 2014

WEEK ENDING	PS-01, CH_4	PS-01, O_2	PS-01, CO	PS-02, CH_4	PS-02, O_2	PS-02, CO	PS-03, CH_4	PS-03, O_2	PS-03, CO	PS-04, CH_4	PS-04, O_2	PS-04, CO	PS-05, CH_4	PS-05, O_2	PS-05, CO	PS-06, CH_4	PS-06, O_2	PS-06, CO
3-Jan-14	0	20.8	0	100	18.5	0	100	16.7	0	0	20.8	0	0	20.8	0	0	20.8	0
10-Jan-14	0	20.8	0	100	13.8	0	100	18.3	0	0	20.8	0	81	19.7	0	7	20.8	0
17-Jan-14	0	20.8	0	0	20.8	0	24	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
24-Jan-14	0	20.8	0	100	20.1	0	100	19.9	0	0	20.8	0	10	20.8	0	0	20.8	0
31-Jan-14	0	20.8	0	100	19.8	0	2	20.4	0	0	20.8	0	33	20.1	0	0	20.8	0
7-Feb-14	0	20.8	0	32	20.3	0	34	20.6	0	0	20.8	0	100	17.5	0	0	20.8	0
14-Feb-14	0	20.8	0	100	18.6	0	5	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
21-Feb-14	0	20.8	0	100	18.7	0	100	18.8	0	26	19.5	0	100	11.3	0	100	19.9	0
28-Feb-14	0	20.8	0	100	15.8	0	100	17.9	0	0	20.8	0	91	19.1	0	100	20.3	0
7-Mar-14	0	20.8	0	100	18.1	0	0	20.8	0	1	20.8	0	100	17.7	0	0	20.8	0
14-Mar-14	0	20.8	0	32	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
21-Mar-14	0	20.8	0	100	15.2	0	0	20.8	0	55	19.7	0	12	20.8	0	0	20.8	0
28-Mar-14	0	20.8	0	100	18.3	0	0	20.8	0	18	19.8	0	38	19.8	0	0	20.8	0
4-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
11-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
18-Apr-14	0	20.8	0	100	16.7	0	0	20.8	0	0	20.8	0	100	18.8	0	0	20.8	0
25-Apr-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
2-May-14	0	20.8	0	100	15.8	0	0	20.8	0	100	19.3	0	0	20.8	0	0	20.8	0
9-May-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
16-May-14	0	20.8	0	100	19.3	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
23-May-14	0	20.8	0	50	20.3	0	0	20.8	0	11	20.5	0	0	20.8	0	0	20.8	0
30-May-14	0	20.8	0	100	19.3	0	0	20.8	0	35	20.1	0	0	20.8	0	0	20.8	0
6-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
13-Jun-14	0	20.8	0	100	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
20-Jun-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
27-Jun-14	0	20.8	0	100	16	0	0	20.8	0	0	20.8	0	20	20.4	0	0	20.8	0
4-Jul-14	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0	10	20.8	0	0	20.8	0
11-Jul-14	0	20.8	0	7	20.8	0	0	20.8	0	0	20.8	0	10	20.8	0	0	20.8	0
18-Jul-14	0	20.8	0	100	19.1	0	0	20.8	0	0	20.8	0	84	19.3	0	0	20.8	0
25-Jul-14	0	20.8	0	100	14.9	1	0	20.8	0	0	20.8	0	38	20.4	0	0	20.8	0
1-Aug-14	0	20.8	0	100	18.9	0	0	20.8	0	0	20.8	0	24	20.4	0	0	20.8	0
8-Aug-14	0	20.8	0	100	18.7	0	100	18.7	0	0	20.8	0	0	20.8	0	0	20.8	0
15-Aug-14	0	20.8	0	100	19.7	0	62	19.7	0	0	20.8	0	0	20.8	0	0	20.8	0
22-Aug-14	0	20.8	0	82	19.7	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
29-Aug-14	0	20.8	0	100	17.6	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
5-Sep-14	0	20.8	0	100	17.6	0	0	20.8	0	0	20.8	0	0	20.8	0	0	20.8	0
12-Sep-14	0	20.8	0	100	17.2	0	0	20.8	0	0	20.8	0	100	17.6	0	0	20.8	0
19-Sep-14	0	20.9	0	29	20.1	0	0	20.9	0	0	0	0	93	18.1	0	0	20.9	0
26-Sep-14	0	20.9	0	100	18.3	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
3-Oct-14	0	20.9	0	100	16.7	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
10-Oct-14	0	20.9	0	100	15.2	0	0	20.9	0	0	20.9	0	0	20.9	0	0	20.9	0
17-Oct-14	0	20.9	0	100	16.9	0	0	20.9	0	0	20.9	0	100	17.9	0	0	20.9	0
24-Oct-14	0	20.9	0	98	18.3	0	0	20.9	0	0	20.9	0	46	18.6	0	0	20.9	0
31-Oct-14	0	20.9	0	100	13.4	0	0	20.9	0	0	20.9	0	100	16.3	0	0	20.9	0
7-Nov-14	0	20.9	0	100	13.7	0	0	20.9	0	0	20.9	0	100	16.7	0	0	20.9	0
14-Nov-14	0	20.9	0	100	12.7	0	0	20.9	0	0	20.9	0	100	14.2	0	0	20.9	0
21-Nov-14	0	20.9	0	100	14.2	0	0	20.9	0	0	20.9	0	80	19.2	0	0	20.9	0
28-Nov-14	0	20.9	0	100	12.6	0	56	18.2	0	0	20.9	0	96	17.3	0	0	20.9	0
5-Dec-14	0	20.9	0	100	13	0	100	8.5	0	0	20.9	0	100	11.8	0	0	20.9	0
12-Dec-14	0	20.9	0	100	14.4	0	0	20.9	0	0	20.9	0	100	17.6	0	0	20.9	0
19-Dec-14	0	20.9	0	100	15.4	0	0	20.9	0	0	20.9	0	100	16.3	0	0	20.9	0
26-Dec-14	0	20.9	0	0	20.9	0	0	20.9	0	0	20.7	0	7	20.5	0	0	20.7	0

Green font indicates dates when quarterly measurements were also collected.

Appendix A, Analytical Results from Soil Boring Locations

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-9039-1
Client Project/Site: LASO Airport Landfill

For:
CTI and Associates Inc.
51331 W Pontiac Trail
Wixom, Michigan 48393

Attn: Brent Kelley

Authorized for release by:
11/10/2014 3:49:15 PM

Chenise Lambert-Sykes, Project Management Assistant II
(314)298-8566
chenise.lambert-sykes@testamericainc.com

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 160-9039-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: CTI and Associates Inc.

Project: LASO Airport Landfill

Report Number: 160-9039-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/24/2014 and 10/25/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

VOLATILE ORGANIC COMPOUNDS BY GC/MS

Samples SB-11 8.5-9.0 FT (160-9039-1), SB-12 7-7.5 FT (160-9039-2), SB20 2.5-3FT (160-9039-3), SB19 6.5-7FT (160-9039-4), SB50 2-2.5FT (160-9039-5) and SB51 3-3.5FT (160-9039-6) were analyzed for Volatile Organic Compounds by GC/MS in accordance with EPA SW-846 Method 8260C. The samples were prepared on 10/25/2014 and analyzed on 10/29/2014.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 152963. An LCS/LCSD was performed to demonstrate accuracy and precision.
(MB 160-152012/1-A), SB-11 8.5-9.0 FT (160-9039-1), SB-12 7-7.5 FT (160-9039-2), SB19 6.5-7FT (160-9039-4), SB20 2.5-3FT (160-9039-3), SB50 2-2.5FT (160-9039-5), SB51 3-3.5FT (160-9039-6)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 160-9039-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

PERCENT SOLIDS

Samples SB-11 8.5-9.0 FT (160-9039-1), SB-12 7-7.5 FT (160-9039-2), SB20 2.5-3FT (160-9039-3), SB19 6.5-7FT (160-9039-4), SB50 2-2.5FT (160-9039-5) and SB51 3-3.5FT (160-9039-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 10/28/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FIXED GASES

Samples SB-11 (160-9039-7), SB-12 (160-9039-8), SB 20 (160-9039-9), SB 19 (160-9039-10), SB 50 (160-9039-11) and SB 51 (160-9039-12) were analyzed for Fixed Gases in accordance with ASTM Method D1946. The samples were analyzed on 10/30/2014.

Nitrogen was detected in method blank MB 320-56731/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples SB-11 (160-9039-7)[2.25X], SB-11 (160-9039-7)[4.5X], SB-12 (160-9039-8)[2.37X], SB 20 (160-9039-9)[2.3X], SB 19 (160-9039-10)[2.32X], SB 50 (160-9039-11)[2.32X] and SB 51 (160-9039-12)[2.35X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFUR EMISSIONS FROM STATIONARY SOURCES

Samples SB-11 (160-9039-7), SB-12 (160-9039-8), SB 20 (160-9039-9), SB 19 (160-9039-10), SB 50 (160-9039-11) and SB 51 (160-9039-12) were analyzed for Sulfur Emissions from Stationary Sources in accordance with EPA_15_16. The samples were analyzed on 10/24/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS

Samples SB-11 (160-9039-7), SB-12 (160-9039-8), SB 20 (160-9039-9), SB 19 (160-9039-10), SB 50 (160-9039-11) and SB 51 (160-9039-12) were analyzed for volatile organic compounds in accordance with EPA Method TO-15. The samples were analyzed on 11/06/2014 and 11/07/2014.

Ethylbenzene and m,p-Xylene were detected in method blank MB 320-57324/12 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples SB-12 (160-9039-8)[1.18X], SB-12 (160-9039-8)[2.37X], SB 20 (160-9039-9)[1.98X], SB 19 (160-9039-10)[386X], SB 19 (160-9039-10)[763X], SB 50 (160-9039-11)[11.6X] and SB 51 (160-9039-12)[1.68X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample was diluted due to the abundance of non-target analytes: SB 50 (160-9039-11). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J. Jordan	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s): Fed Ex 8996 6538 1080	COC No: 160-1929-955.1
Client Contact: Brent Kelley	Phone: 505-379-1269	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 1 of 1
Company: CTI and Associates Inc.				Job #:
Address: 51331 W Pontiac Trail	Due Date Requested:			
City: Wixom	TAT Requested (days):			
State, Zip: MI, 48393				
Phone:	PO #: Purchase Order not required			
Email: bkelley@cticompanies.com	WO #:			
Project Name: LASO Airport Landfill	Project #: 16003715			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-11 8.5-9.0 ft	10/23/14	0840	G	S			X		
SB-12 7-7.5 ft	10/23/14	1000	G	S			X		
~~8~~ SB20 2.5-3 ft	10/23/14	1100	G	S			X		
SB19 6.5-7 ft	10/23/14	1215	G	S			X		
SB 50 2-2.5 ft	10/23/14	1330	G	S			X		
SB 51 3-3.5 ft	10/23/14	1415	G	S			X		

160-9039 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: Fed Ex

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
J. Jordan	10/24/14 1300	TPMC	B	10/25/14 0850	T4
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: Brent Kelley	Samples Collected By: J. Jordan	COC No:
Company Name: CTI + Assoc Inc	Phone: 248-486-5100		____ of ____ COCs
Address: 51331 W. Pontiac Trail	Email: bkelley@ctiscompanies.com		
City/State/Zip Wixom MI 48393			For Lab Use Only:
Phone: 248 486 5100	Site Contact: Evangelos Gletsos		Walk-in Client:
FAX:	TA Contact:		Lab Sampling:
Project Name:	Anaylsis Turnaround Time		
Site/Location:	Standard (Specific):		Job / SDG No.:
P O #	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SB-11 Suma	10/23/14	0900	0900	NA	NA	NA	~~[illegible]~~ 1064	X														
SB-11 Tedlar bag		0900	0910	↓	↓	↓															X	CH_4, CO_2, H_2S N_2
SB-12 Suma		1000	1000	NA	NA	NA	C8508	X														
SB-12 Tedlar bag ~~[illegible]~~		1000	1010	↓	↓	↓															X	
SB20 Suma		1100	1102	NA	NA	NA	C8387	X														
SB20 tedlar bag		1100	1115	↓	↓	↓															X	
SB19 Suma		1230	1230	↓	↓	↓	C8417	X														
SB 19 tedlar bag		1230	1239	↓	↓	↓															X	
SB 50 Suma		1330	1330	↓	↓	↓	7950	X														
SB 50 Tedlar bag		1330	1345	↓	↓	↓															X	

Temperature (Fahrenheit)			
Start	Interior	Ambient	50
Stop			70

Temperature (Fahrenheit)			
Start	Interior	Ambient	50
Stop			70

Page 1 of 2

Fed Ex 8996 6538 1070

Special Instructions/QC Requirements & Comments:

Samples Shipped by: J. Jordan / E. Gletsos	Date / Time: 10/23/14 1600	Samples Received by: [signature] 10/24/14	900
Samples Relinquished by: [signature]	Date / Time:	Received by:	
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: Brent Kelley	Samples Collected By:	COC No:
Company Name: CTI & Associates Inc	Phone: 248 486 5100		_____ of _____ COCs
Address: 51331 W. Pontiac Trail	Email: bkelley@CTicompanies.com		
City/State/Zip Wixom, MI 48393			For Lab Use Only:
Phone: 248 486 5100	Site Contact: Evangelos Glotsos		Walk-in Client:
FAX:	TA Contact:		Lab Sampling:
Project Name: Los Alamos Airport Landfill	Anaylsis Turnaround Time		
Site/Location: Los Alamos, NM	Standard (Specific):		Job / SDG No.:
P O #	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes: JLS 10/23/14
SB S1 Sumo	10/23/14	1415	1415	NA	NA	NA	08327	X														~~CH4, CO2, H2S, N2~~
SB S1 Tedlar bag	↓	1415	1420	NA	NA	NA	NA														X	CH4, CO2, H2S, N2

	Temperature (Fahrenheit)			
	Start	Interior	Ambient	
	Stop			

See Pg 1

Page 2 of 2

	Temperature (Fahrenheit)			
	Start	Interior	Ambient	
	Stop			

Fed Ex 8996 6539 1070

Special Instructions/QC Requirements & Comments:

Samples Shipped by: See Pg 1	Date / Time:	Samples Received by:	
Samples Relinquished by: See Pg 1	Date / Time:	Received by:	
Relinquished by:	Date / Time:	Received by:	

Lab Use Only: Shipper Name: Opened by: Condition:

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 7

Client/Project:		VFR ID:		
Canister Serial #:	34000402	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.23	10/28/14	AO
FINAL PRESSURE (PSIA)	25.26	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.25			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.25		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							10/30/2014	atgc1			
Canister DF =	2.25	X	Load DF =	2	X	Bag DF =	1	=	FINAL DF 4.498664292		
			LVf (mLs)	50		BVf (mLs)					
			LVi (mLs)	25		Bvi (mLs)					
							Date	Instr.	File #		
							11/5/2014	atms2			
Canister DF =	2.25	X	Load DF =	0.4464286	X	Bag DF =	1	=	FINAL DF 1.004166137		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	560		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	2.25	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 8

Client/Project:		VFR ID:		
Canister Serial #:	34000140	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	10.73	10/28/14	AO
FINAL PRESSURE (PSIA)	25.42	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.37			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.37		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							11/5/2014	atms2			
Canister DF =	2.37	X	Load DF =	0.5	X	Bag DF =	1	=	FINAL DF 1.184529357		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	500		Bvi (mLs)					
							Date	Instr.	File #		
							11/6/2014	atms7			
Canister DF =	2.37	X	Load DF =	1	X	Bag DF =	1	=	FINAL DF 2.369058714		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	250		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	2.37	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 9

Client/Project:		VFR ID:		
Canister Serial #:	34001302	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.01	10/28/14	AO
FINAL PRESSURE (PSIA)	25.35	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.30			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.30		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
								11/5/2014	atms2		
Canister DF =	2.30	X	Load DF =	0.4347826	X	Bag DF =	1	=		FINAL DF	1.001066224
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	575		Bvi (mLs)					
								Date	Instr.	File #	
								11/6/2014	atms7		
Canister DF =	2.30	X	Load DF =	0.862069	X	Bag DF =	1	=		FINAL DF	1.984872686
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	290		Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	2.30	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 10

Client/Project:		VFR ID:		
Canister Serial #:	34001275	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	10.93	10/28/14	AO
FINAL PRESSURE (PSIA)	25.35	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.32			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.32		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Canister DF		Load DF		Bag DF		Date	Instr.	File #	FINAL DF
2.32	X	3.3333333 (LVf 250, LVi 75)	X	50 (BVf 1000, Bvi 20)	=	11/5/2014	atms2		386.5507777
2.32	X	6.5789474 (LVf 250, LVi 38)	X	50 (BVf 1000, Bvi 20)	=	11/6/2014	atms7		762.9291665
2.32	X	#DIV/0! (LVf, LVi)	X	1 (BVf, Bvi)	=				#DIV/0!

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 11

Client/Project:		VFR ID:		
Canister Serial #:	34000183	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	10.89	10/28/14	AO
FINAL PRESSURE (PSIA)	25.29	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.32			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.32		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							11/5/2014	atms2			
Canister DF =	2.32	X	Load DF =	5	X	Bag DF =	1	=	FINAL DF 11.61157025		
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	50		Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	2.32	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	2.32	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 160-9039
Sample # 12

Client/Project:		VFR ID:		
Canister Serial #:	34000154	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	10.74	10/28/14	AO
FINAL PRESSURE (PSIA)	25.27	10/28/14	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.35			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.35		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
								11/5/2014	atms2		
Canister DF =	2.35	X	Load DF =	0.7142857	X	Bag DF =	1	=		FINAL DF	1.680633147
			LVf (mLs)	250		BVf (mLs)					
			LVi (mLs)	350		Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	2.35	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
								Date	Instr.	File #	
Canister DF =	2.35	X	Load DF =	#DIV/0!	X	Bag DF =	1	=		FINAL DF	#DIV/0!
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

Login Sample Receipt Checklist

Client: CTI and Associates Inc.

Job Number: 160-9039-1

Login Number: 9039

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CTI and Associates Inc.

Job Number: 160-9039-1

Login Number: 9039
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 10/27/14 02:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Air - GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL SAC
D1946	Fixed Gases in Air (GC)	ASTM	TAL SAC
EPA 15_16	Sulfur Emissions from Stationary Sources (GC/FPD)	EPA	TAL SAC
Moisture	Percent Moisture	EPA	TAL SL

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-9039-1	SB-11 8.5-9.0 FT	Solid	10/23/14 08:40	10/25/14 08:50
160-9039-2	SB-12 7-7.5 FT	Solid	10/23/14 10:00	10/25/14 08:50
160-9039-3	SB20 2.5-3FT	Solid	10/23/14 11:00	10/25/14 08:50
160-9039-4	SB19 6.5-7FT	Solid	10/23/14 12:15	10/25/14 08:50
160-9039-5	SB50 2-2.5FT	Solid	10/23/14 13:30	10/25/14 08:50
160-9039-6	SB51 3-3.5FT	Solid	10/23/14 14:15	10/25/14 08:50
160-9039-7	SB-11	Air	10/23/14 09:10	10/24/14 09:30
160-9039-8	SB-12	Air	10/23/14 10:10	10/25/14 08:50
160-9039-9	SB 20	Air	10/23/14 11:15	10/25/14 08:50
160-9039-10	SB 19	Air	10/23/14 12:39	10/25/14 08:50
160-9039-11	SB 50	Air	10/23/14 13:45	10/25/14 08:50
160-9039-12	SB 51	Air	10/23/14 14:20	10/25/14 08:50

Detection Summary

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB-11 8.5-9.0 FT — Lab Sample ID: 160-9039-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	16	J	25	2.4	ug/Kg	1	☼	8260C	Total/NA
Acetone	120		25	8.2	ug/Kg	1	☼	8260C	Total/NA
Carbon disulfide	3.2	J	6.3	0.87	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-12 7-7.5 FT — Lab Sample ID: 160-9039-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	62		28	9.1	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB20 2.5-3FT — Lab Sample ID: 160-9039-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	24		24	2.3	ug/Kg	1	☼	8260C	Total/NA
Acetone	130		24	7.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB19 6.5-7FT — Lab Sample ID: 160-9039-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	51		24	7.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB50 2-2.5FT — Lab Sample ID: 160-9039-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.0	J	18	5.9	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB51 3-3.5FT — Lab Sample ID: 160-9039-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		29	9.3	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-11 — Lab Sample ID: 160-9039-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24		5.0	0.18	ppb v/v	1		TO-15	Total/NA
Benzene	0.96		0.40	0.079	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	4.0		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	2.7		0.80	0.078	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.095	J	0.80	0.064	ppb v/v	1		TO-15	Total/NA
Chlorobenzene	0.27	J	0.30	0.064	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.61	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	8.0		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	12		0.40	0.15	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	2.1		0.40	0.089	ppb v/v	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.37	J	0.40	0.16	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	8.3		0.40	0.063	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.68		0.40	0.19	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.12	J	0.40	0.072	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.061	J	0.40	0.051	ppb v/v	1		TO-15	Total/NA
Toluene	1.0		0.40	0.051	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.41		0.40	0.20	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-11 (Continued) — Lab Sample ID: 160-9039-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	4.8		0.80	0.16	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	2.2		0.40	0.13	ppb v/v	1		TO-15	Total/NA
Vinyl chloride	0.50		0.40	0.12	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	9.4		0.80	0.10	ppb v/v	1		TO-15	Total/NA
o-Xylene	1.6		0.40	0.054	ppb v/v	1		TO-15	Total/NA
Carbon Dioxide (TCD)	0.18	J	1.1	0.024	% v/v	2.25		D1946	Total/NA
Methane (FID)	0.14		0.00045	0.000090	% v/v	4.5		D1946	Total/NA
Nitrogen	82	B	2.3	0.055	% v/v	2.25		D1946	Total/NA

Client Sample ID: SB-12 — Lab Sample ID: 160-9039-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	47		5.9	0.21	ppb v/v	1.18		TO-15	Total/NA
Benzene	9.8		0.47	0.093	ppb v/v	1.18		TO-15	Total/NA
2-Butanone (MEK)	11		0.94	0.23	ppb v/v	1.18		TO-15	Total/NA
Carbon disulfide	39		0.94	0.092	ppb v/v	1.18		TO-15	Total/NA
Carbon tetrachloride	0.098	J	0.94	0.076	ppb v/v	1.18		TO-15	Total/NA
Chloroform	3.4		0.35	0.11	ppb v/v	1.18		TO-15	Total/NA
Chloromethane	0.61	J	0.94	0.23	ppb v/v	1.18		TO-15	Total/NA
1,4-Dichlorobenzene	5.9		0.47	0.18	ppb v/v	1.18		TO-15	Total/NA
Dichlorodifluoromethane	2.6		0.47	0.17	ppb v/v	1.18		TO-15	Total/NA
1,1-Dichloroethane	0.17	J	0.35	0.085	ppb v/v	1.18		TO-15	Total/NA
cis-1,2-Dichloroethene	68		0.47	0.11	ppb v/v	1.18		TO-15	Total/NA
trans-1,2-Dichloroethene	1.1		0.47	0.12	ppb v/v	1.18		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	15		0.47	0.18	ppb v/v	1.18		TO-15	Total/NA
4-Ethyltoluene	12		0.47	0.22	ppb v/v	1.18		TO-15	Total/NA
Methylene Chloride	0.34	J	0.47	0.085	ppb v/v	1.18		TO-15	Total/NA
Styrene	4.2		0.47	0.070	ppb v/v	1.18		TO-15	Total/NA
Tetrachloroethene	0.42	J	0.47	0.060	ppb v/v	1.18		TO-15	Total/NA
Toluene	7.1		0.47	0.060	ppb v/v	1.18		TO-15	Total/NA
Trichloroethene	0.65		0.47	0.12	ppb v/v	1.18		TO-15	Total/NA
Trichlorofluoromethane	0.33	J	0.47	0.23	ppb v/v	1.18		TO-15	Total/NA
1,2,4-Trimethylbenzene	49		0.94	0.19	ppb v/v	1.18		TO-15	Total/NA
1,3,5-Trimethylbenzene	26		0.47	0.15	ppb v/v	1.18		TO-15	Total/NA
Vinyl chloride	17		0.47	0.14	ppb v/v	1.18		TO-15	Total/NA
m,p-Xylene	58		0.94	0.12	ppb v/v	1.18		TO-15	Total/NA
o-Xylene	10		0.47	0.064	ppb v/v	1.18		TO-15	Total/NA
Ethylbenzene - DL	40	B	0.95	0.15	ppb v/v	2.37		TO-15	Total/NA
Carbon Dioxide (TCD)	1.3		1.2	0.025	% v/v	2.37		D1946	Total/NA
Methane (TCD)	1.9		1.2	0.32	% v/v	2.37		D1946	Total/NA
Nitrogen	80		2.4	0.058	% v/v	2.37		D1946	Total/NA

Client Sample ID: SB 20 — Lab Sample ID: 160-9039-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.7		0.40	0.079	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	15		0.80	0.20	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	8.1		0.80	0.078	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.10	J	0.80	0.064	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.65	J	0.80	0.20	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB 20 (Continued) — Lab Sample ID: 160-9039-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.67		0.40	0.13	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.26	J	0.40	0.11	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	4.2		0.40	0.15	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	3.8		0.40	0.15	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	4.4		0.40	0.089	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.24	J	0.40	0.10	ppb v/v	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.92		0.40	0.16	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	4.9		0.40	0.063	ppb v/v	1		TO-15	Total/NA
4-Ethyltoluene	0.85		0.40	0.19	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.11	J	0.40	0.072	ppb v/v	1		TO-15	Total/NA
Styrene	3.1		0.40	0.059	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.099	J	0.40	0.051	ppb v/v	1		TO-15	Total/NA
Toluene	4.6		0.40	0.051	ppb v/v	1		TO-15	Total/NA
Trichloroethene	5.1		0.40	0.11	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.22	J	0.40	0.20	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	4.3		0.80	0.16	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.9		0.40	0.13	ppb v/v	1		TO-15	Total/NA
Vinyl chloride	1.8		0.40	0.12	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	6.8		0.80	0.10	ppb v/v	1		TO-15	Total/NA
o-Xylene	2.5		0.40	0.054	ppb v/v	1		TO-15	Total/NA
Acetone - DL	44		9.9	0.35	ppb v/v	1.98		TO-15	Total/NA
Carbon Dioxide (TCD)	1.4		1.2	0.025	% v/v	2.3		D1946	Total/NA
Methane (TCD)	2.0		1.2	0.31	% v/v	2.3		D1946	Total/NA
Nitrogen	79		2.3	0.056	% v/v	2.3		D1946	Total/NA

Client Sample ID: SB 19 — Lab Sample ID: 160-9039-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1900		1900	69	ppb v/v	386		TO-15	Total/NA
Benzene	120	J	150	30	ppb v/v	386		TO-15	Total/NA
2-Butanone (MEK)	2800		310	77	ppb v/v	386		TO-15	Total/NA
Carbon disulfide	40	J	310	30	ppb v/v	386		TO-15	Total/NA
1,4-Dichlorobenzene	2800		150	58	ppb v/v	386		TO-15	Total/NA
cis-1,2-Dichloroethene	800		150	34	ppb v/v	386		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	210		150	60	ppb v/v	386		TO-15	Total/NA
Ethylbenzene	4700		150	24	ppb v/v	386		TO-15	Total/NA
4-Ethyltoluene	850		150	72	ppb v/v	386		TO-15	Total/NA
Methylene Chloride	160		150	28	ppb v/v	386		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	1500		150	52	ppb v/v	386		TO-15	Total/NA
Styrene	380		150	23	ppb v/v	386		TO-15	Total/NA
Tetrachloroethene	390		150	20	ppb v/v	386		TO-15	Total/NA
Toluene	9100		150	20	ppb v/v	386		TO-15	Total/NA
1,1,1-Trichloroethane	70	J	120	25	ppb v/v	386		TO-15	Total/NA
Trichloroethene	150		150	41	ppb v/v	386		TO-15	Total/NA
1,2,4-Trimethylbenzene	2400		310	63	ppb v/v	386		TO-15	Total/NA
1,3,5-Trimethylbenzene	1000		150	48	ppb v/v	386		TO-15	Total/NA
Vinyl chloride	210		150	46	ppb v/v	386		TO-15	Total/NA
m,p-Xylene	11000		310	39	ppb v/v	386		TO-15	Total/NA
o-Xylene	3700		150	21	ppb v/v	386		TO-15	Total/NA
Dichlorodifluoromethane - DL	25000		310	110	ppb v/v	763		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB 19 (Continued) — Lab Sample ID: 160-9039-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Dioxide (TCD)	38		1.2	0.025	% v/v	2.32		D1946	Total/NA
Methane (TCD)	50		1.2	0.31	% v/v	2.32		D1946	Total/NA
Nitrogen	15		2.3	0.057	% v/v	2.32		D1946	Total/NA
Hydrogen sulfide	1.5		0.40	0.20	ppm v/v	1		EPA 15_16	Total/NA

Client Sample ID: SB 50 — Lab Sample ID: 160-9039-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	62		58	2.1	ppb v/v	11.6		TO-15	Total/NA
Benzene	7.6		4.6	0.92	ppb v/v	11.6		TO-15	Total/NA
2-Butanone (MEK)	13		9.3	2.3	ppb v/v	11.6		TO-15	Total/NA
Carbon disulfide	14		9.3	0.90	ppb v/v	11.6		TO-15	Total/NA
Dichlorodifluoromethane	56		4.6	1.7	ppb v/v	11.6		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	12		4.6	1.8	ppb v/v	11.6		TO-15	Total/NA
Ethylbenzene	2.4	J	4.6	0.73	ppb v/v	11.6		TO-15	Total/NA
Styrene	5.2		4.6	0.68	ppb v/v	11.6		TO-15	Total/NA
Toluene	7.4		4.6	0.59	ppb v/v	11.6		TO-15	Total/NA
Vinyl chloride	5.7		4.6	1.4	ppb v/v	11.6		TO-15	Total/NA
m,p-Xylene	2.5	J	9.3	1.2	ppb v/v	11.6		TO-15	Total/NA
o-Xylene	1.4	J	4.6	0.63	ppb v/v	11.6		TO-15	Total/NA
Carbon Dioxide (TCD)	4.1		1.2	0.025	% v/v	2.32		D1946	Total/NA
Methane (TCD)	5.5		1.2	0.31	% v/v	2.32		D1946	Total/NA
Nitrogen	75		2.3	0.057	% v/v	2.32		D1946	Total/NA

Client Sample ID: SB 51 — Lab Sample ID: 160-9039-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	55		8.4	0.30	ppb v/v	1.68		TO-15	Total/NA
Benzene	7.4		0.67	0.13	ppb v/v	1.68		TO-15	Total/NA
2-Butanone (MEK)	12		1.3	0.33	ppb v/v	1.68		TO-15	Total/NA
Carbon disulfide	6.3		1.3	0.13	ppb v/v	1.68		TO-15	Total/NA
Chloromethane	0.61	J	1.3	0.33	ppb v/v	1.68		TO-15	Total/NA
1,3-Dichlorobenzene	0.19	J	0.67	0.18	ppb v/v	1.68		TO-15	Total/NA
1,4-Dichlorobenzene	1.3		0.67	0.25	ppb v/v	1.68		TO-15	Total/NA
Dichlorodifluoromethane	2.3		0.67	0.24	ppb v/v	1.68		TO-15	Total/NA
cis-1,2-Dichloroethene	3.2		0.67	0.15	ppb v/v	1.68		TO-15	Total/NA
trans-1,2-Dichloroethene	0.25	J	0.67	0.17	ppb v/v	1.68		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	16		0.67	0.26	ppb v/v	1.68		TO-15	Total/NA
Ethylbenzene	2.2		0.67	0.11	ppb v/v	1.68		TO-15	Total/NA
4-Ethyltoluene	0.38	J	0.67	0.31	ppb v/v	1.68		TO-15	Total/NA
Styrene	5.0		0.67	0.099	ppb v/v	1.68		TO-15	Total/NA
Tetrachloroethene	0.13	J	0.67	0.086	ppb v/v	1.68		TO-15	Total/NA
Toluene	6.1		0.67	0.086	ppb v/v	1.68		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.91	J	1.3	0.27	ppb v/v	1.68		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.30	J	0.67	0.21	ppb v/v	1.68		TO-15	Total/NA
Vinyl chloride	4.1		0.67	0.20	ppb v/v	1.68		TO-15	Total/NA
m,p-Xylene	2.5		1.3	0.17	ppb v/v	1.68		TO-15	Total/NA
Carbon Dioxide (TCD)	2.8		1.2	0.025	% v/v	2.35		D1946	Total/NA
Methane (TCD)	3.9		1.2	0.32	% v/v	2.35		D1946	Total/NA
Nitrogen	78		2.4	0.057	% v/v	2.35		D1946	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB-11 8.5-9.0 FT

Lab Sample ID: 160-9039-1

Date Collected: 10/23/14 08:40
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 79.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.3	0.54	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,1,2,2-Tetrachloroethane	ND		6.3	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.3	2.1	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,1,2-Trichloroethane	ND		6.3	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,1-Dichloroethane	ND		6.3	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,1-Dichloroethene	ND		6.3	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2,4-Trichlorobenzene	ND		6.3	0.54	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2-Dibromo-3-Chloropropane	ND		13	1.8	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2-Dichlorobenzene	ND		6.3	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2-Dichloroethane	ND		6.3	1.1	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2-Dichloropropane	ND		6.3	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,3-Dichlorobenzene	ND		6.3	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,4-Dichlorobenzene	ND		6.3	0.76	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
2-Butanone (MEK)	**16**	**J**	25	2.4	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
2-Hexanone	ND		25	2.2	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	0.92	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Acetone	**120**		25	8.2	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Benzene	ND		6.3	0.32	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Bromoform	ND		6.3	0.47	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Bromomethane	ND		13	1.4	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Carbon disulfide	**3.2**	**J**	6.3	0.87	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Carbon tetrachloride	ND		6.3	0.65	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Chlorobenzene	ND		6.3	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Dibromochloromethane	ND		6.3	0.52	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Chloroethane	ND		13	0.66	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Chloroform	ND		6.3	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Chloromethane	ND		13	0.82	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
cis-1,2-Dichloroethene	ND		6.3	0.76	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
cis-1,3-Dichloropropene	ND		6.3	0.76	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Cyclohexane	ND		13	0.46	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Bromodichloromethane	ND		6.3	0.32	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Dichlorodifluoromethane	ND		13	1.7	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Ethylbenzene	ND		6.3	0.38	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
1,2-Dibromoethane (EDB)	ND		6.3	0.89	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Isopropylbenzene	ND		6.3	0.33	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Methyl acetate	ND		32	1.7	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Methyl tert-butyl ether	ND		6.3	0.61	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Methylcyclohexane	ND		13	0.33	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Methylene Chloride	ND		6.3	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
m-Xylene & p-Xylene	ND		6.3	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
o-Xylene	ND		6.3	0.43	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Styrene	ND		6.3	0.44	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Tetrachloroethene	ND		6.3	0.41	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Toluene	ND		6.3	0.89	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
trans-1,2-Dichloroethene	ND		6.3	1.2	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
trans-1,3-Dichloropropene	ND		6.3	0.44	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Trichloroethene	ND		6.3	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Trichlorofluoromethane	ND		6.3	0.63	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1
Vinyl chloride	ND		6.3	0.54	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1

Client Sample ID: SB-11 8.5-9.0 FT

Lab Sample ID: 160-9039-1
Date Collected: 10/23/14 08:40
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 79.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		13	1.1	ug/Kg	☼	10/25/14 10:50	10/29/14 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*	*10/25/14 10:50*	*10/29/14 05:24*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 126*	*10/25/14 10:50*	*10/29/14 05:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*63 - 150*	*10/25/14 10:50*	*10/29/14 05:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 127*	*10/25/14 10:50*	*10/29/14 05:24*	*1*

Client Sample ID: SB-12 7-7.5 FT

Lab Sample ID: 160-9039-2
Date Collected: 10/23/14 10:00
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 81.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.0	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,1,2,2-Tetrachloroethane	ND		7.0	0.56	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.0	2.4	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,1,2-Trichloroethane	ND		7.0	0.80	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,1-Dichloroethane	ND		7.0	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,1-Dichloroethene	ND		7.0	2.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2,4-Trichlorobenzene	ND		7.0	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2-Dibromo-3-Chloropropane	ND		14	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2-Dichlorobenzene	ND		7.0	0.39	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2-Dichloroethane	ND		7.0	1.2	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2-Dichloropropane	ND		7.0	0.53	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,3-Dichlorobenzene	ND		7.0	0.39	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,4-Dichlorobenzene	ND		7.0	0.84	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
2-Butanone (MEK)	ND		28	2.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
2-Hexanone	ND		28	2.5	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Acetone	**62**		28	9.1	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Benzene	ND		7.0	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Bromoform	ND		7.0	0.52	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Bromomethane	ND		14	1.5	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Carbon disulfide	ND		7.0	0.97	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Carbon tetrachloride	ND		7.0	0.71	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Chlorobenzene	ND		7.0	0.53	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Dibromochloromethane	ND		7.0	0.57	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Chloroethane	ND		14	0.73	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Chloroform	ND		7.0	0.53	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Chloromethane	ND		14	0.91	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
cis-1,2-Dichloroethene	ND		7.0	0.84	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
cis-1,3-Dichloropropene	ND		7.0	0.84	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Cyclohexane	ND		14	0.50	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Bromodichloromethane	ND		7.0	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Dichlorodifluoromethane	ND		14	1.8	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Ethylbenzene	ND		7.0	0.42	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
1,2-Dibromoethane (EDB)	ND		7.0	0.98	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Isopropylbenzene	ND		7.0	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Methyl acetate	ND		35	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1

Client Sample ID: SB-12 7-7.5 FT

Lab Sample ID: 160-9039-2
Date Collected: 10/23/14 10:00
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 81.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		7.0	0.67	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Methylcyclohexane	ND		14	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Methylene Chloride	ND		7.0	2.2	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
m-Xylene & p-Xylene	ND		7.0	0.80	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
o-Xylene	ND		7.0	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Styrene	ND		7.0	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Tetrachloroethene	ND		7.0	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Toluene	ND		7.0	0.98	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
trans-1,2-Dichloroethene	ND		7.0	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
trans-1,3-Dichloropropene	ND		7.0	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Trichloroethene	ND		7.0	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Trichlorofluoromethane	ND		7.0	0.70	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Vinyl chloride	ND		7.0	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1
Xylenes, Total	ND		14	1.2	ug/Kg	☼	10/25/14 10:50	10/29/14 04:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*	*10/25/14 10:50*	*10/29/14 04:59*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 126*	*10/25/14 10:50*	*10/29/14 04:59*	*1*
4-Bromofluorobenzene (Surr)	*105*		*63 - 150*	*10/25/14 10:50*	*10/29/14 04:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 127*	*10/25/14 10:50*	*10/29/14 04:59*	*1*

Client Sample ID: SB20 2.5-3FT

Lab Sample ID: 160-9039-3
Date Collected: 10/23/14 11:00
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,1,2,2-Tetrachloroethane	ND		5.9	0.47	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,1,2-Trichloroethane	ND		5.9	0.67	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,1-Dichloroethane	ND		5.9	0.46	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,1-Dichloroethene	ND		5.9	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2,4-Trichlorobenzene	ND		5.9	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2-Dibromo-3-Chloropropane	ND		12	1.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2-Dichlorobenzene	ND		5.9	0.33	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2-Dichloroethane	ND		5.9	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2-Dichloropropane	ND		5.9	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,3-Dichlorobenzene	ND		5.9	0.33	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,4-Dichlorobenzene	ND		5.9	0.71	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
2-Butanone (MEK)	**24**		24	2.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
2-Hexanone	ND		24	2.1	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
4-Methyl-2-pentanone (MIBK)	ND		24	0.86	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Acetone	**130**		24	7.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Benzene	ND		5.9	0.30	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Bromoform	ND		5.9	0.44	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Bromomethane	ND		12	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Carbon disulfide	ND		5.9	0.82	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Carbon tetrachloride	ND		5.9	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Chlorobenzene	ND		5.9	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1

Client Sample ID: SB20 2.5-3FT

Lab Sample ID: 160-9039-3
Date Collected: 10/23/14 11:00
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		5.9	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Chloroethane	ND		12	0.61	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Chloroform	ND		5.9	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Chloromethane	ND		12	0.77	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
cis-1,2-Dichloroethene	ND		5.9	0.71	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
cis-1,3-Dichloropropene	ND		5.9	0.71	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Cyclohexane	ND		12	0.43	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Bromodichloromethane	ND		5.9	0.30	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Dichlorodifluoromethane	ND		12	1.5	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Ethylbenzene	ND		5.9	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
1,2-Dibromoethane (EDB)	ND		5.9	0.83	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Isopropylbenzene	ND		5.9	0.31	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Methyl acetate	ND		30	1.6	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Methyl tert-butyl ether	ND		5.9	0.57	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Methylcyclohexane	ND		12	0.31	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Methylene Chloride	ND		5.9	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
m-Xylene & p-Xylene	ND		5.9	0.67	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
o-Xylene	ND		5.9	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Styrene	ND		5.9	0.41	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Tetrachloroethene	ND		5.9	0.38	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Toluene	ND		5.9	0.83	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
trans-1,2-Dichloroethene	ND		5.9	1.1	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
trans-1,3-Dichloropropene	ND		5.9	0.41	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Trichloroethene	ND		5.9	0.46	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Trichlorofluoromethane	ND		5.9	0.59	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Vinyl chloride	ND		5.9	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*	*10/25/14 10:50*	*10/29/14 04:34*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 126*	*10/25/14 10:50*	*10/29/14 04:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*63 - 150*	*10/25/14 10:50*	*10/29/14 04:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 127*	*10/25/14 10:50*	*10/29/14 04:34*	*1*

Client Sample ID: SB19 6.5-7FT

Lab Sample ID: 160-9039-4
Date Collected: 10/23/14 12:15
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 83.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,1,2,2-Tetrachloroethane	ND		6.0	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,1,2-Trichloroethane	ND		6.0	0.68	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,1-Dichloroethane	ND		6.0	0.47	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,1-Dichloroethene	ND		6.0	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,2,4-Trichlorobenzene	ND		6.0	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,2-Dibromo-3-Chloropropane	ND		12	1.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,2-Dichlorobenzene	ND		6.0	0.34	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,2-Dichloroethane	ND		6.0	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1

Client Sample ID: SB19 6.5-7FT

Date Collected: 10/23/14 12:15
Date Received: 10/25/14 08:50

Lab Sample ID: 160-9039-4

Matrix: Solid
Percent Solids: 83.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		6.0	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,3-Dichlorobenzene	ND		6.0	0.34	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,4-Dichlorobenzene	ND		6.0	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
2-Butanone (MEK)	ND		24	2.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
2-Hexanone	ND		24	2.1	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
4-Methyl-2-pentanone (MIBK)	ND		24	0.87	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Acetone	**51**		24	7.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Benzene	ND		6.0	0.30	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Bromoform	ND		6.0	0.44	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Bromomethane	ND		12	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Carbon disulfide	ND		6.0	0.83	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Carbon tetrachloride	ND		6.0	0.61	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Chlorobenzene	ND		6.0	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Dibromochloromethane	ND		6.0	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Chloroethane	ND		12	0.62	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Chloroform	ND		6.0	0.45	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Chloromethane	ND		12	0.78	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
cis-1,2-Dichloroethene	ND		6.0	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
cis-1,3-Dichloropropene	ND		6.0	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Cyclohexane	ND		12	0.43	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Bromodichloromethane	ND		6.0	0.30	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Dichlorodifluoromethane	ND		12	1.6	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Ethylbenzene	ND		6.0	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
1,2-Dibromoethane (EDB)	ND		6.0	0.84	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Isopropylbenzene	ND		6.0	0.31	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Methyl acetate	ND		30	1.7	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Methyl tert-butyl ether	ND		6.0	0.57	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Methylcyclohexane	ND		12	0.31	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Methylene Chloride	ND		6.0	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
m-Xylene & p-Xylene	ND		6.0	0.68	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
o-Xylene	ND		6.0	0.41	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Styrene	ND		6.0	0.42	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Tetrachloroethene	ND		6.0	0.38	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Toluene	ND		6.0	0.84	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
trans-1,2-Dichloroethene	ND		6.0	1.1	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
trans-1,3-Dichloropropene	ND		6.0	0.42	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Trichloroethene	ND		6.0	0.47	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Trichlorofluoromethane	ND		6.0	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Vinyl chloride	ND		6.0	0.51	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*10/25/14 10:50*	*10/29/14 04:08*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 126*	*10/25/14 10:50*	*10/29/14 04:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*63 - 150*	*10/25/14 10:50*	*10/29/14 04:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 127*	*10/25/14 10:50*	*10/29/14 04:08*	*1*

Client Sample Results

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB50 2-2.5FT

Date Collected: 10/23/14 13:30
Date Received: 10/25/14 08:50

Lab Sample ID: 160-9039-5

Matrix: Solid
Percent Solids: 86.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.37	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.5	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,1,2-Trichloroethane	ND		4.6	0.52	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,1-Dichloroethane	ND		4.6	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,1-Dichloroethene	ND		4.6	1.5	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2,4-Trichlorobenzene	ND		4.6	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2-Dibromo-3-Chloropropane	ND		9.2	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2-Dichlorobenzene	ND		4.6	0.26	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2-Dichloroethane	ND		4.6	0.80	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2-Dichloropropane	ND		4.6	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,3-Dichlorobenzene	ND		4.6	0.26	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,4-Dichlorobenzene	ND		4.6	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
2-Butanone (MEK)	ND		18	1.8	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
2-Hexanone	ND		18	1.6	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		18	0.67	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Acetone	**8.0**	**J**	18	5.9	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Benzene	ND		4.6	0.23	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Bromoform	ND		4.6	0.34	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Bromomethane	ND		9.2	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Carbon disulfide	ND		4.6	0.63	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Carbon tetrachloride	ND		4.6	0.47	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Chlorobenzene	ND		4.6	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Dibromochloromethane	ND		4.6	0.38	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Chloroethane	ND		9.2	0.48	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Chloroform	ND		4.6	0.35	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Chloromethane	ND		9.2	0.60	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
cis-1,2-Dichloroethene	ND		4.6	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
cis-1,3-Dichloropropene	ND		4.6	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Cyclohexane	ND		9.2	0.33	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Bromodichloromethane	ND		4.6	0.23	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Dichlorodifluoromethane	ND		9.2	1.2	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Ethylbenzene	ND		4.6	0.28	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
1,2-Dibromoethane (EDB)	ND		4.6	0.64	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Isopropylbenzene	ND		4.6	0.24	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Methyl acetate	ND		23	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Methyl tert-butyl ether	ND		4.6	0.44	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Methylcyclohexane	ND		9.2	0.24	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Methylene Chloride	ND		4.6	1.5	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
m-Xylene & p-Xylene	ND		4.6	0.52	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
o-Xylene	ND		4.6	0.31	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Styrene	ND		4.6	0.32	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Tetrachloroethene	ND		4.6	0.29	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Toluene	ND		4.6	0.64	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
trans-1,2-Dichloroethene	ND		4.6	0.86	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
trans-1,3-Dichloropropene	ND		4.6	0.32	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Trichloroethene	ND		4.6	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Trichlorofluoromethane	ND		4.6	0.46	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1
Vinyl chloride	ND		4.6	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1

Client Sample ID: SB50 2-2.5FT

Lab Sample ID: 160-9039-5
Date Collected: 10/23/14 13:30
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 86.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		9.2	0.78	ug/Kg	☼	10/25/14 10:50	10/29/14 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*10/25/14 10:50*	*10/29/14 03:44*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 126*	*10/25/14 10:50*	*10/29/14 03:44*	*1*
4-Bromofluorobenzene (Surr)	*103*		*63 - 150*	*10/25/14 10:50*	*10/29/14 03:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 127*	*10/25/14 10:50*	*10/29/14 03:44*	*1*

Client Sample ID: SB51 3-3.5FT

Lab Sample ID: 160-9039-6
Date Collected: 10/23/14 14:15
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 87.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.2	0.62	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,1,2,2-Tetrachloroethane	ND		7.2	0.58	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.2	2.4	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,1,2-Trichloroethane	ND		7.2	0.82	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,1-Dichloroethane	ND		7.2	0.56	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,1-Dichloroethene	ND		7.2	2.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2,4-Trichlorobenzene	ND		7.2	0.62	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2-Dibromo-3-Chloropropane	ND		14	2.1	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2-Dichlorobenzene	ND		7.2	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2-Dichloroethane	ND		7.2	1.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2-Dichloropropane	ND		7.2	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,3-Dichlorobenzene	ND		7.2	0.40	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,4-Dichlorobenzene	ND		7.2	0.86	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
2-Butanone (MEK)	ND		29	2.8	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
2-Hexanone	ND		29	2.5	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Acetone	**52**		29	9.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Benzene	ND		7.2	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Bromoform	ND		7.2	0.53	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Bromomethane	ND		14	1.6	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Carbon disulfide	ND		7.2	0.99	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Carbon tetrachloride	ND		7.2	0.73	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Chlorobenzene	ND		7.2	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Dibromochloromethane	ND		7.2	0.59	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Chloroethane	ND		14	0.75	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Chloroform	ND		7.2	0.55	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Chloromethane	ND		14	0.93	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
cis-1,2-Dichloroethene	ND		7.2	0.86	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
cis-1,3-Dichloropropene	ND		7.2	0.86	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Cyclohexane	ND		14	0.52	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Bromodichloromethane	ND		7.2	0.36	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Dichlorodifluoromethane	ND		14	1.9	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Ethylbenzene	ND		7.2	0.43	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
1,2-Dibromoethane (EDB)	ND		7.2	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Isopropylbenzene	ND		7.2	0.37	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Methyl acetate	ND		36	2.0	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1

Client Sample ID: SB51 3-3.5FT

Lab Sample ID: 160-9039-6

Date Collected: 10/23/14 14:15
Matrix: Solid
Date Received: 10/25/14 08:50
Percent Solids: 87.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		7.2	0.69	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Methylcyclohexane	ND		14	0.37	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Methylene Chloride	ND		7.2	2.3	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
m-Xylene & p-Xylene	ND		7.2	0.82	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
o-Xylene	ND		7.2	0.49	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Styrene	ND		7.2	0.50	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Tetrachloroethene	ND		7.2	0.46	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Toluene	ND		7.2	1.0	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
trans-1,2-Dichloroethene	ND		7.2	1.4	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
trans-1,3-Dichloropropene	ND		7.2	0.50	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Trichloroethene	ND		7.2	0.56	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Trichlorofluoromethane	ND		7.2	0.72	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Vinyl chloride	ND		7.2	0.62	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1
Xylenes, Total	ND		14	1.2	ug/Kg	☼	10/25/14 10:50	10/29/14 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*10/25/14 10:50*	*10/29/14 03:19*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 126*	*10/25/14 10:50*	*10/29/14 03:19*	*1*
4-Bromofluorobenzene (Surr)	*104*		*63 - 150*	*10/25/14 10:50*	*10/29/14 03:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 127*	*10/25/14 10:50*	*10/29/14 03:19*	*1*

Client Sample ID: SB-11

Lab Sample ID: 160-9039-7

Date Collected: 10/23/14 09:10
Matrix: Air
Date Received: 10/24/14 09:30
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**		5.0	0.18	ppb v/v			11/06/14 02:31	1
Benzene	**0.96**		0.40	0.079	ppb v/v			11/06/14 02:31	1
Benzyl chloride	ND		0.80	0.16	ppb v/v			11/06/14 02:31	1
Bromodichloromethane	ND		0.30	0.066	ppb v/v			11/06/14 02:31	1
Bromoform	ND		0.40	0.070	ppb v/v			11/06/14 02:31	1
Bromomethane	ND		0.80	0.34	ppb v/v			11/06/14 02:31	1
2-Butanone (MEK)	**4.0**		0.80	0.20	ppb v/v			11/06/14 02:31	1
Carbon disulfide	**2.7**		0.80	0.078	ppb v/v			11/06/14 02:31	1
Carbon tetrachloride	**0.095**	**J**	0.80	0.064	ppb v/v			11/06/14 02:31	1
Chlorobenzene	**0.27**	**J**	0.30	0.064	ppb v/v			11/06/14 02:31	1
Dibromochloromethane	ND		0.40	0.079	ppb v/v			11/06/14 02:31	1
Chloroethane	ND		0.80	0.31	ppb v/v			11/06/14 02:31	1
Chloroform	ND		0.30	0.095	ppb v/v			11/06/14 02:31	1
Chloromethane	**0.61**	**J**	0.80	0.20	ppb v/v			11/06/14 02:31	1
1,2-Dibromoethane (EDB)	ND		0.80	0.075	ppb v/v			11/06/14 02:31	1
1,2-Dichlorobenzene	ND		0.40	0.13	ppb v/v			11/06/14 02:31	1
1,3-Dichlorobenzene	ND		0.40	0.11	ppb v/v			11/06/14 02:31	1
1,4-Dichlorobenzene	**8.0**		0.40	0.15	ppb v/v			11/06/14 02:31	1
Dichlorodifluoromethane	**12**		0.40	0.15	ppb v/v			11/06/14 02:31	1
1,1-Dichloroethane	ND		0.30	0.072	ppb v/v			11/06/14 02:31	1
1,2-Dichloroethane	ND		0.80	0.088	ppb v/v			11/06/14 02:31	1
1,1-Dichloroethene	ND		0.80	0.13	ppb v/v			11/06/14 02:31	1

Client Sample Results

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB-11

Lab Sample ID: 160-9039-7

Date Collected: 10/23/14 09:10
Matrix: Air
Date Received: 10/24/14 09:30
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**2.1**		0.40	0.089	ppb v/v			11/06/14 02:31	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			11/06/14 02:31	1
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			11/06/14 02:31	1
cis-1,3-Dichloropropene	ND		0.40	0.10	ppb v/v			11/06/14 02:31	1
trans-1,3-Dichloropropene	ND		0.40	0.088	ppb v/v			11/06/14 02:31	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**0.37**	**J**	0.40	0.16	ppb v/v			11/06/14 02:31	1
Ethylbenzene	**8.3**		0.40	0.063	ppb v/v			11/06/14 02:31	1
4-Ethyltoluene	**0.68**		0.40	0.19	ppb v/v			11/06/14 02:31	1
Hexachlorobutadiene	ND		2.0	0.43	ppb v/v			11/06/14 02:31	1
2-Hexanone	ND		0.40	0.087	ppb v/v			11/06/14 02:31	1
Methylene Chloride	**0.12**	**J**	0.40	0.072	ppb v/v			11/06/14 02:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			11/06/14 02:31	1
Styrene	ND		0.40	0.059	ppb v/v			11/06/14 02:31	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.069	ppb v/v			11/06/14 02:31	1
Tetrachloroethene	**0.061**	**J**	0.40	0.051	ppb v/v			11/06/14 02:31	1
Toluene	**1.0**		0.40	0.051	ppb v/v			11/06/14 02:31	1
1,2,4-Trichlorobenzene	ND		2.0	0.43	ppb v/v			11/06/14 02:31	1
1,1,1-Trichloroethane	ND		0.30	0.065	ppb v/v			11/06/14 02:31	1
1,1,2-Trichloroethane	ND		0.40	0.067	ppb v/v			11/06/14 02:31	1
Trichloroethene	ND		0.40	0.11	ppb v/v			11/06/14 02:31	1
Trichlorofluoromethane	**0.41**		0.40	0.20	ppb v/v			11/06/14 02:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16	ppb v/v			11/06/14 02:31	1
1,2,4-Trimethylbenzene	**4.8**		0.80	0.16	ppb v/v			11/06/14 02:31	1
1,3,5-Trimethylbenzene	**2.2**		0.40	0.13	ppb v/v			11/06/14 02:31	1
Vinyl acetate	ND		0.80	0.15	ppb v/v			11/06/14 02:31	1
Vinyl chloride	**0.50**		0.40	0.12	ppb v/v			11/06/14 02:31	1
m,p-Xylene	**9.4**		0.80	0.10	ppb v/v			11/06/14 02:31	1
o-Xylene	**1.6**		0.40	0.054	ppb v/v			11/06/14 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*11/06/14 02:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/06/14 02:31*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/06/14 02:31*	*1*

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**0.18**	**J**	1.1	0.024	% v/v			10/30/14 11:20	2.25
Methane (FID)	**0.14**		0.00045	0.000090	% v/v			10/30/14 15:28	4.5
Nitrogen	**82**	**B**	2.3	0.055	% v/v			10/30/14 11:20	2.25

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 11:15	1

Client Sample Results

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB-12

Lab Sample ID: 160-9039-8

Date Collected: 10/23/14 10:10
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**47**		5.9	0.21	ppb v/v			11/06/14 03:17	1.18
Benzene	**9.8**		0.47	0.093	ppb v/v			11/06/14 03:17	1.18
Benzyl chloride	ND		0.94	0.19	ppb v/v			11/06/14 03:17	1.18
Bromodichloromethane	ND		0.35	0.078	ppb v/v			11/06/14 03:17	1.18
Bromoform	ND		0.47	0.083	ppb v/v			11/06/14 03:17	1.18
Bromomethane	ND		0.94	0.40	ppb v/v			11/06/14 03:17	1.18
2-Butanone (MEK)	**11**		0.94	0.23	ppb v/v			11/06/14 03:17	1.18
Carbon disulfide	**39**		0.94	0.092	ppb v/v			11/06/14 03:17	1.18
Carbon tetrachloride	**0.098**	**J**	0.94	0.076	ppb v/v			11/06/14 03:17	1.18
Chlorobenzene	ND		0.35	0.076	ppb v/v			11/06/14 03:17	1.18
Dibromochloromethane	ND		0.47	0.093	ppb v/v			11/06/14 03:17	1.18
Chloroethane	ND		0.94	0.36	ppb v/v			11/06/14 03:17	1.18
Chloroform	**3.4**		0.35	0.11	ppb v/v			11/06/14 03:17	1.18
Chloromethane	**0.61**	**J**	0.94	0.23	ppb v/v			11/06/14 03:17	1.18
1,2-Dibromoethane (EDB)	ND		0.94	0.089	ppb v/v			11/06/14 03:17	1.18
1,2-Dichlorobenzene	ND		0.47	0.15	ppb v/v			11/06/14 03:17	1.18
1,3-Dichlorobenzene	ND		0.47	0.13	ppb v/v			11/06/14 03:17	1.18
1,4-Dichlorobenzene	**5.9**		0.47	0.18	ppb v/v			11/06/14 03:17	1.18
Dichlorodifluoromethane	**2.6**		0.47	0.17	ppb v/v			11/06/14 03:17	1.18
1,1-Dichloroethane	**0.17**	**J**	0.35	0.085	ppb v/v			11/06/14 03:17	1.18
1,2-Dichloroethane	ND		0.94	0.10	ppb v/v			11/06/14 03:17	1.18
1,1-Dichloroethene	ND		0.94	0.15	ppb v/v			11/06/14 03:17	1.18
cis-1,2-Dichloroethene	**68**		0.47	0.11	ppb v/v			11/06/14 03:17	1.18
trans-1,2-Dichloroethene	**1.1**		0.47	0.12	ppb v/v			11/06/14 03:17	1.18
1,2-Dichloropropane	ND		0.47	0.28	ppb v/v			11/06/14 03:17	1.18
cis-1,3-Dichloropropene	ND		0.47	0.12	ppb v/v			11/06/14 03:17	1.18
trans-1,3-Dichloropropene	ND		0.47	0.10	ppb v/v			11/06/14 03:17	1.18
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**15**		0.47	0.18	ppb v/v			11/06/14 03:17	1.18
4-Ethyltoluene	**12**		0.47	0.22	ppb v/v			11/06/14 03:17	1.18
Hexachlorobutadiene	ND		2.4	0.51	ppb v/v			11/06/14 03:17	1.18
2-Hexanone	ND		0.47	0.10	ppb v/v			11/06/14 03:17	1.18
Methylene Chloride	**0.34**	**J**	0.47	0.085	ppb v/v			11/06/14 03:17	1.18
4-Methyl-2-pentanone (MIBK)	ND		0.47	0.16	ppb v/v			11/06/14 03:17	1.18
Styrene	**4.2**		0.47	0.070	ppb v/v			11/06/14 03:17	1.18
1,1,2,2-Tetrachloroethane	ND		0.47	0.081	ppb v/v			11/06/14 03:17	1.18
Tetrachloroethene	**0.42**	**J**	0.47	0.060	ppb v/v			11/06/14 03:17	1.18
Toluene	**7.1**		0.47	0.060	ppb v/v			11/06/14 03:17	1.18
1,2,4-Trichlorobenzene	ND		2.4	0.51	ppb v/v			11/06/14 03:17	1.18
1,1,1-Trichloroethane	ND		0.35	0.077	ppb v/v			11/06/14 03:17	1.18
1,1,2-Trichloroethane	ND		0.47	0.079	ppb v/v			11/06/14 03:17	1.18
Trichloroethene	**0.65**		0.47	0.12	ppb v/v			11/06/14 03:17	1.18
Trichlorofluoromethane	**0.33**	**J**	0.47	0.23	ppb v/v			11/06/14 03:17	1.18
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.47	0.19	ppb v/v			11/06/14 03:17	1.18
1,2,4-Trimethylbenzene	**49**		0.94	0.19	ppb v/v			11/06/14 03:17	1.18
1,3,5-Trimethylbenzene	**26**		0.47	0.15	ppb v/v			11/06/14 03:17	1.18
Vinyl acetate	ND		0.94	0.17	ppb v/v			11/06/14 03:17	1.18
Vinyl chloride	**17**		0.47	0.14	ppb v/v			11/06/14 03:17	1.18
m,p-Xylene	**58**		0.94	0.12	ppb v/v			11/06/14 03:17	1.18

Client Sample ID: SB-12

Lab Sample ID: 160-9039-8

Date Collected: 10/23/14 10:10
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	10		0.47	0.064	ppb v/v			11/06/14 03:17	1.18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*11/06/14 03:17*	*1.18*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*11/06/14 03:17*	*1.18*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/06/14 03:17*	*1.18*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	40	B	0.95	0.15	ppb v/v			11/07/14 02:09	2.37

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*		*11/07/14 02:09*	*2.37*
1,2-Dichloroethane-d4 (Surr)	*76*		*70 - 130*		*11/07/14 02:09*	*2.37*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/07/14 02:09*	*2.37*

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	1.3		1.2	0.025	% v/v			10/30/14 11:31	2.37
Methane (TCD)	1.9		1.2	0.32	% v/v			10/30/14 11:31	2.37
Nitrogen	80		2.4	0.058	% v/v			10/30/14 11:31	2.37

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 14:16	1

Client Sample ID: SB 20

Lab Sample ID: 160-9039-9

Date Collected: 10/23/14 11:15
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.7		0.40	0.079	ppb v/v			11/06/14 04:03	1
Benzyl chloride	ND		0.80	0.16	ppb v/v			11/06/14 04:03	1
Bromodichloromethane	ND		0.30	0.066	ppb v/v			11/06/14 04:03	1
Bromoform	ND		0.40	0.070	ppb v/v			11/06/14 04:03	1
Bromomethane	ND		0.80	0.34	ppb v/v			11/06/14 04:03	1
2-Butanone (MEK)	15		0.80	0.20	ppb v/v			11/06/14 04:03	1
Carbon disulfide	8.1		0.80	0.078	ppb v/v			11/06/14 04:03	1
Carbon tetrachloride	0.10	J	0.80	0.064	ppb v/v			11/06/14 04:03	1
Chlorobenzene	ND		0.30	0.064	ppb v/v			11/06/14 04:03	1
Dibromochloromethane	ND		0.40	0.079	ppb v/v			11/06/14 04:03	1
Chloroethane	ND		0.80	0.31	ppb v/v			11/06/14 04:03	1
Chloroform	ND		0.30	0.095	ppb v/v			11/06/14 04:03	1
Chloromethane	0.65	J	0.80	0.20	ppb v/v			11/06/14 04:03	1
1,2-Dibromoethane (EDB)	ND		0.80	0.075	ppb v/v			11/06/14 04:03	1
1,2-Dichlorobenzene	0.67		0.40	0.13	ppb v/v			11/06/14 04:03	1
1,3-Dichlorobenzene	0.26	J	0.40	0.11	ppb v/v			11/06/14 04:03	1
1,4-Dichlorobenzene	4.2		0.40	0.15	ppb v/v			11/06/14 04:03	1

Client Sample ID: SB 20

Lab Sample ID: 160-9039-9

Date Collected: 10/23/14 11:15
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	**3.8**		0.40	0.15	ppb v/v			11/06/14 04:03	1
1,1-Dichloroethane	ND		0.30	0.072	ppb v/v			11/06/14 04:03	1
1,2-Dichloroethane	ND		0.80	0.088	ppb v/v			11/06/14 04:03	1
1,1-Dichloroethene	ND		0.80	0.13	ppb v/v			11/06/14 04:03	1
cis-1,2-Dichloroethene	**4.4**		0.40	0.089	ppb v/v			11/06/14 04:03	1
trans-1,2-Dichloroethene	**0.24**	**J**	0.40	0.10	ppb v/v			11/06/14 04:03	1
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			11/06/14 04:03	1
cis-1,3-Dichloropropene	ND		0.40	0.10	ppb v/v			11/06/14 04:03	1
trans-1,3-Dichloropropene	ND		0.40	0.088	ppb v/v			11/06/14 04:03	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**0.92**		0.40	0.16	ppb v/v			11/06/14 04:03	1
Ethylbenzene	**4.9**		0.40	0.063	ppb v/v			11/06/14 04:03	1
4-Ethyltoluene	**0.85**		0.40	0.19	ppb v/v			11/06/14 04:03	1
Hexachlorobutadiene	ND		2.0	0.43	ppb v/v			11/06/14 04:03	1
2-Hexanone	ND		0.40	0.087	ppb v/v			11/06/14 04:03	1
Methylene Chloride	**0.11**	**J**	0.40	0.072	ppb v/v			11/06/14 04:03	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			11/06/14 04:03	1
Styrene	**3.1**		0.40	0.059	ppb v/v			11/06/14 04:03	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.069	ppb v/v			11/06/14 04:03	1
Tetrachloroethene	**0.099**	**J**	0.40	0.051	ppb v/v			11/06/14 04:03	1
Toluene	**4.6**		0.40	0.051	ppb v/v			11/06/14 04:03	1
1,2,4-Trichlorobenzene	ND		2.0	0.43	ppb v/v			11/06/14 04:03	1
1,1,1-Trichloroethane	ND		0.30	0.065	ppb v/v			11/06/14 04:03	1
1,1,2-Trichloroethane	ND		0.40	0.067	ppb v/v			11/06/14 04:03	1
Trichloroethene	**5.1**		0.40	0.11	ppb v/v			11/06/14 04:03	1
Trichlorofluoromethane	**0.22**	**J**	0.40	0.20	ppb v/v			11/06/14 04:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16	ppb v/v			11/06/14 04:03	1
1,2,4-Trimethylbenzene	**4.3**		0.80	0.16	ppb v/v			11/06/14 04:03	1
1,3,5-Trimethylbenzene	**1.9**		0.40	0.13	ppb v/v			11/06/14 04:03	1
Vinyl acetate	ND		0.80	0.15	ppb v/v			11/06/14 04:03	1
Vinyl chloride	**1.8**		0.40	0.12	ppb v/v			11/06/14 04:03	1
m,p-Xylene	**6.8**		0.80	0.10	ppb v/v			11/06/14 04:03	1
o-Xylene	**2.5**		0.40	0.054	ppb v/v			11/06/14 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*11/06/14 04:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*11/06/14 04:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/06/14 04:03*	*1*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**44**		9.9	0.35	ppb v/v			11/07/14 03:06	1.98

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*11/07/14 03:06*	*1.98*
1,2-Dichloroethane-d4 (Surr)	*76*		*70 - 130*		*11/07/14 03:06*	*1.98*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/07/14 03:06*	*1.98*

Client Sample ID: SB 20

Lab Sample ID: 160-9039-9

Date Collected: 10/23/14 11:15
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	1.4		1.2	0.025	% v/v			10/30/14 11:41	2.3
Methane (TCD)	2.0		1.2	0.31	% v/v			10/30/14 11:41	2.3
Nitrogen	79		2.3	0.056	% v/v			10/30/14 11:41	2.3

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 12:10	1

Client Sample ID: SB 19

Lab Sample ID: 160-9039-10

Date Collected: 10/23/14 12:39
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1900		1900	69	ppb v/v			11/06/14 04:44	386
Benzene	120	J	150	30	ppb v/v			11/06/14 04:44	386
Benzyl chloride	ND		310	63	ppb v/v			11/06/14 04:44	386
Bromodichloromethane	ND		120	25	ppb v/v			11/06/14 04:44	386
Bromoform	ND		150	27	ppb v/v			11/06/14 04:44	386
Bromomethane	ND		310	130	ppb v/v			11/06/14 04:44	386
2-Butanone (MEK)	2800		310	77	ppb v/v			11/06/14 04:44	386
Carbon disulfide	40	J	310	30	ppb v/v			11/06/14 04:44	386
Carbon tetrachloride	ND		310	25	ppb v/v			11/06/14 04:44	386
Chlorobenzene	ND		120	25	ppb v/v			11/06/14 04:44	386
Dibromochloromethane	ND		150	30	ppb v/v			11/06/14 04:44	386
Chloroethane	ND		310	120	ppb v/v			11/06/14 04:44	386
Chloroform	ND		120	37	ppb v/v			11/06/14 04:44	386
Chloromethane	ND		310	76	ppb v/v			11/06/14 04:44	386
1,2-Dibromoethane (EDB)	ND		310	29	ppb v/v			11/06/14 04:44	386
1,2-Dichlorobenzene	ND		150	50	ppb v/v			11/06/14 04:44	386
1,3-Dichlorobenzene	ND		150	42	ppb v/v			11/06/14 04:44	386
1,4-Dichlorobenzene	2800		150	58	ppb v/v			11/06/14 04:44	386
1,1-Dichloroethane	ND		120	28	ppb v/v			11/06/14 04:44	386
1,2-Dichloroethane	ND		310	34	ppb v/v			11/06/14 04:44	386
1,1-Dichloroethene	ND		310	50	ppb v/v			11/06/14 04:44	386
cis-1,2-Dichloroethene	800		150	34	ppb v/v			11/06/14 04:44	386
trans-1,2-Dichloroethene	ND		150	39	ppb v/v			11/06/14 04:44	386
1,2-Dichloropropane	ND		150	93	ppb v/v			11/06/14 04:44	386
cis-1,3-Dichloropropene	ND		150	40	ppb v/v			11/06/14 04:44	386
trans-1,3-Dichloropropene	ND		150	34	ppb v/v			11/06/14 04:44	386
1,2-Dichloro-1,1,2,2-tetrafluoroethane	210		150	60	ppb v/v			11/06/14 04:44	386
Ethylbenzene	4700		150	24	ppb v/v			11/06/14 04:44	386
4-Ethyltoluene	850		150	72	ppb v/v			11/06/14 04:44	386
Hexachlorobutadiene	ND		770	170	ppb v/v			11/06/14 04:44	386
2-Hexanone	ND		150	34	ppb v/v			11/06/14 04:44	386
Methylene Chloride	160		150	28	ppb v/v			11/06/14 04:44	386
4-Methyl-2-pentanone (MIBK)	1500		150	52	ppb v/v			11/06/14 04:44	386

Client Sample ID: SB 19

Lab Sample ID: 160-9039-10

Date Collected: 10/23/14 12:39

Matrix: Air

Date Received: 10/25/14 08:50

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	380		150	23	ppb v/v			11/06/14 04:44	386
1,1,2,2-Tetrachloroethane	ND		150	27	ppb v/v			11/06/14 04:44	386
Tetrachloroethene	390		150	20	ppb v/v			11/06/14 04:44	386
Toluene	9100		150	20	ppb v/v			11/06/14 04:44	386
1,2,4-Trichlorobenzene	ND		770	170	ppb v/v			11/06/14 04:44	386
1,1,1-Trichloroethane	70	J	120	25	ppb v/v			11/06/14 04:44	386
1,1,2-Trichloroethane	ND		150	26	ppb v/v			11/06/14 04:44	386
Trichloroethene	150		150	41	ppb v/v			11/06/14 04:44	386
Trichlorofluoromethane	ND		150	76	ppb v/v			11/06/14 04:44	386
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		150	63	ppb v/v			11/06/14 04:44	386
1,2,4-Trimethylbenzene	2400		310	63	ppb v/v			11/06/14 04:44	386
1,3,5-Trimethylbenzene	1000		150	48	ppb v/v			11/06/14 04:44	386
Vinyl acetate	ND		310	56	ppb v/v			11/06/14 04:44	386
Vinyl chloride	210		150	46	ppb v/v			11/06/14 04:44	386
m,p-Xylene	11000		310	39	ppb v/v			11/06/14 04:44	386
o-Xylene	3700		150	21	ppb v/v			11/06/14 04:44	386

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*11/06/14 04:44*	*386*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*11/06/14 04:44*	*386*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/06/14 04:44*	*386*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	25000		310	110	ppb v/v			11/07/14 04:00	763

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*11/07/14 04:00*	*763*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*11/07/14 04:00*	*763*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/07/14 04:00*	*763*

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	38		1.2	0.025	% v/v			10/30/14 11:51	2.32
Methane (TCD)	50		1.2	0.31	% v/v			10/30/14 11:51	2.32
Nitrogen	15		2.3	0.057	% v/v			10/30/14 11:51	2.32

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	1.5		0.40	0.20	ppm v/v			10/24/14 11:46	1

Client Sample ID: SB 50

Lab Sample ID: 160-9039-11

Date Collected: 10/23/14 13:45

Matrix: Air

Date Received: 10/25/14 08:50

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	62		58	2.1	ppb v/v			11/06/14 05:25	11.6
Benzene	7.6		4.6	0.92	ppb v/v			11/06/14 05:25	11.6

Client Sample ID: SB 50

Lab Sample ID: 160-9039-11

Date Collected: 10/23/14 13:45

Matrix: Air

Date Received: 10/25/14 08:50

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	ND		9.3	1.9	ppb v/v			11/06/14 05:25	11.6
Bromodichloromethane	ND		3.5	0.77	ppb v/v			11/06/14 05:25	11.6
Bromoform	ND		4.6	0.81	ppb v/v			11/06/14 05:25	11.6
Bromomethane	ND		9.3	3.9	ppb v/v			11/06/14 05:25	11.6
2-Butanone (MEK)	**13**		9.3	2.3	ppb v/v			11/06/14 05:25	11.6
Carbon disulfide	**14**		9.3	0.90	ppb v/v			11/06/14 05:25	11.6
Carbon tetrachloride	ND		9.3	0.74	ppb v/v			11/06/14 05:25	11.6
Chlorobenzene	ND		3.5	0.74	ppb v/v			11/06/14 05:25	11.6
Dibromochloromethane	ND		4.6	0.92	ppb v/v			11/06/14 05:25	11.6
Chloroethane	ND		9.3	3.6	ppb v/v			11/06/14 05:25	11.6
Chloroform	ND		3.5	1.1	ppb v/v			11/06/14 05:25	11.6
Chloromethane	ND		9.3	2.3	ppb v/v			11/06/14 05:25	11.6
1,2-Dibromoethane (EDB)	ND		9.3	0.87	ppb v/v			11/06/14 05:25	11.6
1,2-Dichlorobenzene	ND		4.6	1.5	ppb v/v			11/06/14 05:25	11.6
1,3-Dichlorobenzene	ND		4.6	1.3	ppb v/v			11/06/14 05:25	11.6
1,4-Dichlorobenzene	ND		4.6	1.7	ppb v/v			11/06/14 05:25	11.6
Dichlorodifluoromethane	**56**		4.6	1.7	ppb v/v			11/06/14 05:25	11.6
1,1-Dichloroethane	ND		3.5	0.84	ppb v/v			11/06/14 05:25	11.6
1,2-Dichloroethane	ND		9.3	1.0	ppb v/v			11/06/14 05:25	11.6
1,1-Dichloroethene	ND		9.3	1.5	ppb v/v			11/06/14 05:25	11.6
cis-1,2-Dichloroethene	ND		4.6	1.0	ppb v/v			11/06/14 05:25	11.6
trans-1,2-Dichloroethene	ND		4.6	1.2	ppb v/v			11/06/14 05:25	11.6
1,2-Dichloropropane	ND		4.6	2.8	ppb v/v			11/06/14 05:25	11.6
cis-1,3-Dichloropropene	ND		4.6	1.2	ppb v/v			11/06/14 05:25	11.6
trans-1,3-Dichloropropene	ND		4.6	1.0	ppb v/v			11/06/14 05:25	11.6
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**12**		4.6	1.8	ppb v/v			11/06/14 05:25	11.6
Ethylbenzene	**2.4**	**J**	4.6	0.73	ppb v/v			11/06/14 05:25	11.6
4-Ethyltoluene	ND		4.6	2.2	ppb v/v			11/06/14 05:25	11.6
Hexachlorobutadiene	ND		23	5.0	ppb v/v			11/06/14 05:25	11.6
2-Hexanone	ND		4.6	1.0	ppb v/v			11/06/14 05:25	11.6
Methylene Chloride	ND		4.6	0.84	ppb v/v			11/06/14 05:25	11.6
4-Methyl-2-pentanone (MIBK)	ND		4.6	1.6	ppb v/v			11/06/14 05:25	11.6
Styrene	**5.2**		4.6	0.68	ppb v/v			11/06/14 05:25	11.6
1,1,2,2-Tetrachloroethane	ND		4.6	0.80	ppb v/v			11/06/14 05:25	11.6
Tetrachloroethene	ND		4.6	0.59	ppb v/v			11/06/14 05:25	11.6
Toluene	**7.4**		4.6	0.59	ppb v/v			11/06/14 05:25	11.6
1,2,4-Trichlorobenzene	ND		23	5.0	ppb v/v			11/06/14 05:25	11.6
1,1,1-Trichloroethane	ND		3.5	0.75	ppb v/v			11/06/14 05:25	11.6
1,1,2-Trichloroethane	ND		4.6	0.78	ppb v/v			11/06/14 05:25	11.6
Trichloroethene	ND		4.6	1.2	ppb v/v			11/06/14 05:25	11.6
Trichlorofluoromethane	ND		4.6	2.3	ppb v/v			11/06/14 05:25	11.6
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ppb v/v			11/06/14 05:25	11.6
1,2,4-Trimethylbenzene	ND		9.3	1.9	ppb v/v			11/06/14 05:25	11.6
1,3,5-Trimethylbenzene	ND		4.6	1.5	ppb v/v			11/06/14 05:25	11.6
Vinyl acetate	ND		9.3	1.7	ppb v/v			11/06/14 05:25	11.6
Vinyl chloride	**5.7**		4.6	1.4	ppb v/v			11/06/14 05:25	11.6
m,p-Xylene	**2.5**	**J**	9.3	1.2	ppb v/v			11/06/14 05:25	11.6
o-Xylene	**1.4**	**J**	4.6	0.63	ppb v/v			11/06/14 05:25	11.6

Client Sample Results

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Client Sample ID: SB 50

Lab Sample ID: 160-9039-11

Date Collected: 10/23/14 13:45
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*11/06/14 05:25*	*11.6*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*11/06/14 05:25*	*11.6*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/06/14 05:25*	*11.6*

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**4.1**		1.2	0.025	% v/v			10/30/14 12:01	2.32
Methane (TCD)	**5.5**		1.2	0.31	% v/v			10/30/14 12:01	2.32
Nitrogen	**75**		2.3	0.057	% v/v			10/30/14 12:01	2.32

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 12:28	1

Client Sample ID: SB 51

Lab Sample ID: 160-9039-12

Date Collected: 10/23/14 14:20
Matrix: Air
Date Received: 10/25/14 08:50
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**55**		8.4	0.30	ppb v/v			11/06/14 06:09	1.68
Benzene	**7.4**		0.67	0.13	ppb v/v			11/06/14 06:09	1.68
Benzyl chloride	ND		1.3	0.27	ppb v/v			11/06/14 06:09	1.68
Bromodichloromethane	ND		0.50	0.11	ppb v/v			11/06/14 06:09	1.68
Bromoform	ND		0.67	0.12	ppb v/v			11/06/14 06:09	1.68
Bromomethane	ND		1.3	0.56	ppb v/v			11/06/14 06:09	1.68
2-Butanone (MEK)	**12**		1.3	0.33	ppb v/v			11/06/14 06:09	1.68
Carbon disulfide	**6.3**		1.3	0.13	ppb v/v			11/06/14 06:09	1.68
Carbon tetrachloride	ND		1.3	0.11	ppb v/v			11/06/14 06:09	1.68
Chlorobenzene	ND		0.50	0.11	ppb v/v			11/06/14 06:09	1.68
Dibromochloromethane	ND		0.67	0.13	ppb v/v			11/06/14 06:09	1.68
Chloroethane	ND		1.3	0.52	ppb v/v			11/06/14 06:09	1.68
Chloroform	ND		0.50	0.16	ppb v/v			11/06/14 06:09	1.68
Chloromethane	**0.61**	**J**	1.3	0.33	ppb v/v			11/06/14 06:09	1.68
1,2-Dibromoethane (EDB)	ND		1.3	0.13	ppb v/v			11/06/14 06:09	1.68
1,2-Dichlorobenzene	ND		0.67	0.22	ppb v/v			11/06/14 06:09	1.68
1,3-Dichlorobenzene	**0.19**	**J**	0.67	0.18	ppb v/v			11/06/14 06:09	1.68
1,4-Dichlorobenzene	**1.3**		0.67	0.25	ppb v/v			11/06/14 06:09	1.68
Dichlorodifluoromethane	**2.3**		0.67	0.24	ppb v/v			11/06/14 06:09	1.68
1,1-Dichloroethane	ND		0.50	0.12	ppb v/v			11/06/14 06:09	1.68
1,2-Dichloroethane	ND		1.3	0.15	ppb v/v			11/06/14 06:09	1.68
1,1-Dichloroethene	ND		1.3	0.22	ppb v/v			11/06/14 06:09	1.68
cis-1,2-Dichloroethene	**3.2**		0.67	0.15	ppb v/v			11/06/14 06:09	1.68
trans-1,2-Dichloroethene	**0.25**	**J**	0.67	0.17	ppb v/v			11/06/14 06:09	1.68
1,2-Dichloropropane	ND		0.67	0.40	ppb v/v			11/06/14 06:09	1.68
cis-1,3-Dichloropropene	ND		0.67	0.17	ppb v/v			11/06/14 06:09	1.68
trans-1,3-Dichloropropene	ND		0.67	0.15	ppb v/v			11/06/14 06:09	1.68
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**16**		0.67	0.26	ppb v/v			11/06/14 06:09	1.68

Client Sample ID: SB 51

Lab Sample ID: 160-9039-12

Date Collected: 10/23/14 14:20

Matrix: Air

Date Received: 10/25/14 08:50

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**2.2**		0.67	0.11	ppb v/v			11/06/14 06:09	1.68
4-Ethyltoluene	**0.38**	**J**	0.67	0.31	ppb v/v			11/06/14 06:09	1.68
Hexachlorobutadiene	ND		3.4	0.73	ppb v/v			11/06/14 06:09	1.68
2-Hexanone	ND		0.67	0.15	ppb v/v			11/06/14 06:09	1.68
Methylene Chloride	ND		0.67	0.12	ppb v/v			11/06/14 06:09	1.68
4-Methyl-2-pentanone (MIBK)	ND		0.67	0.23	ppb v/v			11/06/14 06:09	1.68
Styrene	**5.0**		0.67	0.099	ppb v/v			11/06/14 06:09	1.68
1,1,2,2-Tetrachloroethane	ND		0.67	0.12	ppb v/v			11/06/14 06:09	1.68
Tetrachloroethene	**0.13**	**J**	0.67	0.086	ppb v/v			11/06/14 06:09	1.68
Toluene	**6.1**		0.67	0.086	ppb v/v			11/06/14 06:09	1.68
1,2,4-Trichlorobenzene	ND		3.4	0.73	ppb v/v			11/06/14 06:09	1.68
1,1,1-Trichloroethane	ND		0.50	0.11	ppb v/v			11/06/14 06:09	1.68
1,1,2-Trichloroethane	ND		0.67	0.11	ppb v/v			11/06/14 06:09	1.68
Trichloroethene	ND		0.67	0.18	ppb v/v			11/06/14 06:09	1.68
Trichlorofluoromethane	ND		0.67	0.33	ppb v/v			11/06/14 06:09	1.68
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.67	0.27	ppb v/v			11/06/14 06:09	1.68
1,2,4-Trimethylbenzene	**0.91**	**J**	1.3	0.27	ppb v/v			11/06/14 06:09	1.68
1,3,5-Trimethylbenzene	**0.30**	**J**	0.67	0.21	ppb v/v			11/06/14 06:09	1.68
Vinyl acetate	ND		1.3	0.24	ppb v/v			11/06/14 06:09	1.68
Vinyl chloride	**4.1**		0.67	0.20	ppb v/v			11/06/14 06:09	1.68
m,p-Xylene	**2.5**		1.3	0.17	ppb v/v			11/06/14 06:09	1.68
o-Xylene	ND		0.67	0.091	ppb v/v			11/06/14 06:09	1.68

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*11/06/14 06:09*	*1.68*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*11/06/14 06:09*	*1.68*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/06/14 06:09*	*1.68*

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	**2.8**		1.2	0.025	% v/v			10/30/14 12:10	2.35
Methane (TCD)	**3.9**		1.2	0.32	% v/v			10/30/14 12:10	2.35
Nitrogen	**78**		2.4	0.057	% v/v			10/30/14 12:10	2.35

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 12:50	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-152012/1-A
Matrix: Solid
Analysis Batch: 152963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 152012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.43	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.40	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.7	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,1-Dichloroethane	ND		5.0	0.39	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,1-Dichloroethene	ND		5.0	1.6	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2,4-Trichlorobenzene	ND		5.0	0.43	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2-Dibromo-3-Chloropropane	ND		10	1.5	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2-Dichloroethane	ND		5.0	0.87	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2-Dichloropropane	ND		5.0	0.38	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,3-Dichlorobenzene	ND		5.0	0.28	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,4-Dichlorobenzene	ND		5.0	0.60	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
2-Butanone (MEK)	ND		20	1.9	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
2-Hexanone	ND		20	1.8	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.73	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Acetone	ND		20	6.5	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Benzene	ND		5.0	0.25	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Bromoform	ND		5.0	0.37	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Bromomethane	ND		10	1.1	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Carbon disulfide	ND		5.0	0.69	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Carbon tetrachloride	ND		5.0	0.51	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Chlorobenzene	ND		5.0	0.38	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Dibromochloromethane	ND		5.0	0.41	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Chloroethane	ND		10	0.52	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Chloroform	ND		5.0	0.38	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Chloromethane	ND		10	0.65	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
cis-1,2-Dichloroethene	ND		5.0	0.60	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
cis-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Cyclohexane	ND		10	0.36	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Bromodichloromethane	ND		5.0	0.25	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Dichlorodifluoromethane	ND		10	1.3	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Ethylbenzene	ND		5.0	0.30	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
1,2-Dibromoethane (EDB)	ND		5.0	0.70	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Isopropylbenzene	ND		5.0	0.26	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Methyl acetate	ND		25	1.4	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Methyl tert-butyl ether	ND		5.0	0.48	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Methylcyclohexane	ND		10	0.26	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Methylene Chloride	ND		5.0	1.6	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
m-Xylene & p-Xylene	ND		5.0	0.57	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
o-Xylene	ND		5.0	0.34	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Styrene	ND		5.0	0.35	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Tetrachloroethene	ND		5.0	0.32	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Toluene	ND		5.0	0.70	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
trans-1,2-Dichloroethene	ND		5.0	0.94	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Trichloroethene	ND		5.0	0.39	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Trichlorofluoromethane	ND		5.0	0.50	ug/Kg		10/25/14 10:50	10/29/14 02:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-152012/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 152963 — **Prep Batch: 152012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	0.43	ug/Kg		10/25/14 10:50	10/29/14 02:54	1
Xylenes, Total	ND		10	0.85	ug/Kg		10/25/14 10:50	10/29/14 02:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*10/25/14 10:50*	*10/29/14 02:54*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 126*	*10/25/14 10:50*	*10/29/14 02:54*	*1*
4-Bromofluorobenzene (Surr)	*102*		*63 - 150*	*10/25/14 10:50*	*10/29/14 02:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 127*	*10/25/14 10:50*	*10/29/14 02:54*	*1*

Lab Sample ID: LCS 160-152012/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 152963 — **Prep Batch: 152012**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	81 - 124
1,1,2,2-Tetrachloroethane	50.0	48.1		ug/Kg		96	78 - 121
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	48.2		ug/Kg		96	69 - 131
1,1,2-Trichloroethane	50.0	49.9		ug/Kg		100	80 - 120
1,1-Dichloroethane	50.0	46.6		ug/Kg		93	80 - 120
1,1-Dichloroethene	50.0	45.7		ug/Kg		91	80 - 120
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/Kg		100	75 - 129
1,2-Dichlorobenzene	50.0	49.4		ug/Kg		99	80 - 120
1,2-Dichloroethane	50.0	49.3		ug/Kg		99	76 - 125
1,2-Dichloropropane	50.0	47.7		ug/Kg		95	80 - 120
1,3-Dichlorobenzene	50.0	48.3		ug/Kg		97	80 - 120
1,4-Dichlorobenzene	50.0	48.1		ug/Kg		96	80 - 120
2-Butanone (MEK)	50.0	51.5		ug/Kg		103	61 - 134
2-Hexanone	50.0	54.6		ug/Kg		109	71 - 127
4-Methyl-2-pentanone (MIBK)	50.0	52.6		ug/Kg		105	75 - 127
Acetone	50.0	44.3		ug/Kg		89	59 - 129
Benzene	50.0	46.2		ug/Kg		92	80 - 120
Bromoform	50.0	50.4		ug/Kg		101	84 - 126
Bromomethane	50.0	42.6		ug/Kg		85	74 - 128
Carbon disulfide	50.0	45.9		ug/Kg		92	79 - 121
Carbon tetrachloride	50.0	46.8		ug/Kg		94	80 - 125
Chlorobenzene	50.0	48.1		ug/Kg		96	80 - 120
Dibromochloromethane	50.0	49.6		ug/Kg		99	80 - 120
Chloroethane	50.0	45.2		ug/Kg		90	73 - 129
Chloroform	50.0	47.2		ug/Kg		94	80 - 120
Chloromethane	50.0	43.2		ug/Kg		86	70 - 129
cis-1,2-Dichloroethene	50.0	47.7		ug/Kg		95	80 - 120
cis-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	80 - 125
Cyclohexane	50.0	47.1		ug/Kg		94	80 - 120
Bromodichloromethane	50.0	50.3		ug/Kg		101	80 - 120
Dichlorodifluoromethane	50.0	41.4		ug/Kg		83	73 - 124
Ethylbenzene	50.0	46.9		ug/Kg		94	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-152012/2-A
Matrix: Solid
Analysis Batch: 152963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	50.0	51.3		ug/Kg		103	80 - 120
Isopropylbenzene	50.0	50.3		ug/Kg		101	80 - 120
Methyl acetate	250	249		ug/Kg		99	73 - 129
Methyl tert-butyl ether	50.0	49.6		ug/Kg		99	83 - 124
Methylcyclohexane	50.0	46.8		ug/Kg		94	80 - 120
Methylene Chloride	50.0	46.6		ug/Kg		93	80 - 120
m-Xylene & p-Xylene	50.0	49.7		ug/Kg		99	80 - 120
o-Xylene	50.0	51.5		ug/Kg		103	80 - 127
Styrene	50.0	50.1		ug/Kg		100	80 - 120
Tetrachloroethene	50.0	49.3		ug/Kg		99	80 - 120
Toluene	50.0	49.2		ug/Kg		98	80 - 120
trans-1,2-Dichloroethene	50.0	46.9		ug/Kg		94	80 - 120
trans-1,3-Dichloropropene	50.0	51.8		ug/Kg		104	82 - 124
Trichloroethene	50.0	46.3		ug/Kg		93	80 - 120
Trichlorofluoromethane	50.0	38.9		ug/Kg		78	77 - 132
Vinyl chloride	50.0	42.1		ug/Kg		84	65 - 123
Xylenes, Total	100	101		ug/Kg		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*70 - 126*
4-Bromofluorobenzene (Surr)	*98*		*63 - 150*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 127*

Lab Sample ID: LCSD 160-152012/3-A
Matrix: Solid
Analysis Batch: 152963

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 152012

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	48.3		ug/Kg		97	81 - 124	2	20
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	78 - 121	4	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	48.6		ug/Kg		97	69 - 131	1	20
1,1,2-Trichloroethane	50.0	48.3		ug/Kg		97	80 - 120	3	20
1,1-Dichloroethane	50.0	47.0		ug/Kg		94	80 - 120	1	20
1,1-Dichloroethene	50.0	46.8		ug/Kg		94	80 - 120	2	20
1,2,4-Trichlorobenzene	50.0	47.9		ug/Kg		96	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	48.4		ug/Kg		97	75 - 129	4	20
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	80 - 120	2	20
1,2-Dichloroethane	50.0	47.8		ug/Kg		96	76 - 125	3	20
1,2-Dichloropropane	50.0	47.9		ug/Kg		96	80 - 120	0	20
1,3-Dichlorobenzene	50.0	47.8		ug/Kg		96	80 - 120	1	20
1,4-Dichlorobenzene	50.0	47.5		ug/Kg		95	80 - 120	1	20
2-Butanone (MEK)	50.0	48.5		ug/Kg		97	61 - 134	6	20
2-Hexanone	50.0	51.6		ug/Kg		103	71 - 127	6	20
4-Methyl-2-pentanone (MIBK)	50.0	50.3		ug/Kg		101	75 - 127	4	20
Acetone	50.0	44.2		ug/Kg		88	59 - 129	0	20
Benzene	50.0	46.9		ug/Kg		94	80 - 120	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-152012/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 152963 — **Prep Batch: 152012**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	50.0	49.8		ug/Kg		100	84 - 126	1	20
Bromomethane	50.0	44.8		ug/Kg		90	74 - 128	5	20
Carbon disulfide	50.0	46.3		ug/Kg		93	79 - 121	1	20
Carbon tetrachloride	50.0	47.7		ug/Kg		95	80 - 125	2	20
Chlorobenzene	50.0	47.9		ug/Kg		96	80 - 120	0	20
Dibromochloromethane	50.0	49.8		ug/Kg		100	80 - 120	0	20
Chloroethane	50.0	46.5		ug/Kg		93	73 - 129	3	20
Chloroform	50.0	47.4		ug/Kg		95	80 - 120	1	20
Chloromethane	50.0	43.8		ug/Kg		88	70 - 129	1	20
cis-1,2-Dichloroethene	50.0	48.2		ug/Kg		96	80 - 120	1	20
cis-1,3-Dichloropropene	50.0	49.7		ug/Kg		99	80 - 125	3	20
Cyclohexane	50.0	47.6		ug/Kg		95	80 - 120	1	20
Bromodichloromethane	50.0	49.3		ug/Kg		99	80 - 120	2	20
Dichlorodifluoromethane	50.0	41.6		ug/Kg		83	73 - 124	1	20
Ethylbenzene	50.0	47.0		ug/Kg		94	80 - 120	0	20
1,2-Dibromoethane (EDB)	50.0	49.5		ug/Kg		99	80 - 120	4	20
Isopropylbenzene	50.0	49.6		ug/Kg		99	80 - 120	1	20
Methyl acetate	250	237		ug/Kg		95	73 - 129	5	20
Methyl tert-butyl ether	50.0	49.0		ug/Kg		98	83 - 124	1	20
Methylcyclohexane	50.0	47.2		ug/Kg		94	80 - 120	1	20
Methylene Chloride	50.0	46.0		ug/Kg		92	80 - 120	1	20
m-Xylene & p-Xylene	50.0	49.1		ug/Kg		98	80 - 120	1	20
o-Xylene	50.0	52.1		ug/Kg		104	80 - 127	1	20
Styrene	50.0	50.0		ug/Kg		100	80 - 120	0	20
Tetrachloroethene	50.0	49.5		ug/Kg		99	80 - 120	0	20
Toluene	50.0	49.2		ug/Kg		98	80 - 120	0	20
trans-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	80 - 120	1	20
trans-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	82 - 124	4	20
Trichloroethene	50.0	45.9		ug/Kg		92	80 - 120	1	20
Trichlorofluoromethane	50.0	40.3		ug/Kg		81	77 - 132	4	20
Vinyl chloride	50.0	45.3		ug/Kg		91	65 - 123	7	20
Xylenes, Total	100	101		ug/Kg		101	80 - 120	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*70 - 126*
4-Bromofluorobenzene (Surr)	*95*		*63 - 150*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 127*

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 320-57212/9 — **Client Sample ID: Method Blank**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 57212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	0.18	ppb v/v			11/05/14 15:47	1
Benzene	ND		0.40	0.079	ppb v/v			11/05/14 15:47	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-57212/9
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	ND		0.80	0.16	ppb v/v			11/05/14 15:47	1
Bromodichloromethane	ND		0.30	0.066	ppb v/v			11/05/14 15:47	1
Bromoform	ND		0.40	0.070	ppb v/v			11/05/14 15:47	1
Bromomethane	ND		0.80	0.34	ppb v/v			11/05/14 15:47	1
2-Butanone (MEK)	ND		0.80	0.20	ppb v/v			11/05/14 15:47	1
Carbon disulfide	ND		0.80	0.078	ppb v/v			11/05/14 15:47	1
Carbon tetrachloride	ND		0.80	0.064	ppb v/v			11/05/14 15:47	1
Chlorobenzene	ND		0.30	0.064	ppb v/v			11/05/14 15:47	1
Dibromochloromethane	ND		0.40	0.079	ppb v/v			11/05/14 15:47	1
Chloroethane	ND		0.80	0.31	ppb v/v			11/05/14 15:47	1
Chloroform	ND		0.30	0.095	ppb v/v			11/05/14 15:47	1
Chloromethane	ND		0.80	0.20	ppb v/v			11/05/14 15:47	1
1,2-Dibromoethane (EDB)	ND		0.80	0.075	ppb v/v			11/05/14 15:47	1
1,2-Dichlorobenzene	ND		0.40	0.13	ppb v/v			11/05/14 15:47	1
1,3-Dichlorobenzene	ND		0.40	0.11	ppb v/v			11/05/14 15:47	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			11/05/14 15:47	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			11/05/14 15:47	1
1,1-Dichloroethane	ND		0.30	0.072	ppb v/v			11/05/14 15:47	1
1,2-Dichloroethane	ND		0.80	0.088	ppb v/v			11/05/14 15:47	1
1,1-Dichloroethene	ND		0.80	0.13	ppb v/v			11/05/14 15:47	1
cis-1,2-Dichloroethene	ND		0.40	0.089	ppb v/v			11/05/14 15:47	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			11/05/14 15:47	1
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			11/05/14 15:47	1
cis-1,3-Dichloropropene	ND		0.40	0.10	ppb v/v			11/05/14 15:47	1
trans-1,3-Dichloropropene	ND		0.40	0.088	ppb v/v			11/05/14 15:47	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16	ppb v/v			11/05/14 15:47	1
Ethylbenzene	ND		0.40	0.063	ppb v/v			11/05/14 15:47	1
4-Ethyltoluene	ND		0.40	0.19	ppb v/v			11/05/14 15:47	1
Hexachlorobutadiene	ND		2.0	0.43	ppb v/v			11/05/14 15:47	1
2-Hexanone	ND		0.40	0.087	ppb v/v			11/05/14 15:47	1
Methylene Chloride	ND		0.40	0.072	ppb v/v			11/05/14 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			11/05/14 15:47	1
Styrene	ND		0.40	0.059	ppb v/v			11/05/14 15:47	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.069	ppb v/v			11/05/14 15:47	1
Tetrachloroethene	ND		0.40	0.051	ppb v/v			11/05/14 15:47	1
Toluene	ND		0.40	0.051	ppb v/v			11/05/14 15:47	1
1,2,4-Trichlorobenzene	ND		2.0	0.43	ppb v/v			11/05/14 15:47	1
1,1,1-Trichloroethane	ND		0.30	0.065	ppb v/v			11/05/14 15:47	1
1,1,2-Trichloroethane	ND		0.40	0.067	ppb v/v			11/05/14 15:47	1
Trichloroethene	ND		0.40	0.11	ppb v/v			11/05/14 15:47	1
Trichlorofluoromethane	ND		0.40	0.20	ppb v/v			11/05/14 15:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16	ppb v/v			11/05/14 15:47	1
1,2,4-Trimethylbenzene	ND		0.80	0.16	ppb v/v			11/05/14 15:47	1
1,3,5-Trimethylbenzene	ND		0.40	0.13	ppb v/v			11/05/14 15:47	1
Vinyl acetate	ND		0.80	0.15	ppb v/v			11/05/14 15:47	1
Vinyl chloride	ND		0.40	0.12	ppb v/v			11/05/14 15:47	1
m,p-Xylene	ND		0.80	0.10	ppb v/v			11/05/14 15:47	1
o-Xylene	ND		0.40	0.054	ppb v/v			11/05/14 15:47	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-57212/9
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		11/05/14 15:47	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		11/05/14 15:47	1
Toluene-d8 (Surr)	107		70 - 130		11/05/14 15:47	1

Lab Sample ID: LCS 320-57212/4
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.5		ppb v/v		83	71 - 131
Benzene	20.0	16.7		ppb v/v		83	68 - 128
Benzyl chloride	20.0	17.8		ppb v/v		89	58 - 120
Bromodichloromethane	20.0	17.2		ppb v/v		86	65 - 130
Bromoform	20.0	21.4		ppb v/v		107	64 - 144
Bromomethane	20.0	21.0		ppb v/v		105	70 - 131
2-Butanone (MEK)	20.0	15.5		ppb v/v		78	71 - 131
Carbon disulfide	20.0	17.7		ppb v/v		88	63 - 123
Carbon tetrachloride	20.0	18.6		ppb v/v		93	67 - 127
Chlorobenzene	20.0	18.4		ppb v/v		92	70 - 132
Dibromochloromethane	20.0	18.5		ppb v/v		92	68 - 128
Chloroethane	20.0	19.2		ppb v/v		96	70 - 131
Chloroform	20.0	16.8		ppb v/v		84	69 - 129
Chloromethane	20.0	21.5		ppb v/v		107	67 - 127
1,2-Dibromoethane (EDB)	20.0	18.8		ppb v/v		94	68 - 131
1,2-Dichlorobenzene	20.0	22.5		ppb v/v		112	73 - 143
1,3-Dichlorobenzene	20.0	22.1		ppb v/v		111	77 - 136
1,4-Dichlorobenzene	20.0	22.2		ppb v/v		111	73 - 143
Dichlorodifluoromethane	20.0	19.8		ppb v/v		99	69 - 129
1,1-Dichloroethane	20.0	16.2		ppb v/v		81	65 - 125
1,2-Dichloroethane	20.0	17.4		ppb v/v		87	71 - 131
1,1-Dichloroethene	20.0	16.8		ppb v/v		84	53 - 128
cis-1,2-Dichloroethene	20.0	16.7		ppb v/v		84	68 - 128
trans-1,2-Dichloroethene	20.0	17.1		ppb v/v		86	70 - 130
1,2-Dichloropropane	20.0	18.6		ppb v/v		93	74 - 128
cis-1,3-Dichloropropene	20.0	18.8		ppb v/v		94	78 - 132
trans-1,3-Dichloropropene	20.0	16.7		ppb v/v		83	56 - 136
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	18.0		ppb v/v		90	64 - 124
Ethylbenzene	20.0	17.8		ppb v/v		89	76 - 136
4-Ethyltoluene	20.0	17.2		ppb v/v		86	62 - 136
Hexachlorobutadiene	20.0	25.3		ppb v/v		127	42 - 150
2-Hexanone	20.0	18.2		ppb v/v		91	70 - 128
Methylene Chloride	20.0	16.6		ppb v/v		83	65 - 125
4-Methyl-2-pentanone (MIBK)	20.0	18.4		ppb v/v		92	73 - 133
Styrene	20.0	19.1		ppb v/v		95	76 - 144
1,1,2,2-Tetrachloroethane	20.0	19.6		ppb v/v		98	75 - 135
Tetrachloroethene	20.0	18.4		ppb v/v		92	56 - 138
Toluene	20.0	18.3		ppb v/v		91	71 - 132

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-57212/4
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	20.0	26.6		ppb v/v		133	59 - 150
1,1,1-Trichloroethane	20.0	17.4		ppb v/v		87	65 - 124
1,1,2-Trichloroethane	20.0	18.5		ppb v/v		93	71 - 131
Trichloroethene	20.0	17.5		ppb v/v		88	64 - 127
Trichlorofluoromethane	20.0	20.0		ppb v/v		100	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.1		ppb v/v		81	50 - 132
1,2,4-Trimethylbenzene	20.0	16.4		ppb v/v		82	61 - 145
1,3,5-Trimethylbenzene	20.0	18.3		ppb v/v		91	65 - 136
Vinyl acetate	20.0	18.7		ppb v/v		93	77 - 134
Vinyl chloride	20.0	20.5		ppb v/v		103	69 - 129
m,p-Xylene	40.0	35.7		ppb v/v		89	75 - 138
o-Xylene	20.0	18.2		ppb v/v		91	77 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 320-57212/5
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	20.0	16.4		ppb v/v		82	71 - 131	1	25
Benzene	20.0	16.7		ppb v/v		84	68 - 128	1	25
Benzyl chloride	20.0	17.7		ppb v/v		89	58 - 120	1	25
Bromodichloromethane	20.0	17.1		ppb v/v		86	65 - 130	1	25
Bromoform	20.0	21.1		ppb v/v		105	64 - 144	1	25
Bromomethane	20.0	21.2		ppb v/v		106	70 - 131	1	25
2-Butanone (MEK)	20.0	16.0		ppb v/v		80	71 - 131	3	25
Carbon disulfide	20.0	17.9		ppb v/v		90	63 - 123	2	25
Carbon tetrachloride	20.0	18.4		ppb v/v		92	67 - 127	1	25
Chlorobenzene	20.0	18.4		ppb v/v		92	70 - 132	0	25
Dibromochloromethane	20.0	18.3		ppb v/v		92	68 - 128	1	25
Chloroethane	20.0	18.9		ppb v/v		94	70 - 131	2	25
Chloroform	20.0	16.7		ppb v/v		84	69 - 129	0	25
Chloromethane	20.0	20.9		ppb v/v		105	67 - 127	3	25
1,2-Dibromoethane (EDB)	20.0	18.7		ppb v/v		93	68 - 131	1	25
1,2-Dichlorobenzene	20.0	22.1		ppb v/v		111	73 - 143	2	25
1,3-Dichlorobenzene	20.0	22.0		ppb v/v		110	77 - 136	1	25
1,4-Dichlorobenzene	20.0	21.9		ppb v/v		110	73 - 143	1	25
Dichlorodifluoromethane	20.0	19.5		ppb v/v		97	69 - 129	2	25
1,1-Dichloroethane	20.0	16.3		ppb v/v		82	65 - 125	1	25
1,2-Dichloroethane	20.0	17.2		ppb v/v		86	71 - 131	1	25
1,1-Dichloroethene	20.0	16.7		ppb v/v		84	53 - 128	0	25
cis-1,2-Dichloroethene	20.0	17.0		ppb v/v		85	68 - 128	1	25
trans-1,2-Dichloroethene	20.0	17.3		ppb v/v		86	70 - 130	1	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 320-57212/5
Matrix: Air
Analysis Batch: 57212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	20.0	18.2		ppb v/v		91	74 - 128	2	25
cis-1,3-Dichloropropene	20.0	18.7		ppb v/v		93	78 - 132	1	25
trans-1,3-Dichloropropene	20.0	16.5		ppb v/v		82	56 - 136	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	16.5		ppb v/v		82	64 - 124	9	25
Ethylbenzene	20.0	17.8		ppb v/v		89	76 - 136	0	25
4-Ethyltoluene	20.0	18.4		ppb v/v		92	62 - 136	7	25
Hexachlorobutadiene	20.0	24.7		ppb v/v		123	42 - 150	3	25
2-Hexanone	20.0	18.4		ppb v/v		92	70 - 128	1	25
Methylene Chloride	20.0	16.5		ppb v/v		82	65 - 125	1	25
4-Methyl-2-pentanone (MIBK)	20.0	18.3		ppb v/v		91	73 - 133	1	25
Styrene	20.0	19.0		ppb v/v		95	76 - 144	0	25
1,1,2,2-Tetrachloroethane	20.0	19.6		ppb v/v		98	75 - 135	0	25
Tetrachloroethene	20.0	18.3		ppb v/v		92	56 - 138	0	25
Toluene	20.0	18.4		ppb v/v		92	71 - 132	0	25
1,2,4-Trichlorobenzene	20.0	26.2		ppb v/v		131	59 - 150	1	25
1,1,1-Trichloroethane	20.0	17.2		ppb v/v		86	65 - 124	1	25
1,1,2-Trichloroethane	20.0	18.3		ppb v/v		92	71 - 131	1	25
Trichloroethene	20.0	17.5		ppb v/v		88	64 - 127	0	25
Trichlorofluoromethane	20.0	20.0		ppb v/v		100	68 - 128	0	25
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.2		ppb v/v		81	50 - 132	0	25
1,2,4-Trimethylbenzene	20.0	16.5		ppb v/v		82	61 - 145	0	25
1,3,5-Trimethylbenzene	20.0	18.4		ppb v/v		92	65 - 136	1	25
Vinyl acetate	20.0	18.7		ppb v/v		93	77 - 134	0	25
Vinyl chloride	20.0	20.3		ppb v/v		101	69 - 129	1	25
m,p-Xylene	40.0	35.7		ppb v/v		89	75 - 138	0	25
o-Xylene	20.0	18.3		ppb v/v		92	77 - 132	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 320-57324/12
Matrix: Air
Analysis Batch: 57324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.0	0.18	ppb v/v			11/06/14 23:26	1
Benzene	ND		0.40	0.079	ppb v/v			11/06/14 23:26	1
Benzyl chloride	ND		0.80	0.16	ppb v/v			11/06/14 23:26	1
Bromodichloromethane	ND		0.30	0.066	ppb v/v			11/06/14 23:26	1
Bromoform	ND		0.40	0.070	ppb v/v			11/06/14 23:26	1
Bromomethane	ND		0.80	0.34	ppb v/v			11/06/14 23:26	1
2-Butanone (MEK)	ND		0.80	0.20	ppb v/v			11/06/14 23:26	1
Carbon disulfide	ND		0.80	0.078	ppb v/v			11/06/14 23:26	1
Carbon tetrachloride	ND		0.80	0.064	ppb v/v			11/06/14 23:26	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 320-57324/12
Matrix: Air
Analysis Batch: 57324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.30	0.064	ppb v/v			11/06/14 23:26	1
Dibromochloromethane	ND		0.40	0.079	ppb v/v			11/06/14 23:26	1
Chloroethane	ND		0.80	0.31	ppb v/v			11/06/14 23:26	1
Chloroform	ND		0.30	0.095	ppb v/v			11/06/14 23:26	1
Chloromethane	ND		0.80	0.20	ppb v/v			11/06/14 23:26	1
1,2-Dibromoethane (EDB)	ND		0.80	0.075	ppb v/v			11/06/14 23:26	1
1,2-Dichlorobenzene	ND		0.40	0.13	ppb v/v			11/06/14 23:26	1
1,3-Dichlorobenzene	ND		0.40	0.11	ppb v/v			11/06/14 23:26	1
1,4-Dichlorobenzene	ND		0.40	0.15	ppb v/v			11/06/14 23:26	1
Dichlorodifluoromethane	ND		0.40	0.15	ppb v/v			11/06/14 23:26	1
1,1-Dichloroethane	ND		0.30	0.072	ppb v/v			11/06/14 23:26	1
1,2-Dichloroethane	ND		0.80	0.088	ppb v/v			11/06/14 23:26	1
1,1-Dichloroethene	ND		0.80	0.13	ppb v/v			11/06/14 23:26	1
cis-1,2-Dichloroethene	ND		0.40	0.089	ppb v/v			11/06/14 23:26	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			11/06/14 23:26	1
1,2-Dichloropropane	ND		0.40	0.24	ppb v/v			11/06/14 23:26	1
cis-1,3-Dichloropropene	ND		0.40	0.10	ppb v/v			11/06/14 23:26	1
trans-1,3-Dichloropropene	ND		0.40	0.088	ppb v/v			11/06/14 23:26	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16	ppb v/v			11/06/14 23:26	1
Ethylbenzene	0.0697	J	0.40	0.063	ppb v/v			11/06/14 23:26	1
4-Ethyltoluene	ND		0.40	0.19	ppb v/v			11/06/14 23:26	1
Hexachlorobutadiene	ND		2.0	0.43	ppb v/v			11/06/14 23:26	1
2-Hexanone	ND		0.40	0.087	ppb v/v			11/06/14 23:26	1
Methylene Chloride	ND		0.40	0.072	ppb v/v			11/06/14 23:26	1
4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14	ppb v/v			11/06/14 23:26	1
Styrene	ND		0.40	0.059	ppb v/v			11/06/14 23:26	1
1,1,2,2-Tetrachloroethane	ND		0.40	0.069	ppb v/v			11/06/14 23:26	1
Tetrachloroethene	ND		0.40	0.051	ppb v/v			11/06/14 23:26	1
Toluene	ND		0.40	0.051	ppb v/v			11/06/14 23:26	1
1,2,4-Trichlorobenzene	ND		2.0	0.43	ppb v/v			11/06/14 23:26	1
1,1,1-Trichloroethane	ND		0.30	0.065	ppb v/v			11/06/14 23:26	1
1,1,2-Trichloroethane	ND		0.40	0.067	ppb v/v			11/06/14 23:26	1
Trichloroethene	ND		0.40	0.11	ppb v/v			11/06/14 23:26	1
Trichlorofluoromethane	ND		0.40	0.20	ppb v/v			11/06/14 23:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16	ppb v/v			11/06/14 23:26	1
1,2,4-Trimethylbenzene	ND		0.80	0.16	ppb v/v			11/06/14 23:26	1
1,3,5-Trimethylbenzene	ND		0.40	0.13	ppb v/v			11/06/14 23:26	1
Vinyl acetate	ND		0.80	0.15	ppb v/v			11/06/14 23:26	1
Vinyl chloride	ND		0.40	0.12	ppb v/v			11/06/14 23:26	1
m,p-Xylene	0.115	J	0.80	0.10	ppb v/v			11/06/14 23:26	1
o-Xylene	ND		0.40	0.054	ppb v/v			11/06/14 23:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/06/14 23:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*70 - 130*		*11/06/14 23:26*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/06/14 23:26*	*1*

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-57324/4
Matrix: Air
Analysis Batch: 57324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.3		ppb v/v		86	71 - 131
Benzene	20.0	18.9		ppb v/v		94	68 - 128
Benzyl chloride	20.0	19.1		ppb v/v		95	58 - 120
Bromodichloromethane	20.0	18.5		ppb v/v		92	65 - 130
Bromoform	20.0	23.4		ppb v/v		117	64 - 144
Bromomethane	20.0	17.6		ppb v/v		88	70 - 131
2-Butanone (MEK)	20.0	18.9		ppb v/v		95	71 - 131
Carbon disulfide	20.0	18.0		ppb v/v		90	63 - 123
Carbon tetrachloride	20.0	21.6		ppb v/v		108	67 - 127
Chlorobenzene	20.0	20.8		ppb v/v		104	70 - 132
Dibromochloromethane	20.0	20.6		ppb v/v		103	68 - 128
Chloroethane	20.0	17.4		ppb v/v		87	70 - 131
Chloroform	20.0	18.6		ppb v/v		93	69 - 129
Chloromethane	20.0	17.4		ppb v/v		87	67 - 127
1,2-Dibromoethane (EDB)	20.0	21.0		ppb v/v		105	68 - 131
1,2-Dichlorobenzene	20.0	21.7		ppb v/v		108	73 - 143
1,3-Dichlorobenzene	20.0	21.4		ppb v/v		107	77 - 136
1,4-Dichlorobenzene	20.0	22.3		ppb v/v		111	73 - 143
Dichlorodifluoromethane	20.0	18.6		ppb v/v		93	69 - 129
1,1-Dichloroethane	20.0	18.3		ppb v/v		91	65 - 125
1,2-Dichloroethane	20.0	17.5		ppb v/v		87	71 - 131
1,1-Dichloroethene	20.0	16.7		ppb v/v		83	53 - 128
cis-1,2-Dichloroethene	20.0	20.0		ppb v/v		100	68 - 128
trans-1,2-Dichloroethene	20.0	18.4		ppb v/v		92	70 - 130
1,2-Dichloropropane	20.0	18.5		ppb v/v		93	74 - 128
cis-1,3-Dichloropropene	20.0	21.3		ppb v/v		107	78 - 132
trans-1,3-Dichloropropene	20.0	18.2		ppb v/v		91	56 - 136
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	20.6		ppb v/v		103	64 - 124
Ethylbenzene	20.0	17.1	B	ppb v/v		86	76 - 136
4-Ethyltoluene	20.0	19.8		ppb v/v		99	62 - 136
Hexachlorobutadiene	20.0	19.1		ppb v/v		95	42 - 150
2-Hexanone	20.0	18.8		ppb v/v		94	70 - 128
Methylene Chloride	20.0	16.3		ppb v/v		82	65 - 125
4-Methyl-2-pentanone (MIBK)	20.0	16.9		ppb v/v		84	73 - 133
Styrene	20.0	21.8		ppb v/v		109	76 - 144
1,1,2,2-Tetrachloroethane	20.0	21.3		ppb v/v		106	75 - 135
Tetrachloroethene	20.0	21.1		ppb v/v		105	56 - 138
Toluene	20.0	18.3		ppb v/v		91	71 - 132
1,2,4-Trichlorobenzene	20.0	21.1		ppb v/v		106	59 - 150
1,1,1-Trichloroethane	20.0	18.7		ppb v/v		94	65 - 124
1,1,2-Trichloroethane	20.0	20.9		ppb v/v		104	71 - 131
Trichloroethene	20.0	20.2		ppb v/v		101	64 - 127
Trichlorofluoromethane	20.0	16.8		ppb v/v		84	68 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.5		ppb v/v		88	50 - 132
1,2,4-Trimethylbenzene	20.0	21.4		ppb v/v		107	61 - 145
1,3,5-Trimethylbenzene	20.0	21.2		ppb v/v		106	65 - 136

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-57324/4
Matrix: Air
Analysis Batch: 57324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl acetate	20.0	21.1		ppb v/v		105	77 - 134
Vinyl chloride	20.0	18.3		ppb v/v		92	69 - 129
m,p-Xylene	40.0	33.1	B	ppb v/v		83	75 - 138
o-Xylene	20.0	16.9		ppb v/v		85	77 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 320-57324/5
Matrix: Air
Analysis Batch: 57324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	20.0	17.1		ppb v/v		86	71 - 131	1	25
Benzene	20.0	19.2		ppb v/v		96	68 - 128	2	25
Benzyl chloride	20.0	19.5		ppb v/v		98	58 - 120	2	25
Bromodichloromethane	20.0	18.3		ppb v/v		92	65 - 130	1	25
Bromoform	20.0	24.0		ppb v/v		120	64 - 144	3	25
Bromomethane	20.0	17.5		ppb v/v		87	70 - 131	1	25
2-Butanone (MEK)	20.0	18.8		ppb v/v		94	71 - 131	1	25
Carbon disulfide	20.0	18.1		ppb v/v		91	63 - 123	1	25
Carbon tetrachloride	20.0	22.1		ppb v/v		111	67 - 127	2	25
Chlorobenzene	20.0	21.3		ppb v/v		106	70 - 132	2	25
Dibromochloromethane	20.0	20.8		ppb v/v		104	68 - 128	1	25
Chloroethane	20.0	17.2		ppb v/v		86	70 - 131	1	25
Chloroform	20.0	18.6		ppb v/v		93	69 - 129	0	25
Chloromethane	20.0	18.6		ppb v/v		93	67 - 127	7	25
1,2-Dibromoethane (EDB)	20.0	21.2		ppb v/v		106	68 - 131	1	25
1,2-Dichlorobenzene	20.0	22.2		ppb v/v		111	73 - 143	2	25
1,3-Dichlorobenzene	20.0	21.9		ppb v/v		110	77 - 136	2	25
1,4-Dichlorobenzene	20.0	22.7		ppb v/v		114	73 - 143	2	25
Dichlorodifluoromethane	20.0	18.8		ppb v/v		94	69 - 129	1	25
1,1-Dichloroethane	20.0	18.4		ppb v/v		92	65 - 125	0	25
1,2-Dichloroethane	20.0	17.8		ppb v/v		89	71 - 131	2	25
1,1-Dichloroethene	20.0	16.7		ppb v/v		83	53 - 128	0	25
cis-1,2-Dichloroethene	20.0	20.2		ppb v/v		101	68 - 128	1	25
trans-1,2-Dichloroethene	20.0	18.5		ppb v/v		93	70 - 130	1	25
1,2-Dichloropropane	20.0	18.4		ppb v/v		92	74 - 128	0	25
cis-1,3-Dichloropropene	20.0	20.9		ppb v/v		105	78 - 132	2	25
trans-1,3-Dichloropropene	20.0	17.9		ppb v/v		90	56 - 136	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20.0	21.2		ppb v/v		106	64 - 124	3	25
Ethylbenzene	20.0	17.4	B	ppb v/v		87	76 - 136	2	25
4-Ethyltoluene	20.0	19.8		ppb v/v		99	62 - 136	0	25
Hexachlorobutadiene	20.0	19.6		ppb v/v		98	42 - 150	3	25
2-Hexanone	20.0	18.8		ppb v/v		94	70 - 128	0	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 320-57324/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 57324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	20.0	16.3		ppb v/v		82	65 - 125	0	25
4-Methyl-2-pentanone (MIBK)	20.0	16.5		ppb v/v		82	73 - 133	2	25
Styrene	20.0	22.4		ppb v/v		112	76 - 144	3	25
1,1,2,2-Tetrachloroethane	20.0	21.4		ppb v/v		107	75 - 135	1	25
Tetrachloroethene	20.0	21.3		ppb v/v		107	56 - 138	1	25
Toluene	20.0	18.3		ppb v/v		91	71 - 132	0	25
1,2,4-Trichlorobenzene	20.0	22.1		ppb v/v		111	59 - 150	5	25
1,1,1-Trichloroethane	20.0	18.8		ppb v/v		94	65 - 124	1	25
1,1,2-Trichloroethane	20.0	20.5		ppb v/v		102	71 - 131	2	25
Trichloroethene	20.0	20.5		ppb v/v		102	64 - 127	1	25
Trichlorofluoromethane	20.0	18.2		ppb v/v		91	68 - 128	8	25
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.6		ppb v/v		88	50 - 132	0	25
1,2,4-Trimethylbenzene	20.0	21.9		ppb v/v		109	61 - 145	2	25
1,3,5-Trimethylbenzene	20.0	21.6		ppb v/v		108	65 - 136	2	25
Vinyl acetate	20.0	21.1		ppb v/v		105	77 - 134	0	25
Vinyl chloride	20.0	18.1		ppb v/v		90	69 - 129	1	25
m,p-Xylene	40.0	33.9	B	ppb v/v		85	75 - 138	2	25
o-Xylene	20.0	17.4		ppb v/v		87	77 - 132	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: D1946 - Fixed Gases in Air (GC)

Lab Sample ID: MB 320-56731/5 — **Client Sample ID: Method Blank**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide (TCD)	ND		0.50	0.011	% v/v			10/30/14 10:55	1
Methane (TCD)	ND		0.50	0.14	% v/v			10/30/14 10:55	1
Nitrogen	0.0900	J	1.0	0.024	% v/v			10/30/14 10:55	1

Lab Sample ID: LCS 320-56731/3 — **Client Sample ID: Lab Control Sample**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon Dioxide (TCD)	23.6	23.5		% v/v		100	80 - 120
Methane (TCD)	26.0	27.3		% v/v		105	80 - 120
Nitrogen	24.4	26.1		% v/v		107	80 - 120

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: MB 320-56783/3 — **Client Sample ID: Method Blank**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56783

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane (FID)	ND		0.00010	0.000020	% v/v			10/30/14 15:12	1

Lab Sample ID: LCS 320-56783/2 — **Client Sample ID: Lab Control Sample**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56783

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (FID)	0.0250	0.0241		% v/v		97	80 - 120

Method: EPA 15_16 - Sulfur Emissions from Stationary Sources (GC/FPD)

Lab Sample ID: MB 320-56201/5 — **Client Sample ID: Method Blank**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrogen sulfide	ND		0.40	0.20	ppm v/v			10/24/14 08:58	1

Lab Sample ID: LCS 320-56201/3 — **Client Sample ID: Lab Control Sample**
Matrix: Air — **Prep Type: Total/NA**
Analysis Batch: 56201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hydrogen sulfide	2.00	1.93		ppm v/v		97	63 - 140

QC Association Summary

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

GC/MS VOA

Prep Batch: 152012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-1	SB-11 8.5-9.0 FT	Total/NA	Solid	5035	
160-9039-2	SB-12 7-7.5 FT	Total/NA	Solid	5035	
160-9039-3	SB20 2.5-3FT	Total/NA	Solid	5035	
160-9039-4	SB19 6.5-7FT	Total/NA	Solid	5035	
160-9039-5	SB50 2-2.5FT	Total/NA	Solid	5035	
160-9039-6	SB51 3-3.5FT	Total/NA	Solid	5035	
LCS 160-152012/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 160-152012/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 160-152012/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 152963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-1	SB-11 8.5-9.0 FT	Total/NA	Solid	8260C	152012
160-9039-2	SB-12 7-7.5 FT	Total/NA	Solid	8260C	152012
160-9039-3	SB20 2.5-3FT	Total/NA	Solid	8260C	152012
160-9039-4	SB19 6.5-7FT	Total/NA	Solid	8260C	152012
160-9039-5	SB50 2-2.5FT	Total/NA	Solid	8260C	152012
160-9039-6	SB51 3-3.5FT	Total/NA	Solid	8260C	152012
LCS 160-152012/2-A	Lab Control Sample	Total/NA	Solid	8260C	152012
LCSD 160-152012/3-A	Lab Control Sample Dup	Total/NA	Solid	8260C	152012
MB 160-152012/1-A	Method Blank	Total/NA	Solid	8260C	152012

Air - GC/MS VOA

Analysis Batch: 57212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-7	SB-11	Total/NA	Air	TO-15	
160-9039-8	SB-12	Total/NA	Air	TO-15	
160-9039-9	SB 20	Total/NA	Air	TO-15	
160-9039-10	SB 19	Total/NA	Air	TO-15	
160-9039-11	SB 50	Total/NA	Air	TO-15	
160-9039-12	SB 51	Total/NA	Air	TO-15	
LCS 320-57212/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 320-57212/5	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 320-57212/9	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 57324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-8 - DL	SB-12	Total/NA	Air	TO-15	
160-9039-9 - DL	SB 20	Total/NA	Air	TO-15	
160-9039-10 - DL	SB 19	Total/NA	Air	TO-15	
LCS 320-57324/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 320-57324/5	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 320-57324/12	Method Blank	Total/NA	Air	TO-15	

Air - GC VOA

Analysis Batch: 56201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-7	SB-11	Total/NA	Air	EPA 15_16	

Air - GC VOA (Continued)

Analysis Batch: 56201 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-8	SB-12	Total/NA	Air	EPA 15_16	
160-9039-9	SB 20	Total/NA	Air	EPA 15_16	
160-9039-10	SB 19	Total/NA	Air	EPA 15_16	
160-9039-11	SB 50	Total/NA	Air	EPA 15_16	
160-9039-12	SB 51	Total/NA	Air	EPA 15_16	
LCS 320-56201/3	Lab Control Sample	Total/NA	Air	EPA 15_16	
MB 320-56201/5	Method Blank	Total/NA	Air	EPA 15_16	

Analysis Batch: 56731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-7	SB-11	Total/NA	Air	D1946	
160-9039-8	SB-12	Total/NA	Air	D1946	
160-9039-9	SB 20	Total/NA	Air	D1946	
160-9039-10	SB 19	Total/NA	Air	D1946	
160-9039-11	SB 50	Total/NA	Air	D1946	
160-9039-12	SB 51	Total/NA	Air	D1946	
LCS 320-56731/3	Lab Control Sample	Total/NA	Air	D1946	
MB 320-56731/5	Method Blank	Total/NA	Air	D1946	

Analysis Batch: 56783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-7	SB-11	Total/NA	Air	D1946	
LCS 320-56783/2	Lab Control Sample	Total/NA	Air	D1946	
MB 320-56783/3	Method Blank	Total/NA	Air	D1946	

General Chemistry

Analysis Batch: 152416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-9039-1	SB-11 8.5-9.0 FT	Total/NA	Solid	Moisture	
160-9039-2	SB-12 7-7.5 FT	Total/NA	Solid	Moisture	
160-9039-3	SB20 2.5-3FT	Total/NA	Solid	Moisture	
160-9039-4	SB19 6.5-7FT	Total/NA	Solid	Moisture	
160-9039-5	SB50 2-2.5FT	Total/NA	Solid	Moisture	
160-9039-6	SB51 3-3.5FT	Total/NA	Solid	Moisture	
160-9053-B-11 DU	Duplicate	Total/NA	Solid	Moisture	

Surrogate Summary

Client: CTI and Associates Inc.
Project/Site: LASO Airport Landfill

TestAmerica Job ID: 160-9039-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(80-120)	(70-126)	(63-150)	(72-127)
160-9039-1	SB-11 8.5-9.0 FT	98	97	107	101
160-9039-2	SB-12 7-7.5 FT	97	98	105	101
160-9039-3	SB20 2.5-3FT	97	104	103	107
160-9039-4	SB19 6.5-7FT	96	99	100	100
160-9039-5	SB50 2-2.5FT	95	100	103	103
160-9039-6	SB51 3-3.5FT	96	99	104	101
LCS 160-152012/2-A	Lab Control Sample	97	96	98	99
LCSD 160-152012/3-A	Lab Control Sample Dup	99	95	95	96
MB 160-152012/1-A	Method Blank	96	95	102	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
160-9039-7	SB-11	108	100	104
160-9039-8	SB-12	126	95	104
160-9039-8 - DL	SB-12	129	76	98
160-9039-9	SB 20	110	95	102
160-9039-9 - DL	SB 20	100	76	96
160-9039-10	SB 19	109	97	104
160-9039-10 - DL	SB 19	97	78	97
160-9039-11	SB 50	106	97	101
160-9039-12	SB 51	107	99	104
LCS 320-57212/4	Lab Control Sample	112	98	105
LCS 320-57324/4	Lab Control Sample	97	86	100
LCSD 320-57212/5	Lab Control Sample Dup	111	100	105
LCSD 320-57324/5	Lab Control Sample Dup	96	87	98
MB 320-57212/9	Method Blank	105	91	107
MB 320-57324/12	Method Blank	90	76	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Appendix B, Annual Inspection Checklist

Lakeworth Group, LLC

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

Monthly AND Annual December 2014

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-19-14

Inspector Printed Name: Joseph T. Sena Inspector Signature: Joseph T Sena

Barometric Pressure: 30.20 Temperature: 30 Wind Direction: NE Wind Speed: 7

Weather conditions: Fair

Date and amount of last precipitation (within last 48 hours): 12-17-14 .03

Weather Data Source: Los Alamos Airport - National Weather Service

Figure(s): Photos attached

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	See Attachment	N		
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	See Attachment	N.		
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	Benchmarks attached and accessible	N		
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A	Intact and appear functional	No		

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B	Measurements conduct, PS-02 & PS-05 had concentrations greater than 25% of LEL for Methane.	N		
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Intact except for areas under construction	No		
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR	Intact & functional	N		
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	Intact	N		
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR	Intact, observed standing water within trenches.	N		
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR	Intact, observed standing water within inlets.	N		
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR	No evidence that pollutants had entered the storm water system	N		
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR	No	N		
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR	Intact, appears functional	N		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR	Under construction	NA		
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Covered with snow unable to conduct visual inspection	N		
OTHER					

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

LIST PHOTOS:

1-4 matcon	11-13 retaining wall,	
5 concrete pads	waddle slope,	
6 survey benchmarks	retention area	
7 turbines	14 perimeter fence	
8 vegetated slopes		
9-10 gravel drainages		

Lakeworth Group, LLC

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-19-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Matrix Inspection	M	Differential settlement and subsidence continues as previously report in prior monthly			
Concrete Hanger Pads	M	Subsidence and settling continues on all pads. Spider web cracks and seperation of expansion joints are visible at a higher degree than observed during previous month inspection.			

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Photo 1. Settlement in matcon

Photo 2. Cracking in matcon

Photo 3. Settlement in matcon

Photo 4. Settlement in matcon

Photo 5. Separation of expansion joints on concrete pads

Photo 6. Survey Benchmarks in tact on all pads

Photo 7. Turbines intact

Photo 8. Vegetated slopes

Photo 9. East-West gravel drainage channel

Photo 10. North-South gravel drainage channel

Photo 11. Rock retaining wall

Photo 12. Check dam installation at former waddle slope

Photo 13. Work in progress below former waddle slope at retention area	Photo 14. New rock adjacent to perimeter fence, below cut in slope

Appendix C, Monthly Inspection Checklists

Appendix C, Monthly Inspection Checklists

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: January 28 , 2014 Time: 1100 Printed Name: Jeff Walterscheid Signature: _____
Figure(s): Photos attached.
Weather: temperature: 36 degrees wind: N 5 mph, last significant rain/snow: ½ inch of snow January 23, 2014.
Weather Data Source: Los Alamos Airport

January 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area with evidence of low spots that allow stormwater water to puddle and pond.	Yes		
		Ponding of water is evident at NW corners of Pad 2 & 3 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since the monthly inspection in November 2013.	Yes Yes		
		Cracks / Gaps Approximately 70% of the previously repaired cracks (hot seal) have failed and re-cracked. Many of the cracks have extended and new cracking is evident.	Yes		
		Spider web and open cracking is visible along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line.	Yes		
		Gaps between the MatCon pavement and Concrete pads /trench drains are evident. Hot seal has cracked.	Yes		
		Photo: 1, 2, & 3			

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2 & 3 have noticeable subsidence and the trench drains drain in reverse causing water to puddle. Pads 4 & 5 have subsidence and drainage problems at the north end of the pads. Additional subsidence is occurring on the NW side of Pad 4. Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Cracking and subsidence are trending along a hinge line that is roughly in east-west orientation. The north side of the hinge line is subsiding with the exception of pad 1 which has lifted. Cracks are evident within the trench drains. Previously repaired cracks are failing. <u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains are damaged and failing in many locations. Previously repaired cracks in the Pads are failing and separating. Gaps between the MatCon pavement and Concrete pads/trench drains are evident. Hot seal has cracked. Photo: 4 & 5	Yes Yes Yes Yes Yes Yes Yes		
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to 2013 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.
Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: View west

Photo 2: Cracks in Matcon pavement

Photo 3: Cracks in Matcon pavement between hangar pads 3 & 4 along hinge line.

Photo 4: View east. Note subsidence of hangar pads and Matcon pavement.

Photo 5: Cracks in trench drain, hangar pad #3 and Matcon pavement.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 2/26 – 3/4/14 Time: _____ Printed Name: Derek Faulk Signature: _____
Figure(s): Photos attached.
Weather: temperature: 36° F wind: E @ 3 mph, last significant rain/snow: ½ inch of snow January 23, 2014.
Weather Data Source: Los Alamos Airport

January 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area with evidence of low spots that allow stormwater water to puddle and pond.	Yes		
		Ponding of water is evident at NW corners of Pad 2 & 3 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since the monthly inspection in November 2013.	Yes Yes		
		Cracks / Gaps Approximately 70% of the previously repaired cracks (hot seal) have failed and re-cracked. Many of the cracks have extended and new cracking is evident.	Yes		
		Spider web and open cracking is visible along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line.	Yes		
		Gaps between the MatCon pavement and Concrete pads /trench drains are evident. Hot seal has cracked. Photo: 1, 2, 4, & 5	Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2 & 3 have noticeable subsidence and the trench drains drain in reverse causing water to puddle. Pads 4 & 5 have subsidence and drainage problems at the north end of the pads. Additional subsidence is occurring on the NW side of Pad 4. Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Cracking and subsidence are trending along a hinge line that is roughly in east-west orientation. The north side of the hinge line is subsiding with the exception of pad 1 which has lifted. Cracks are evident within the trench drains. Previously repaired cracks are failing. <u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains are damaged and failing in many locations. Previously repaired cracks in the Pads are failing and separating. Gaps between the MatCon pavement and Concrete pads/trench drains are evident. Hot seal has cracked. Photo: 3, 6, & 7	Yes Yes Yes Yes Yes Yes Yes		
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Section of fence on east end damaged and down from heavy rains in Sept 2013	M	Fence still down with yellow caution tape across gap in fence.	Yes	Fence contractor repairing fence week of Feb 24, 2014.	Feb 28, 2014
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Component: Concern(s)	**Inspection Frequency***	**Inspection Findings**	**Corrective Action Needed Yes/No?**	**Description of Corrective Action**	**Corrective Action Completion Date**
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to 2013 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

Inspection Checklist Airport Landfill (form modified April, 2011)

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.
Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Note additional photos related to repair of fence at east end of airport including surface damage to north slope caused by Bobcat used by fence crew to carry supplies and materials.

Photo 1: Vegetation growing on east edge of hangar pad

Photos 2 & 3: Cracks in Hangar Pads

Photo 4: Cracks in trench drain, along edge of Hangar Pad #3, and subsidence in Matcon pavement.

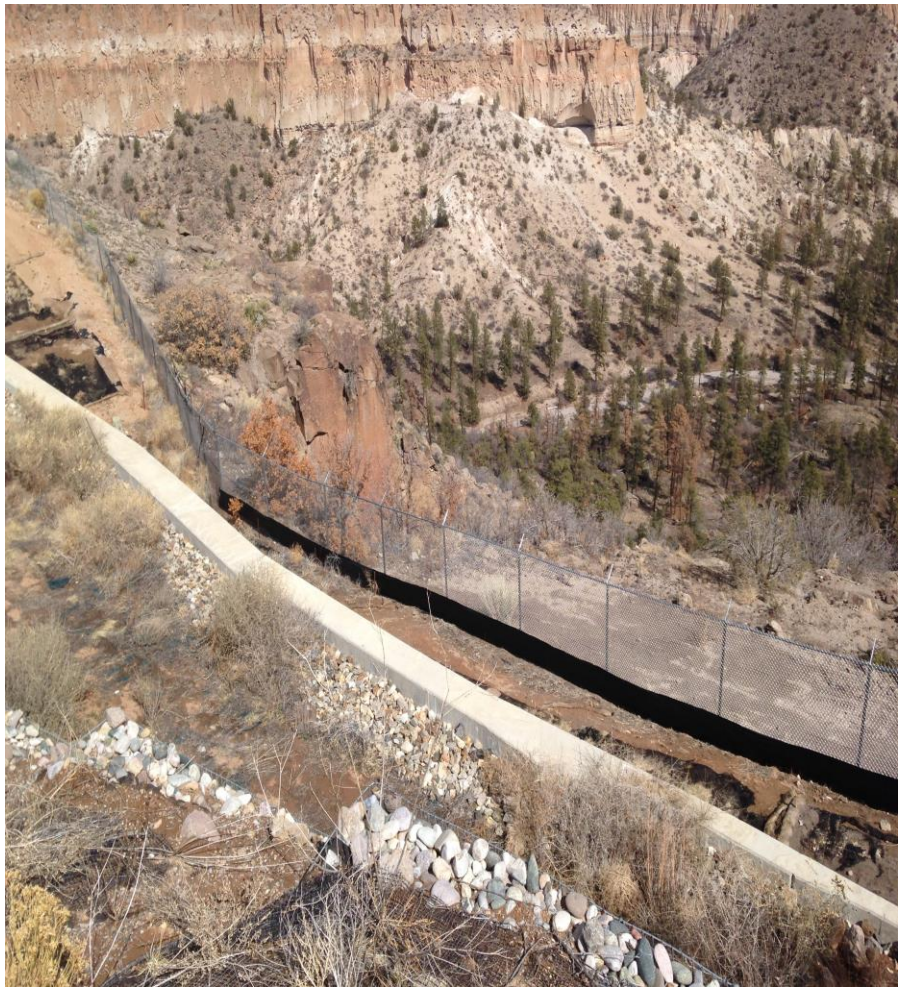
Photo 5: Note subsidence of Matcon pavement and evidence of ponding water.

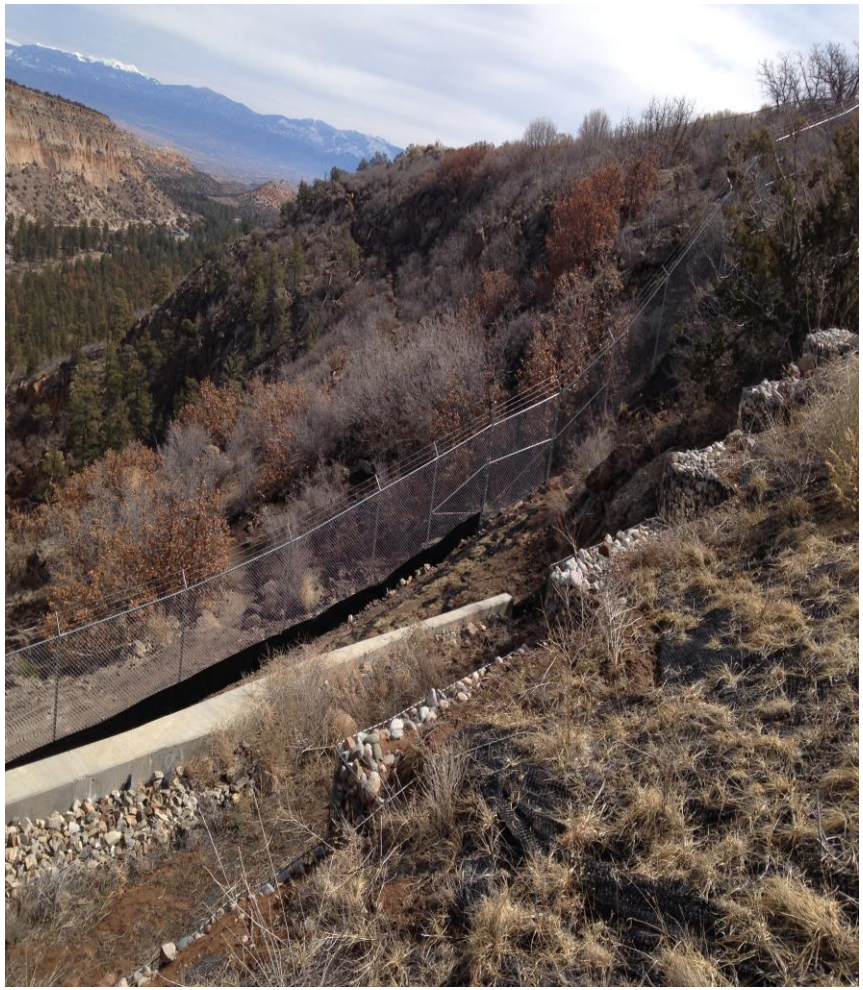
Photos 6 & 7: Cracks in Matcon pavement.

Photo 8: Fence repair east end of airport, Feb 26.

Photo 9: Fence repair east end of airport, Feb 27.

Photos 10 & 11: Damage to slope on north side by Bobcat used by fence crew repairing fence.





Photos 12 and 13: Completed fence repair east end of airport, March 4.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 3/26/2014 Time: 1000 hours Printed Name: Derek Faulk Signature: _____
Figure(s): Photos attached.
Weather: temperature: 48° F wind: W @ 7 mph, last significant rain/snow: March 1, 2014 0.17".
Weather Data Source: Los Alamos Airport

March 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area with evidence of low spots that allow stormwater water to puddle and pond.	Yes		
		Ponding of water is evident at NW corners of Pad 2 & 3 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since the monthly inspection in November 2013.	Yes		
		Cracks / Gaps Approximately 70% of the previously repaired cracks (hot seal) have failed and re-cracked. Many of the cracks have extended and new cracking is evident.	Yes		
		Spider web and open cracking is visible along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line.	Yes		
		Gaps between the MatCon pavement and Concrete pads /trench drains are evident. Hot seal has cracked.	Yes		
		Photos: 1, 2, 3, 4, and 8			

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2 & 3 have noticeable subsidence and the trench drains drain in reverse causing water to puddle. Pads 4 & 5 have subsidence and drainage problems at the north end of the pads. Additional subsidence is occurring on the NW side of Pad 4.	Yes		
		Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking.	Yes		
		Cracking and subsidence are trending along a hinge line that is roughly in east-west orientation. The north side of the hinge line is subsiding with the exception of pad 1 which has lifted.	Yes		
		Cracks are evident within the trench drains. Previously repaired cracks are failing.	Yes		
		<u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains are damaged and failing in many locations.	Yes		
		Previously repaired cracks in the Pads are failing and separating.	Yes		
		Gaps between the MatCon pavement and Concrete pads/trench drains are evident. Hot seal has cracked.	Yes		
		Photos: 5, 6, and 7			
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Inspection Checklist Airport Landfill (form modified April, 2011)

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Section of fence on east end damaged and down from heavy rains in Sept 2013	M	Fence Repaired. Photos: 9 and 10	No	Fence contractor repaired fence week of Feb 24, 2014.	Feb 28, 2014
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Component: Concern(s)	**Inspection Frequency***	**Inspection Findings**	**Corrective Action Needed Yes/No?**	**Description of Corrective Action**	**Corrective Action Completion Date**
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to 2013 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

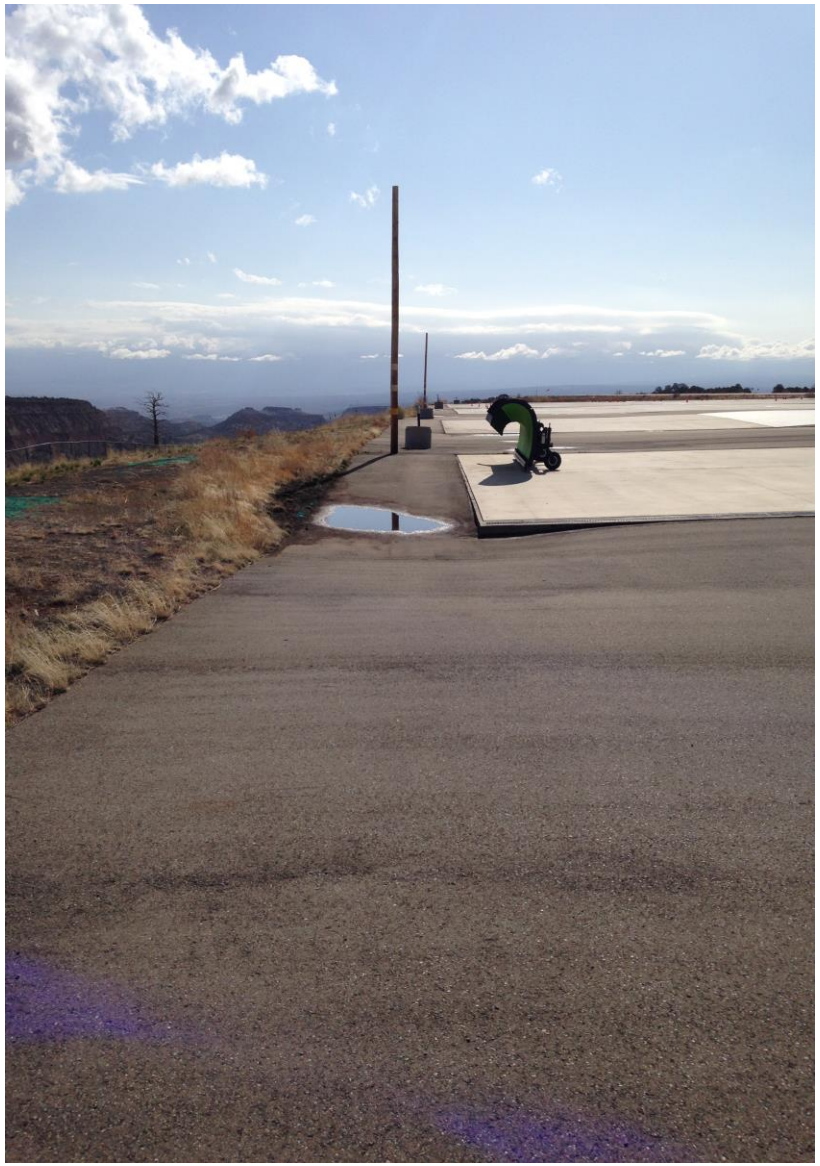


Photo 1: Standing water and MatCon subsidence NW corner of Pad 2.

Photo 2:Standing water and MatCon subsidence NW corner of Pad 3.

Photo 3: Hinge Point across site. Photo looking west from Pad 3. Large East-west cracking visible along hinge line on Pad 3..

Photo 4: Previously repaired crack showing evidence of failing and crack extending.

Photos 5 and 6: Spider web cracking in hangar pads.

Photo 7: Separation evident between Hangar Pad 3 and MatCon pavement.

Photo 8: Previously repaired crack showing evidence of failing and crack extending..

Photo 9: Repaired fence east end of airport.

Photo 10: Slope damage north of airport pad caused by use of Bobcat during fence repair.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 4/23/2014 Time: 1000 hours Printed Name: Derek Faulk Signature: _____
Figure(s): Photos attached.
Weather: temperature: 54° F wind: SW @ 10 mph, last significant rain/snow: March 14, 2014 0.3”.
Weather Data Source: Los Alamos Airport

April 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area with evidence of low spots that allow stormwater water to puddle and pond.	Yes		
		Ponding of water is evident at NW corners of Pad 2 & 3 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since the monthly inspection in November 2013.	Yes		
		Cracks / Gaps Approximately 80% of the previously repaired cracks (hot seal) have failed and re-cracked. Many of the cracks have extended and new cracking is evident.	Yes		
		Spider web and open cracking is visible along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line.	Yes		
		Gaps between the MatCon pavement and Concrete pads /trench drains are evident. Hot seal has cracked. Photos: 1, 2, 3, 4, 8, 11	Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2 & 3 have noticeable subsidence and the trench drains drain in reverse causing water to puddle. Pads 4 & 5 have subsidence and drainage problems at the north end of the pads. Additional subsidence is occurring on the NW side of Pad 4.	Yes		
		Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking.	Yes		
		Cracking and subsidence are trending along a hinge line that is roughly in east-west orientation. The north side of the hinge line is subsiding with the exception of pad 1 which has lifted.	Yes		
		Cracks are evident within the trench drains. Previously repaired cracks are failing.	Yes		
		<u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains are damaged and failing in many locations.	Yes		
		Previously repaired cracks in the Pads are failing and separating.	Yes		
		Gaps between the MatCon pavement and Concrete pads/trench drains are evident. Hot seal has cracked.	Yes		
		Photos: 5, 6, 7, 9, 10, 12			
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Inspection Checklist Airport Landfill (form modified April, 2011)

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Section of fence on east end damaged and down from heavy rains in Sept 2013	M	Fence Repaired.	No	Fence contractor repaired fence week of Feb 24, 2014.	Feb 28, 2014
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to 2013 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: Evidence of ponding water and MatCon subsidence west of Pad 1.

Photo 2:Evidence of ponding water and MatCon subsidence NW corner of Pad 2.

Photo 3: Erosion channel down north slope between Pads 3 and 4

Photo 4: Hinge point across site. Photo looking west. Subsidence noticeable to right of photo.

Photos 5 and 6: Spider web cracking in hangar pads. Cracking is Photo 6 is on hinge line with cracks in an east-west orientation.

Photo 7: Evidence of ponding water and failing hot seal around drain at SW corner of hangar pad.

Photo 8: Crack in MatCon where hot seal has failed and cracked has extended.

Photo 9: Hot seal failing and concrete cracking along trench drains.

Photo 10: Vegetation growing along edge of hangar pad.

Photo 11: Cracking along hinge point. Hot seal has failed and crack is extending..

Photo 12: Evidence of ponding water at NW corner of hangar pad. Hot seal has failed along trench drain. Can see displacement of drain grate.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 5/28/2014 Time: 1330 hours Printed Name: Derek Faulk Signature: _____
Figure(s): Photos attached.
Weather: temperature: 76° F wind: S @ 8 mph, last significant rain/snow: May 25, 2014 0.34".
Weather Data Source: LANL Weather Machine

May 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area. Low spots that allow stormwater water to puddle and pond are present at the NW corners of Pad 2, 3, &4 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. After rain events, standing water is present in some sections of trench drains. Ponded water at the NW corner of Pad 2 seeps into the soil berm. A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since November 2013. Cracks / Gaps The cracks in the MatCon pavement were hot sealed by an asphalt contractor the week of May 19, 2014. Spider web and open cracking along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line. All cracks were hot sealed the week of May 19, 2014. Gaps between the MatCon pavement and Concrete pads /trench drains were hot sealed the week of May 19, 2014. Photos: 1, 2, 4, 6, 7, 8	Yes Yes Yes Yes Yes Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2, 3, 4, & 5, particularly the NW corners, have noticeable subsidence and the trench drains drain in reverse causing standing water in the drains. Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Substantial cracks were sealed by asphalt contractor the week of May 19, 2014. Cracks are evident within the trench drains. Previously repaired cracks failed but were hot sealed the week of May 19, 2014. <u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains were damaged and failed in many locations. They were sealed the week of May 19, 2014. Gaps between the MatCon pavement and Concrete pads/trench drains were evident, and were sealed the week of May 19, 2014. Photos: 3, 5, 9, 10, 11	Yes Yes Yes Yes Yes Yes		
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		
Section of fence on east end damaged and down from heavy rains in Sept 2013	M	Fence Repaired.	No	Fence contractor repaired fence week of Feb 24, 2014.	Feb 28, 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to other 2013 and 2014 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: Ponding water and MatCon subsidence west of Pad 1.

Photo 2: Ponding water and MatCon subsidence NW corner of Pad 2.

Photo 3: Expansion joint on east side of concrete hangar pad showing new hot seal applied by asphalt contractor week of May 19, 2014.

Photo 4: Crack in MatCon with new hot seal applied week of May 19, 2014. Old hot seal used to seal old crack visible along outer edges of new hot seal in upper half of photo. Hot seal in lower half of photo is new applied to new crack

Photo 5: Hinge point across site with cracks in concrete hangar pad on right side of photo. Subsidence noticeable to left side of photo. Photo facing east.

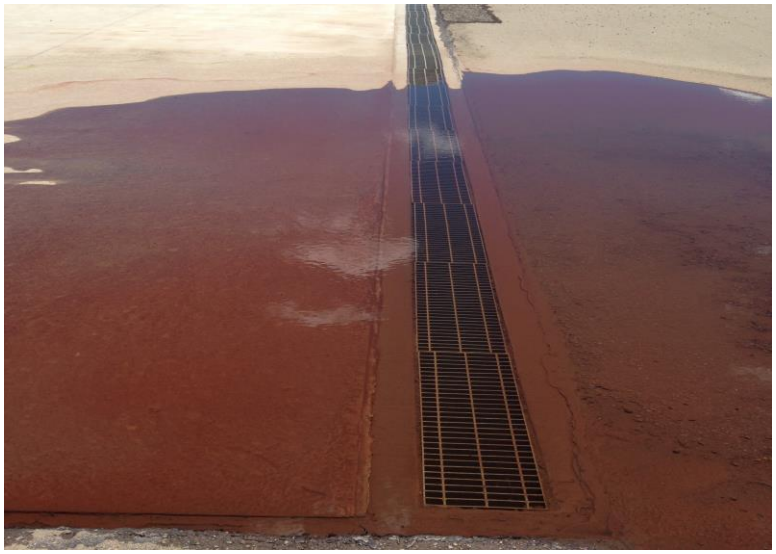


Photo 6: Ponded water over NW corner of hangar pad. Portion of trench drain submerged.

Photo 7: MatCon cracking along east-west hinge line. Both new and old hot seal visible in photo.

Photo 8: Subsidence of MatCon showing separation from hangar pad. Separation sealed by new hot seal applied by contractor week of May 19, 2014

Photo 9: East-west spider web cracking of concrete hangar pad and subsidence of MatCon showing separation from hangar pad. Substantial cracks and edge separated from MatCon sealed with hot seal week of May 19, 2014.

Photo 10: Spider cracking in hangar pads. Cracking is on hinge line with cracks in an east-west orientation. Substantial cracks sealed week of May 19, 2014.

Photo 11: Expansion joint separating sections of hangar pad. Joint along east-west hinge line and had separated enough that it was hot sealed week of May 19, 2014.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 6/27/2014 Time: 0900 hours Printed Name: Jeff Walterscheid Signature: _____
Figure(s): Photos attached.
Weather: temperature: 68° F wind: S @ 3 mph, last significant rain/snow: June 21, 2014 0.24 inches.
Weather Data Source: LANL Weather Machine

June 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area. Low spots that allow stormwater water to puddle and pond are present at the NW corners of Pad 2, 3, &4 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. After rain events, standing water is present in some sections of trench drains. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible: settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since November 2013.	Yes		
		Cracks / Gaps Spider web and open cracking along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line. All cracks were hot sealed the week of May 19, 2014. Photos: 1, 2, 3 & 5	No		May 19, 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2, 3, 4, & 5, particularly the NW corners, have noticeable subsidence and the trench drains drain in reverse causing standing water in the drains.	Yes		
		Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Substantial cracks were sealed by asphalt contractor the week of May 19, 2014.	No		May 19, 2014
		Cracks are evident within the trench drains. Previously repaired cracks failed but were hot sealed the week of May 19, 2014.	No		May 19, 2014
		<u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains were damaged and failed in many locations. They were sealed the week of May 19, 2014.	No		May 19, 2014
		Gaps between the MatCon pavement and Concrete pads/trench drains were evident, and were sealed the week of May 19, 2014. Photos: 1, 2 & 5	No		May 19, 2014
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				

Component: Concern(s)	**Inspection Frequency***	**Inspection Findings**	**Corrective Action Needed Yes/No?**	**Description of Corrective Action**	**Corrective Action Completion Date**
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to other 2013 and 2014 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: Photo of pads 1-5. Subsidence noticeable to left side of photo. Photo facing east

Photo 2: Sealed cracks Pad 3. Note subsidence of MatCon pavement.

Photo 3: Visible subsidence of MatCon and concrete pad northern 3rd of Pad 2.

Photo 4: Hot seal crack repair Pad 3.

Photo 5: Puddle NE corner of Pad 2, note Matcon subsidence.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 8/21/2014 Time: 0900 hours Printed Name: John Wilcox Signature: _____
Figure(s): Photos attached.
Weather: temperature: 66° F wind: E @ 3 mph, last significant rain/snow: July 31, 2014 0.85 inches.
Weather Data Source: LANL Weather Machine

July 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area. Low spots that allow storm water to puddle and pond are present at the NW corners of Pad 2, 3, &4 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. After rain events, standing water is present in some sections of trench drains. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible: settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since November 2013.	Yes		
		Cracks / Gaps Spider web cracking and open cracking along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line. All cracks were hot sealed the week of May 19, 2014, but new cracks have developed since then. Photos: 1, 2, 3 & 5	No		May 19, 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2, 3, 4, & 5, particularly the NW corners, have noticeable subsidence and the trench drains drain in reverse causing standing water in the drains.	Yes		
		Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Substantial cracks were sealed by asphalt contractor the week of May 19, 2014.	No		May 19, 2014
		Cracks are evident within the trench drains. Previously repaired cracks failed but were hot sealed the week of May 19, 2014.	No		May 19, 2014
		<u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains were damaged and failed in many locations. They were sealed the week of May 19, 2014.	No		May 19, 2014
		Gaps between the MatCon pavement and Concrete pads/trench drains were evident, and were sealed the week of May 19, 2014. Photos: 1, 2 & 5	No		May 19, 2014
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	Photo 4			
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to other 2013 and 2014 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: Photo showing cracks in pad 2. Notebook for scale.

Photo 2: Puddle at southern end of Pad 3.

Photo 3: Puddle W of Pad 1.

Photo 4: Concrete retention wall and wattle slope.

Photo 5: Puddle NE corner of Pad 2, note Matcon subsidence.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: 8/28/2014 Time: 0900 hours Printed Name: John Wilcox Signature: _____
Figure(s): Photos attached.
Weather: temperature: 66° F wind: E @ 3 mph, last significant rain/snow: July 31, 2014 0.85 inches.
Weather Data Source: LANL Weather Machine

June 2014 Monthly Inspection

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Settlement / Subsidence Differential settlement and subsidence of the MatCon pavement is visible throughout the paved area. Low spots that allow storm water to puddle and pond are present at the NW corners of Pad 2, 3, &4 due to settlement of the MatCon pavement, concrete pads and associated trench drains. Trench drains were designed to drain north to south and are currently ineffective. After rain events, standing water is present in some sections of trench drains. Ponded water at the NW corner of Pad 2 seeps into the soil berm.	Yes		
		A visible hinge point has developed in an approximate east west orientation. North of the hinge point line, from Pad 2 to Pad 5, is visible: settling, cracking, and ineffective drainage for the MatCon pavement, pads and trench drains. The northwest side of Pad 4 has visibly subsided since November 2013.	Yes		
		Cracks / Gaps Spider web cracking and open cracking along an east-west hinge point trend in the MatCon from the east side of pad 2 to the west side of pad 5. Cracks are forming in an east-west orientation with subsidence of both the pavement and concrete pads along the hinge line. All cracks were hot sealed the week of May 19, 2014, but new cracks have developed since then. Photos: 1, 2, & 3	No		May 19, 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	<u>Subsidence / Settlement / Cracking</u> Subsidence and settlement is evident at Pads 2, 3, 4 & 5. North end of Pad 1 has raised and slightly twisted. The north ends of Pads 2, 3, 4, & 5, particularly the NW corners, have noticeable subsidence and the trench drains drain in reverse causing standing water in the drains.	Yes		
		Pads 1, 2, 3, 4, & 5 have cracking in an east-west orientation mainly along the hinge point with major cracking occurring at pads 2 and 3. Cracks in pads 2 & 3 are numerous and large enough to allow infiltration of water during storm events. All pads have spider web type cracking. Substantial cracks were sealed by asphalt contractor the week of May 19, 2014.	No		May 19, 2014
		Cracks are evident within the trench drains. Previously repaired cracks failed but were hot sealed the week of May 19, 2014.	No		May 19, 2014
		<u>Gaps / Pop-outs / Separation</u> Sealed expansion joints within the pads and along the trench drains were damaged and failed in many locations. They were sealed the week of May 19, 2014.	No		May 19, 2014
		Gaps between the MatCon pavement and Concrete pads/trench drains were evident, and were sealed the week of May 19, 2014. Photos: 1, 2 & 3	No		May 19, 2014
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	All ACOE points are in place and accessible.	No		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	Photo 4			
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Photo 5			

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Refer to other 2013 and 2014 inspections for additional photos

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1: Photo showing cracks in pad 2. Notebook for scale (photo from previous inspection).

Photo 2: Puddle at southern end of Pad 2.

Photo 3: Puddle at northern end of Pad 3.

Photo 4: Concrete retention wall and wattle slope.

Photo 5: View of eastern section of landfill area.

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Monthly - September 2014

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 9/25/14

Inspector Printed Name: Joseph Sena Inspector Signature: _____

Barometric Pressure: 30.42in 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

Figure(s): Photos attached

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	see monthly discussion attached.			
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
OTHER					

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

LIST PHOTOS:

1. Puddling West Side of Pad 1	7. Pad 3 subsidence	11. Waddle slope
2. Cracks in Pad 1 w/vegetation	8. Pad 3, vegetation growing through grate	12. concrete retaining wall
3. Puddling above NW corner of Pad 2	9. Pad 4, vegetation growing on East Edge	13. Perimeter Fence
4. Cracks in Pad 2	10. Pad 4, subsidence	
5. Pad 2 Subsidence, looking West		
6. Pad 3, previous puddling at NW corner		

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 9-25-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Matcon Asphalt Pavement: cracks, gaps, subsidence	M	Differential settlement and subsidence of the Matcon and pads is visible. There are low spots where pads have subsided especially at pads 1-4 and at a lesser degree at pad 5. The photos taken during this inspection provide an example of the inspection results. Photo 1-6 Due to the subsidence of the Mat Con and pads, low areas where water can accumulate is visible (Photo 1).	yes		
Concrete Hanger Pads and expansion joints:		The Matcon and pads show a high volume of spider web cracking.			

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 9-25-14

- continue

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Survey Benchmarks on each hanger pad:		Trench drains seem to be ineffective due to the presence of standing water within trenches and new growth vegetation (Photo 8). Survey Benchmarks were located and were attached on pads 1-4. No benchmark was located on pad 5, a better locate will be requested during joint visit with LANL personel on 10-2-14.			

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Inspection PHOTOS for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 9/25/14

Photo 1. Puddling West side of Pad 1

Photo 2. Cracks in Pad 1, vegetation growing through

Photo 3. Puddling above NW corner of Pad 2

Photo 4. Cracks in Pad 2

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Photo 5. Pad 2 subsidence, looking West

Photo 6. Pad 3 previous puddling at NW corner

Photo 7. Pad 3 subsidence

Photo 8. Pad 3 vegetation growing through grate

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Photo 9. Pad 4 vegetation growing on East edge

Photo 10. Pad 4 subsidence

Photo 11. Waddle slope

Photo 12. Concrete wall

Photo 13. Perimeter Fence

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Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 10-29-14

Inspector Printed Name: Joseph T. Sena Inspector Signature: Joseph T Sena

Barometric Pressure: 30.37 Temperature: 49 Wind Direction: NE Wind Speed: 5 mph

Weather conditions: Fair

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

Weather Data Source: Los Alamos Airport - National Weather Service

Figure(s): Photos attached

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	See monthly discussion attached			
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
OTHER					

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

LIST PHOTOS:

Crack on Mat Con - E. of pad 5	Pad 3 crack on expansion joint	NE Pad 3 - hole in mat above trench
"	Pad 3 - west side displacement	
Pad 5 - Crack in expansion joint	Pad 2 - crack in joint	
"	"	
Pad 4 - Crack in expansion joint	NE Pad 2 - settling/trench	
Pad 4 - west side displacement	NE Pad 3 - ground settling/trench	

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 10-29-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Matcon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	Differential settlement and subsidence continue on the matcon and pads. The subsidence and settling is much more visible at pads 1-4 with a lesser degree at pad. 5. The attached photos represent these observations of the settling, subsidence and cracking.	yes		
Concrete Hanger Pads and expansion joints: cracks, gaps, spalling, drop-outs,	M.	The concret pads show a high volume of spider web cracks and separation at the expansion joints.	yes		

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 10-29-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Survey Benchmarks on each hanger pad: accessible, attached to concrete pad.	M	All survey benchmarks were accessible and attached to concrete pads.	No		

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Photo 1. East Side of Pad 5, MatCon Cracking	Photo 2. East Side of Pad 5, MatCon Cracking
Photo 3. Pad 5, crack in expansion joint	Photo 4. Pad 5, crack in expansion joint

Photo 5. Pad 4, crack in expansion joint

Photo 6. Pad 4, crack in expansion joint

Photo 7. Pad 4, West side subsidence

Photo 8. Pad 4, West side subsidence

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Photo 9. Pad 3, crack in expansion joint

Photo 10. Pad 3, subsidence

Photo 11. Pad 3, subsidence

Photo 12. Pad 2, joint cracking

Photo 13. Pad 2, joint cracking

Photo 14. NE of Pad 2, settling of ground

Photo 15. NE of Pad 3, settling of ground

Photo 16. NE of Pad 3, hole in matting over settling of ground

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Monthly – November 2014

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-1-14

Inspector Printed Name: Joseph T. Sena Inspector Signature: Joseph T. Sena

Barometric Pressure: 30.34 Temperature: 43 Wind Direction: E Wind Speed: 6

Weather conditions: Fair

Date and amount of last precipitation (within last 48 hours): 11-30-14 .03 in

Weather Data Source: Los Alamos Airport - National Weather Service

Figure(s): Photos attached

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	See Monthly discussion attached. Photos also attached.			
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR				
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR				
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR				
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR				
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR				
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR				
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR				

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR				
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR				
OTHER					

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

LIST PHOTOS:

1-4 subsidence examples		
5-11 cracking		
12-15 general		

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-1-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Matcon Asphalt Pavement	M	Differential settlement and subsidence of matcon continues as previous reported in prior monthly inspections.	yes		
Concrete Hanger Pads and expansion joints	M	Subsidence and settling continue on all pads. Spider web cracks and seperation at expansion joints are visible at a higher degree than observed during last months inspection.	yes		
Survey Benchmarks	M	All survey bench marks were present and accessible	no		

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Photo 1. Pad2 NW corner looking S - subsidence

Photo 2. Pad2 NW corner looking – pad below Matcon grade

Photo 3. Pad3 NW corner looking S - subsidence

Photo 4. Matcon between Pad4 and Pad5- “hinge” point now visible

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Photo 5. Pad1-cracking, previously not apparent on Pad1

Photo 6. Pad3- cracking of areas previously sealed

Photo 7. Pad3 –cracking along seams

Photo 8. Pad4 –cracking along seams

Photo 9. Pad4 –cracking along seams previously sealed

Photo 10. Matcon between Pad4 and Pad5 cracking along seams previously sealed

Photo 11. Pad5 – cracking along seams previously sealed

Photo 12. Pad1 looking E toward Pad5 – uneven overall surface

Photo 13. General – survey benchmarks present and accessible

Photo 14. survey benchmarks present and accessible

Photo 15. Example of filled borehole from work at site

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Monthly AND Annual December 2014

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-19-14

Inspector Printed Name: Joseph T. Sena Inspector Signature: Joseph T Sena

Barometric Pressure: 30.20 Temperature: 30 Wind Direction: NE Wind Speed: 7

Weather conditions: Fair

Date and amount of last precipitation (within last 48 hours): 12-17-14 .03

Weather Data Source: Los Alamos Airport - National Weather Service

Figure(s): Photos attached

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M	See Attachment	N		
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M	See Attachment	N.		
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M	Benchmarks attached and accessible	N		
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A	Intact and appear functional	No		

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Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B	Measurements conduct, PS-02 & PS-05 had concentrations greater than 25% of LEL for Methane.	N		
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Intact except for areas under construction	No		
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR	Intact & functional	N		
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	Intact	N		
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR	Intact, observed standing water within trenches.	N		
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR	Intact, observed standing water within inlets.	N		
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR	No evidence that pollutants had entered the storm water system	N		
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR	No	N		
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR	Intact, appears functional	N		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR	Under construction	NA		
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Covered with snow unable to conduct visual inspection	N		
OTHER					

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

LIST PHOTOS:

1-4 matcon	11-13 retaining wall,	
5 concrete pads	waddle slope,	
6 survey benchmarks	retention area	
7 turbines	14 perimeter fence	
8 vegetated slopes		
9-10 gravel drainages		

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Inspection Attachment for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d) Date: 12-19-14

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Matrix Inspection	M	Differential settlement and subsidence continues as previously report in prior monthly			
Concrete Hanger Pads	M	Subsidence and settling continues on all pads. Spider web cracks and seperation of expansion joints are visible at a higher degree than observed during previous month inspection.			

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A = annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.

Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

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Photo 1. Settlement in matcon

Photo 2. Cracking in matcon

Photo 3. Settlement in matcon

Photo 4. Settlement in matcon

Photo 5. Separation of expansion joints on concrete pads

Photo 6. Survey Benchmarks in tact on all pads

Photo 7. Turbines intact

Photo 8. Vegetated slopes

Photo 9. East-West gravel drainage channel

Photo 10. North-South gravel drainage channel

Photo 11. Rock retaining wall

Photo 12. Check dam installation at former waddle slope

Photo 13. Work in progress below former waddle slope at retention area	Photo 14. New rock adjacent to perimeter fence, below cut in slope

Appendix D, Quarterly Landfill-Gas Measurements

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 4/3/14 Barometric Pressure: 29.81" Temperature: 31° F

Weather conditions: Partly Cloudy Wind Direction: SW Wind Speed: 8 mph

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

Instrument: MSA Altair 5X #1584 Calibration method and date: Pentane gas 3/20/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1019	0	20.8	0
HP-02	2 inches above expansion joint*	1019	0	20.8	0
HP-03	2 inches above expansion joint*	1020	0	20.8	0
HP-04	2 inches above expansion joint*	1016	0	20.8	0
HP-05	2 inches above expansion joint*	1016	0	20.8	0
HP-06	2 inches above expansion joint*	1017	0	20.8	0
HP-07	2 inches above expansion joint*	1013	0	20.8	0
HP-08	2 inches above expansion joint*	1013	0	20.8	0
HP-09	2 inches above expansion joint*	1014	0	20.8	0
HP-10	2 inches above expansion joint*	1010	0	20.8	0
HP-11	2 inches above expansion joint*	1010	0	20.8	0
HP-12	2 inches above expansion joint*	1011	0	20.8	0
HP-13	2 inches above expansion joint*	1007	0	20.8	0
HP-14	2 inches above expansion joint*	1007	0	20.8	0
HP-15	2 inches above expansion joint*	1008	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1021	0	20.8	0
TD-02	4 inches below trench grate	1020	0	20.8	0
TD-03	4 inches below trench grate	1018	0	20.8	0
TD-04	4 inches below trench grate	1017	0	20.8	0
TD-05	4 inches below trench grate	1015	0	20.8	0
TD-06	4 inches below trench grate	1014	0	20.8	0
TD-07	4 inches below trench grate	1012	0	20.8	0
TD-08	4 inches below trench grate	1011	0	20.8	0
TD-09	4 inches below trench grate	1009	0	20.8	0
TD-10	4 inches below trench grate	1008	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1039	0	20.8	0
DC-02	4 inches below grate	1039	0	20.8	0
DC-03	4 inches below grate	1038	0	20.8	0
DC-04	4 inches below grate	1037	0	20.8	0
DC-05	4 inches below grate	1037	0	20.8	0
DC-06	4 inches below grate	1036	0	20.8	0
DC-07	4 inches below grate	1035	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	1022	0	20.8	0
PG-02	2 inches above ground surface	1022	0	20.8	0
PG-03	2 inches above ground surface	1023	0	20.8	0
PG-04	2 inches above ground surface	1024	0	20.8	0
PG-05	2 inches above ground surface	1024	0	20.8	0
PG-06	2 inches above ground surface	1025	0	20.8	0
PG-07	2 inches above ground surface	1026	0	20.8	0
PG-08	2 inches above ground surface	1026	0	20.8	0

PG-09	2 inches above ground surface	1027	0	20.8	0
PG-10	2 inches above ground surface	1031	0	20.8	0
PG-11	2 inches above ground surface	1030	0	20.8	0
PG-12	2 inches above ground surface	1027	0	20.8	0
PG-13	2 inches above ground surface	1029	0	20.8	0
PG-14	2 inches above ground surface	1028	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1003	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1003	0	20.8	0
PS-03	at spinner (4 ft above pavement)	1004	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1005	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1005	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1006	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

Light snow showers morning of 4-3-14 but no accumulation at airport.

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: _6/26/14_ Barometric Pressure: ___30.12”___ Temperature: __ 69° F___

Weather conditions: __ Mostly Sunny _____ Wind Direction: _S __ Wind Speed: _10_ mph

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

Instrument: _MSA Altair 5X_#1552 Calibration method and date: _ Pentane gas 6/9/14

Week of June 9, 2014

Sample Location	**Height (ft)**	**Time**	**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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	0	20.8	0
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	0	20.8	0
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	NM	NM	NM
TD-03	4 inches below trench grate	0920	0	20.8	0
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	0	20.8	0
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	3	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	100	16	1% H2S
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	20	20.4	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
Hydrogen Sulfide = H2S

Comments:

NM – Not measured, standing water in trench drain.

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

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QUARTERLY/BI-ANNUAL, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d GAS MONITORING ATTACHMENT

Date: 9-25-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

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

Wind Speed: NA 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 12K14gas55

Comments:

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)	0825	0	20.9	0
PS-02	at spinner (4 ft above pavement)	0827	100	18.3	0
PS-03	at spinner (4 ft above pavement)	0828	0	20.9	0
PS-04	at spinner (4 ft above pavement)	0830	0	20.9	0
PS-05	at spinner (4 ft above pavement)	0832	0	20.9	0
PS-06	at spinner (4 ft above pavement)	0835	0	20.9	0
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*	0848	0	20.9	0
HP-02	2 inches above expansion joint*	0850	0	20.9	0
HP-03	2 inches above expansion joint*	0852	0	20.9	0

HP-04	2 inches above expansion joint*	0906	0	20.9	0
HP-05	2 inches above expansion joint*	0907	0	20.9	0
HP-06	2 inches above expansion joint*	0909	0	20.9	0
HP-07	2 inches above expansion joint*	0918	0	20.9	0
HP-08	2 inches above expansion joint*	0920	0	20.9	0
HP-09	2 inches above expansion joint*	0921	0	20.9	0
HP-10	2 inches above expansion joint*	0927	0	20.9	0
HP-11	2 inches above expansion joint*	0928	0	20.9	0
HP-12	2 inches above expansion joint*	0930	0	20.9	0
HP-13	2 inches above expansion joint*	0939	0	20.9	0
HP-14	2 inches above expansion joint*	0941	0	20.9	0
HP-15	2 inches above expansion joint*	0943	0	20.9	0
Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0854	0	20.9	0
TD-02	4 inches below trench grate	0855	0	20.9	0
TD-03	4 inches below trench grate	0905	0	20.9	0
TD-04	4 inches below trench grate	0904	0	20.9	0
TD-05	4 inches below trench grate	0916	0	20.9	0
TD-06	4 inches below trench grate	0914	0	20.9	0
TD-07	4 inches below trench grate	0927	0	20.9	0
TD-08	4 inches below trench grate	0925	0	20.9	0
TD-09	4 inches below trench grate	0937	0	20.9	0
TD-10	4 inches below trench grate	0935	0	20.9	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0858	0	20.9	0
DC-02	4 inches below grate	0900	0	20.9	0
DC-03	4 inches below grate	0902	0	20.9	0
DC-04	4 inches below grate	0912	0	20.9	0

DC-05	4 inches below grate	0923	0	20.9	0
DC-06	4 inches below grate	0933	0	20.9	0
DC-07	4 inches below grate	0947	0	20.9	0
DC-08	4 inches below manhole lid	0955	0	20.9	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1043	0	20.9	0
PG-02	2 inches above ground surface	1040	0	20.9	0
PG-03	2 inches above ground surface	1036	0	20.9	0
PG-04	2 inches above ground surface	1033	0	20.9	0
PG-05	2 inches above ground surface	1030	0	20.9	0
PG-06	2 inches above ground surface	1025	0	20.9	0
PG-07	2 inches above ground surface	1022	0	20.9	0
PG-08	2 inches above ground surface	1015	0	20.9	0
PG-09	2 inches above ground surface	1012	0	20.9	0
PG-10	2 inches above ground surface	1018	0	20.9	0
PG-11	2 inches above ground surface	1006	0	20.9	0
PG-12	2 inches above ground surface	1009	0	20.9	0
PG-13	2 inches above ground surface	1003	0	20.9	0
PG-14	2 inches above ground surface	0959	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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QUARTERLY/BI-ANNUAL, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d GAS MONITORING ATTACHMENT

Date: 12-19-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.20 Temperature: 30 Wind Direction: NE

Wind Speed: 7 Weather Conditions: ~~12-17-14 .03~~ 7air

Date and amount of last precipitation (within last 48 hours): 12-17-14 .03

Weather Data Source: Los Alamos Airport - National Weather Service

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

Comments: none

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)	12:38	0	20.9	0
PS-02	at spinner (4 ft above pavement)	12:48	100	15.4	0
PS-03	at spinner (4 ft above pavement)	12:56	0	20.9	0
PS-04	at spinner (4 ft above pavement)	13:04	0	20.9	0
PS-05	at spinner (4 ft above pavement)	13:12	100	16.3	0
PS-06	at spinner (4 ft above pavement)	13:20	0	20.9	0
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*	12:47	0	20.9	0
HP-02	2 inches above expansion joint*	12:46	0	20.9	0
HP-03	2 inches above expansion joint*	12:45	0	20.9	0

HP-04	2 inches above expansion joint*	12:55	0	20.9	0
HP-05	2 inches above expansion joint*	12:54	0	20.9	0
HP-06	2 inches above expansion joint*	12:53	0	20.9	0
HP-07	2 inches above expansion joint*	13:03	0	20.9	0
HP-08	2 inches above expansion joint*	13:02	0	20.9	0
HP-09	2 inches above expansion joint*	13:01	0	20.9	0
HP-10	2 inches above expansion joint*	13:10	0	20.9	0
HP-11	2 inches above expansion joint*	13:09	0	20.9	0
HP-12	2 inches above expansion joint*	13:08	0	20.9	0
HP-13	2 inches above expansion joint*	13:19	0	20.9	0
HP-14	2 inches above expansion joint*	13:18	0	20.9	0
HP-15	2 inches above expansion joint*	13:17	0	20.9	0
Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	12:40	0	20.9	0
TD-02	4 inches below trench grate	12:42	0	20.9	0
TD-03	4 inches below trench grate	12:50	0	20.9	0
TD-04	4 inches below trench grate	12:51	0	20.9	0
TD-05	4 inches below trench grate	12:58	0	20.9	0
TD-06	4 inches below trench grate	12:59	0	20.9	0
TD-07	4 inches below trench grate	13:05	0	20.9	0
TD-08	4 inches below trench grate	13:07	0	20.9	0
TD-09	4 inches below trench grate	13:14	0	20.9	0
TD-10	4 inches below trench grate	13:15	0	20.9	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	12:44	0	20.9	0
DC-02	4 inches below grate	12:43	0	20.9	0
DC-03	4 inches below grate	12:52	0	20.9	0
DC-04	4 inches below grate	13:00	0	20.9	0

DC-05	4 inches below grate	13:07	0	20.9	0
DC-06	4 inches below grate	13:16	0	20.9	0
DC-07	4 inches below grate	13:23	0	20.9	0
DC-08	4 inches below manhole lid	13:34	0	20.9	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	12:39	0	20.9	0
PG-02	2 inches above ground surface	12:49	0	20.9	0
PG-03	2 inches above ground surface	12:57	0	20.9	0
PG-04	2 inches above ground surface	13:05	0	20.9	0
PG-05	2 inches above ground surface	13:13	0	20.9	0
PG-06	2 inches above ground surface	13:47	0	20.9	0
PG-07	2 inches above ground surface	13:42	0	20.9	0
PG-08	2 inches above ground surface	13:39	0	20.9	0
PG-09	2 inches above ground surface	13:30	0	20.9	0
PG-10	2 inches above ground surface	13:44	0	20.9	0
PG-11	2 inches above ground surface	13:36	0	20.9	0
PG-12	2 inches above ground surface	13:28	0	20.9	0
PG-13	2 inches above ground surface	1335	0	20.9	0
PG-14	2 inches above ground surface	13:27	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.

Appendix E, Weekly Landfill-Gas Measurements

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 1/2/14 Barometric Pressure: 30.36 Temperature: 28 degrees F

Weather conditions: Fair Wind Direction: NW Wind Speed: 6 mph

Date and amount of last precipitation (within last 48 hours): 12/22/13 0.5 inches of snow

Instrument: MSA Altair 5X #1500 Calibration method and date: Pentane gas 12/18/13

Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1048	0	20.8	0
HP-02	2 inches above expansion joint*	1049	0	20.8	0
HP-03	2 inches above expansion joint*	1050	0	20.8	0
HP-04	2 inches above expansion joint*	1052	0	20.8	0
HP-05	2 inches above expansion joint*	1053	0	20.8	0
HP-06	2 inches above expansion joint*	1054	0	20.8	0
HP-07	2 inches above expansion joint*	1055	0	20.8	0
HP-08	2 inches above expansion joint*	1056	0	20.8	0
HP-09	2 inches above expansion joint*	1058	0	20.8	0
HP-10	2 inches above expansion joint*	1059	0	20.8	0
HP-11	2 inches above expansion joint*	1100	0	20.8	0
HP-12	2 inches above expansion joint*	1101	0	20.8	0
HP-13	2 inches above expansion joint*	1102	0	20.8	0
HP-14	2 inches above expansion joint*	1103	0	20.8	0
HP-15	2 inches above expansion joint*	1104	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1035	0	20.8	0
TD-02	4 inches below trench grate	1036	0	20.8	0
TD-03	4 inches below trench grate	1037	0	20.8	0
TD-04	4 inches below trench grate	1038	0	20.8	0
TD-05	4 inches below trench grate	Ice	-	-	-
TD-06	4 inches below trench grate	1040	0	20.8	0
TD-07	4 inches below trench grate	Ice	-	-	-
TD-08	4 inches below trench grate	1042	0	20.8	0
TD-09	4 inches below trench grate	1044	0	20.8	0
TD-10	4 inches below trench grate	1045	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1033	0	20.8	0
DC-02	4 inches below grate	1032	0	20.8	0
DC-03	4 inches below grate	1031	0	20.8	0
DC-04	4 inches below grate	1030	0	20.8	0
DC-05	4 inches below grate	1029	0	20.8	0
DC-06	4 inches below grate	1028	0	20.8	0
DC-07	4 inches below grate	1027	0	20.8	0
DC-08	4 inches below manhole lid	1107	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1122	0	20.8	0
PG-02	2 inches above ground surface	1121	0	20.8	0
PG-03	2 inches above ground surface	1120	0	20.8	0
PG-04	2 inches above ground surface	1119	0	20.8	0
PG-05	2 inches above ground surface	1118	0	20.8	0
PG-06	2 inches above ground surface	1112	0	20.8	0
PG-07	2 inches above ground surface	1111	0	20.8	0
PG-08	2 inches above ground surface	1110	0	20.8	0

PG-09	2 inches above ground surface	1109	0	20.8	0
PG-10	2 inches above ground surface	1114	0	20.8	0
PG-11	2 inches above ground surface	1115	0	20.8	0
PG-12	2 inches above ground surface	1108	0	20.8	0
PG-13	2 inches above ground surface	Snow	-	-	-
PG-14	2 inches above ground surface	1107	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1017	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1018	100	18.5	0
PS-03	at spinner (4 ft above pavement)	1020	100	16.7	0
PS-04	at spinner (4 ft above pavement)	1022	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1023	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1025	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

Photo 1: Posting for methane gas at PS-01 (similar posting at PS-06)

Photo 2: Monitoring at PG-01

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 1/6/14 Barometric Pressure: 30.30 Temperature: 25 degrees F

Weather conditions: Fair Wind Direction: NE Wind Speed: 2 mph

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

Instrument: MSA Altair 5X #1500 Calibration method and date: Pentane gas 12/18/13

Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1337	0	20.8	0
HP-02	2 inches above expansion joint*	1338	0	20.8	0
HP-03	2 inches above expansion joint*	1339	0	20.8	0
HP-04	2 inches above expansion joint*	1342	0	20.8	0
HP-05	2 inches above expansion joint*	1343	0	20.8	0
HP-06	2 inches above expansion joint*	1344	0	20.8	0
HP-07	2 inches above expansion joint*	1347	0	20.8	0
HP-08	2 inches above expansion joint*	1348	0	20.8	0
HP-09	2 inches above expansion joint*	1349	0	20.8	0
HP-10	2 inches above expansion joint*	1353	0	20.8	0
HP-11	2 inches above expansion joint*	1354	0	20.8	0
HP-12	2 inches above expansion joint*	1355	0	20.8	0
HP-13	2 inches above expansion joint*	1359	0	20.8	0
HP-14	2 inches above expansion joint*	1400	0	20.8	0
HP-15	2 inches above expansion joint*	1402	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1335	0	20.8	0
TD-02	4 inches below trench grate	1336	0	20.8	0
TD-03	4 inches below trench grate	1340	0	20.8	0
TD-04	4 inches below trench grate	1341	0	20.8	0
TD-05	4 inches below trench grate	1345	0	20.8	0
TD-06	4 inches below trench grate	1346	0	20.8	0
TD-07	4 inches below trench grate	1350	0	20.8	0
TD-08	4 inches below trench grate	1352	0	20.8	0
TD-09	4 inches below trench grate	1356	0	20.8	0
TD-10	4 inches below trench grate	1358	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1334	0	20.8	0
DC-02	4 inches below grate	1333	4	20.8	0
DC-03	4 inches below grate	1332	0	20.8	0
DC-04	4 inches below grate	1331	0	20.8	0
DC-05	4 inches below grate	1330	0	20.8	0
DC-06	4 inches below grate	1329	7	20.8	0
DC-07	4 inches below grate	1328	0	20.8	0
DC-08	4 inches below manhole lid	1410	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	Frozen	-	-	-
PG-02	2 inches above ground surface	Frozen	-	-	-
PG-03	2 inches above ground surface	Frozen	-	-	-
PG-04	2 inches above ground surface	Frozen	-	-	-
PG-05	2 inches above ground surface	Frozen	-	-	-
PG-06	2 inches above ground surface	Frozen	-	-	-
PG-07	2 inches above ground surface	Frozen	-	-	-
PG-08	2 inches above ground surface	Frozen	-	-	-

PG-09	2 inches above ground surface	Frozen	-	-	-
PG-10	2 inches above ground surface	Frozen	-	-	-
PG-11	2 inches above ground surface	Frozen	-	-	-
PG-12	2 inches above ground surface	Frozen	-	-	-
PG-13	2 inches above ground surface	Frozen	-	-	-
PG-14	2 inches above ground surface	Frozen	-	-	-
PS-01	at spinner (4 ft above pavement)	1320	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1321	100	13.8	0
PS-03	at spinner (4 ft above pavement)	1323	100	18.3	0
PS-04	at spinner (4 ft above pavement)	1325	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1326	81	19.7	0
PS-06	at spinner (4 ft above pavement)	1327	7	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

1. All Northern Perimeter sites are on frozen ground and were not monitored per the monitoring guidelines.
2. No photos were taken.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 1/15/14 Barometric Pressure: 30.38 Temperature: 31 degrees F

Weather conditions: Fair Wind Direction: N Wind Speed: 6 mph

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

Instrument: MSA Altair 5X #1550 Calibration method and date: Pentane gas 1/14/14

Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1040	0	20.8	0
HP-02	2 inches above expansion joint*	1038	0	20.8	0
HP-03	2 inches above expansion joint*	1037	0	20.8	0
HP-04	2 inches above expansion joint*	1036	0	20.8	0
HP-05	2 inches above expansion joint*	1035	0	20.8	0
HP-06	2 inches above expansion joint*	1-33	0	20.8	0
HP-07	2 inches above expansion joint*	1032	0	20.8	0
HP-08	2 inches above expansion joint*	1030	0	20.8	0
HP-09	2 inches above expansion joint*	1029	0	20.8	0
HP-10	2 inches above expansion joint*	1028	0	20.8	0
HP-11	2 inches above expansion joint*	1027	0	20.8	0
HP-12	2 inches above expansion joint*	1026	0	20.8	0
HP-13	2 inches above expansion joint*	1025	0	20.8	0
HP-14	2 inches above expansion joint*	1023	0	20.8	0
HP-15	2 inches above expansion joint*	1022	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1007	0	20.8	0
TD-02	4 inches below trench grate	1008	0	20.8	0
TD-03	4 inches below trench grate	1009	0	20.8	0
TD-04	4 inches below trench grate	1012	0	20.8	0
TD-05	4 inches below trench grate	1014	0	20.8	0
TD-06	4 inches below trench grate	1015	0	20.8	0
TD-07	4 inches below trench grate	1017	0	20.8	0
TD-08	4 inches below trench grate	1018	0	20.8	0
TD-09	4 inches below trench grate	1019	0	20.8	0
TD-10	4 inches below trench grate	1020	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1005	0	20.8	0
DC-02	4 inches below grate	1004	0	20.8	0
DC-03	4 inches below grate	1003	0	20.8	0
DC-04	4 inches below grate	1002	0	20.8	0
DC-05	4 inches below grate	1001	0	20.8	0
DC-06	4 inches below grate	1000	0	20.8	0
DC-07	4 inches below grate	0959	0	20.8	0
DC-08	4 inches below manhole lid	1054	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1042	0	20.8	0
PG-02	2 inches above ground surface	1043	0	20.8	0
PG-03	2 inches above ground surface	1044	0	20.8	0
PG-04	2 inches above ground surface	1045	0	20.8	0
PG-05	2 inches above ground surface	1046	0	20.8	0
PG-06	2 inches above ground surface	1047	0	20.8	0
PG-07	2 inches above ground surface	1048	0	20.8	0
PG-08	2 inches above ground surface	1049	0	20.8	0

PG-09	2 inches above ground surface	1050	0	20.8	0
PG-10	2 inches above ground surface	1108	0	20.8	0
PG-11	2 inches above ground surface	1107	0	20.8	0
PG-12	2 inches above ground surface	1051	0	20.8	0
PG-13	2 inches above ground surface	1105	0	20.8	0
PG-14	2 inches above ground surface	1052	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0951	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0952	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0953	24	20.8	0
PS-04	at spinner (4 ft above pavement)	0955	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0956	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0957	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

1. All Northern Perimeter sites are on frozen ground and were not monitored per the monitoring guidelines.
2. No photos were taken.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 1/24/14 Barometric Pressure: 30.45 Temperature: 31 F

Weather conditions: Fair Wind Direction: N Wind Speed: 5 mph

Date and amount of last precipitation (within last 48 hours): 1/2 inch snow 1/23/14

Instrument: MSA Altair 5X #1550 Calibration method and date: Pentane gas 1/14/14

January Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1051	0	20.8	0
HP-02	2 inches above expansion joint*	1050	0	20.8	0
HP-03	2 inches above expansion joint*	1049	0	20.8	0
HP-04	2 inches above expansion joint*	1048	0	20.8	0
HP-05	2 inches above expansion joint*	1047	0	20.8	0
HP-06	2 inches above expansion joint*	1045	0	20.8	0
HP-07	2 inches above expansion joint*	1044	0	20.8	0
HP-08	2 inches above expansion joint*	1043	0	20.8	0
HP-09	2 inches above expansion joint*	1042	0	20.8	0
HP-10	2 inches above expansion joint*	1041	0	20.8	0
HP-11	2 inches above expansion joint*	1040	0	20.8	0
HP-12	2 inches above expansion joint*	1039	0	20.8	0
HP-13	2 inches above expansion joint*	1038	0	20.8	0
HP-14	2 inches above expansion joint*	1036	0	20.8	0
HP-15	2 inches above expansion joint*	1034	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	snow/ice	-	-	-
TD-02	4 inches below trench grate	1020	0	20.8	0
TD-03	4 inches below trench grate	snow/ice	-	-	-
TD-04	4 inches below trench grate	1022	0	20.8	0
TD-05	4 inches below trench grate	snow/ice	-	-	-
TD-06	4 inches below trench grate	1025	0	20.8	0
TD-07	4 inches below trench grate	snow/ice	-	-	-
TD-08	4 inches below trench grate	1027	0	20.8	0
TD-09	4 inches below trench grate	snow/ice	-	-	-
TD-10	4 inches below trench grate	1029	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1016	0	20.8	0
DC-02	4 inches below grate	1015	0	20.8	0
DC-03	4 inches below grate	1014	0	20.8	0
DC-04	4 inches below grate	1013	0	20.8	0
DC-05	4 inches below grate	1012	0	20.8	0
DC-06	4 inches below grate	1010	0	20.8	0
DC-07	4 inches below grate	1009	0	20.8	0
DC-08	4 inches below manhole lid	1045	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	snow/ice	-	-	-
PG-02	2 inches above ground surface	snow/ice	-	-	-
PG-03	2 inches above ground surface	snow/ice	-	-	-
PG-04	2 inches above ground surface	snow/ice	-	-	-
PG-05	2 inches above ground surface	snow/ice	-	-	-
PG-06	2 inches above ground surface	snow/ice	-	-	-
PG-07	2 inches above ground surface	snow/ice	-	-	-
PG-08	2 inches above ground surface	snow/ice	-	-	-

PG-09	2 inches above ground surface	snow/ice	-	-	-
PG-10	2 inches above ground surface	snow/ice	-	-	-
PG-11	2 inches above ground surface	snow/ice	-	-	-
PG-12	2 inches above ground surface	snow/ice	-	-	-
PG-13	2 inches above ground surface	snow/ice	-	-	-
PG-14	2 inches above ground surface	snow/ice	-	-	-
PS-01	at spinner (4 ft above pavement)	0946	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0947	100	20.1	0
PS-03	at spinner (4 ft above pavement)	0948	100	19.9	0
PS-04	at spinner (4 ft above pavement)	0959	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1000	10	20.8	0
PS-06	at spinner (4 ft above pavement)	1001	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

1. All Northern Perimeter sites are on frozen ground and were not monitored per the monitoring guidelines.
2. No photos were taken.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 1/28/14 Barometric Pressure: 30.40 Temperature: 36 F

Weather conditions: Fair Wind Direction: N Wind Speed: 4 mph

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

Instrument: MSA Altair 5X #1550 Calibration method and date: Pentane gas 1/14/14

January Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1123	0	20.8	0
HP-02	2 inches above expansion joint*	1124	0	20.8	0
HP-03	2 inches above expansion joint*	1125	0	20.8	0
HP-04	2 inches above expansion joint*	1126	0	20.8	0
HP-05	2 inches above expansion joint*	1127	0	20.8	0
HP-06	2 inches above expansion joint*	1128	0	20.8	0
HP-07	2 inches above expansion joint*	1129	0	20.8	0
HP-08	2 inches above expansion joint*	1130	0	20.8	0
HP-09	2 inches above expansion joint*	1132	0	20.8	0
HP-10	2 inches above expansion joint*	1133	0	20.8	0
HP-11	2 inches above expansion joint*	1134	0	20.8	0
HP-12	2 inches above expansion joint*	1135	0	20.8	0
HP-13	2 inches above expansion joint*	1136	0	20.8	0
HP-14	2 inches above expansion joint*	1137	0	20.8	0
HP-15	2 inches above expansion joint*	1138	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1140	0	20.8	0
TD-02	4 inches below trench grate	1141	0	20.8	0
TD-03	4 inches below trench grate	1142	0	20.8	0
TD-04	4 inches below trench grate	1143	0	20.8	0
TD-05	4 inches below trench grate	1144	0	20.8	0
TD-06	4 inches below trench grate	1145	0	20.8	0
TD-07	4 inches below trench grate	1146	0	20.8	0
TD-08	4 inches below trench grate	1147	0	20.8	0
TD-09	4 inches below trench grate	1148	0	20.8	0
TD-10	4 inches below trench grate	1149	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1157	0	20.8	0
DC-02	4 inches below grate	1156	0	20.8	0
DC-03	4 inches below grate	1155	0	20.8	0
DC-04	4 inches below grate	1153	0	20.8	0
DC-05	4 inches below grate	1152	0	20.8	0
DC-06	4 inches below grate	1151	0	20.8	0
DC-07	4 inches below grate	1150	0	20.8	0
DC-08	4 inches below manhole lid	1220	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1159	0	20.8	0
PG-02	2 inches above ground surface	1200	0	20.8	0
PG-03	2 inches above ground surface	1201	0	20.8	0
PG-04	2 inches above ground surface	1202	0	20.8	0
PG-05	2 inches above ground surface	1203	0	20.8	0
PG-06	2 inches above ground surface	1204	0	20.8	0
PG-07	2 inches above ground surface	1205	0	20.8	0
PG-08	2 inches above ground surface	1206	0	20.8	0

PG-09	2 inches above ground surface	1208	0	20.8	0
PG-10	2 inches above ground surface	1209	0	20.8	0
PG-11	2 inches above ground surface	12010	0	20.8	0
PG-12	2 inches above ground surface	1211	0	20.8	0
PG-13	2 inches above ground surface	1213	0	20.8	0
PG-14	2 inches above ground surface	1214	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1116	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1117	100	19.8	0
PS-03	at spinner (4 ft above pavement)	1119	2	20.4	0
PS-04	at spinner (4 ft above pavement)	1118	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1120	33	20.1	0
PS-06	at spinner (4 ft above pavement)	1121	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 2/4/14 Barometric Pressure: 29.79 Temperature: 26 F

Weather conditions: Partly Cloudy Wind Direction: WNW Wind Speed: 5 mph

Date and amount of last precipitation (within last 48 hours): 2/3/14 0.5" snow

Instrument: MSA Altair 5X #1550 Calibration method and date: Pentane gas 2/4/14

February Weekly Monitoring

Sample Location	Height (ft)	Time	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*				
HP-02	2 inches above expansion joint*				
HP-03	2 inches above expansion joint*				
HP-04	2 inches above expansion joint*				
HP-05	2 inches above expansion joint*				
HP-06	2 inches above expansion joint*				
HP-07	2 inches above expansion joint*				
HP-08	2 inches above expansion joint*				
HP-09	2 inches above expansion joint*				
HP-10	2 inches above expansion joint*				
HP-11	2 inches above expansion joint*				
HP-12	2 inches above expansion joint*				
HP-13	2 inches above expansion joint*				
HP-14	2 inches above expansion joint*				
HP-15	2 inches above expansion joint*				

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate				
TD-02	4 inches below trench grate				
TD-03	4 inches below trench grate				
TD-04	4 inches below trench grate				
TD-05	4 inches below trench grate				
TD-06	4 inches below trench grate				
TD-07	4 inches below trench grate				
TD-08	4 inches below trench grate				
TD-09	4 inches below trench grate				
TD-10	4 inches below trench grate				
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate				
DC-02	4 inches below grate				
DC-03	4 inches below grate				
DC-04	4 inches below grate				
DC-05	4 inches below grate				
DC-06	4 inches below grate				
DC-07	4 inches below grate				
DC-08	4 inches below manhole lid				
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface				
PG-02	2 inches above ground surface				
PG-03	2 inches above ground surface				
PG-04	2 inches above ground surface				
PG-05	2 inches above ground surface				
PG-06	2 inches above ground surface				
PG-07	2 inches above ground surface				
PG-08	2 inches above ground surface				

PG-09	2 inches above ground surface				
PG-10	2 inches above ground surface				
PG-11	2 inches above ground surface				
PG-12	2 inches above ground surface				
PG-13	2 inches above ground surface				
PG-14	2 inches above ground surface				
PS-01	at spinner (4 ft above pavement)	0936	0	0	0
PS-02	at spinner (4 ft above pavement)	0938	32	20.3	0
PS-03	at spinner (4 ft above pavement)	0939	34	20.6	0
PS-04	at spinner (4 ft above pavement)	0940	0	0	0
PS-05	at spinner (4 ft above pavement)	0942	100	17.5	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

Snow on ground and asphalt. Could not measure methane from other locations.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 2/12/14 Barometric Pressure: 30.21 Temperature: 36 F

Weather conditions: Mostly Sunny Wind Direction: WNW Wind Speed: 3 mph

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

Instrument: MSA Altair 5X #1308 Calibration method and date: Pentane gas 1/22/14

February Weekly Monitoring

Sample Location	Height (ft)	Time	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*	0944	0	20.8	0
HP-02	2 inches above expansion joint*	0945	0	20.8	0
HP-03	2 inches above expansion joint*	0946	0	20.8	0
HP-04	2 inches above expansion joint*	0947	0	20.8	0
HP-05	2 inches above expansion joint*	0948	0	20.8	0
HP-06	2 inches above expansion joint*	0949	0	20.8	0
HP-07	2 inches above expansion joint*	0950	0	20.8	0
HP-08	2 inches above expansion joint*	0951	0	20.8	0
HP-09	2 inches above expansion joint*	0952	0	20.8	0
HP-10	2 inches above expansion joint*	0954	0	20.8	0
HP-11	2 inches above expansion joint*	0955	0	20.8	0
HP-12	2 inches above expansion joint*	0956	0	20.8	0
HP-13	2 inches above expansion joint*	0958	0	20.8	0
HP-14	2 inches above expansion joint*	0959	0	20.8	0
HP-15	2 inches above expansion joint*	1000	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0943	0	20.8	0
TD-02	4 inches below trench grate	0942	0	20.8	0
TD-03	4 inches below trench grate	0947	0	20.8	0
TD-04	4 inches below trench grate	0946	0	20.8	0
TD-05	4 inches below trench grate	0950	0	20.8	0
TD-06	4 inches below trench grate	0949	0	20.8	0
TD-07	4 inches below trench grate	0954	0	20.8	0
TD-08	4 inches below trench grate	0953	0	20.8	0
TD-09	4 inches below trench grate	0958	0	20.8	0
TD-10	4 inches below trench grate	0957	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0941	0	20.8	0
DC-02	4 inches below grate	0940	0	20.8	0
DC-03	4 inches below grate	0939	0	20.8	0
DC-04	4 inches below grate	0938	0	20.8	0
DC-05	4 inches below grate	0937	0	20.8	0
DC-06	4 inches below grate	0936	0	20.8	0
DC-07	4 inches below grate	0935	0	20.8	0
DC-08	4 inches below manhole lid	1019	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1002	0	20.8	0
PG-02	2 inches above ground surface	1003	0	20.8	0
PG-03	2 inches above ground surface	1004	0	20.8	0
PG-04	2 inches above ground surface	1006	0	20.8	0
PG-05	2 inches above ground surface	1008	0	20.8	0
PG-06	2 inches above ground surface	1010	0	20.8	0
PG-07	2 inches above ground surface	1011	0	20.8	0
PG-08	2 inches above ground surface	1012	0	20.8	0

PG-09	2 inches above ground surface	1013	0	20.8	0
PG-10	2 inches above ground surface	1018	0	20.8	0
PG-11	2 inches above ground surface	1017	0	20.8	0
PG-12	2 inches above ground surface	1014	0	20.8	0
PG-13	2 inches above ground surface	1016	0	20.8	0
PG-14	2 inches above ground surface	1015	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0926	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0927	100	18.6	0
PS-03	at spinner (4 ft above pavement)	0929	5	20.8	0
PS-04	at spinner (4 ft above pavement)	0931	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0932	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0933	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 2/18/14 Barometric Pressure: 30.09" Temperature: 57° F

Weather conditions: Mostly Sunny Wind Direction: SE Wind Speed: 7 mph

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

Instrument: MSA Altair 5X #1548 Calibration method and date: Pentane gas 1/22/14

February Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1421	0	20.8	0
HP-02	2 inches above expansion joint*	1422	0	20.8	0
HP-03	2 inches above expansion joint*	1423	0	20.8	0
HP-04	2 inches above expansion joint*	1418	0	20.8	0
HP-05	2 inches above expansion joint*	1419	0	20.8	0
HP-06	2 inches above expansion joint*	1419	0	20.8	0
HP-07	2 inches above expansion joint*	1414	0	20.8	0
HP-08	2 inches above expansion joint*	1415	0	20.8	0
HP-09	2 inches above expansion joint*	1416	0	20.8	0
HP-10	2 inches above expansion joint*	1411	0	20.8	0
HP-11	2 inches above expansion joint*	1412	0	20.8	0
HP-12	2 inches above expansion joint*	1412	0	20.8	0
HP-13	2 inches above expansion joint*	1407	0	20.8	0
HP-14	2 inches above expansion joint*	1408	0	20.8	0
HP-15	2 inches above expansion joint*	1409	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1424	0	20.8	0
TD-02	4 inches below trench grate	1425	0	20.8	0
TD-03	4 inches below trench grate	1421	0	20.8	0
TD-04	4 inches below trench grate	1420	0	20.8	0
TD-05	4 inches below trench grate	1417	0	20.8	0
TD-06	4 inches below trench grate	1416	0	20.8	0
TD-07	4 inches below trench grate	1413	0	20.8	0
TD-08	4 inches below trench grate	1412	0	20.8	0
TD-09	4 inches below trench grate	1411	0	20.8	0
TD-10	4 inches below trench grate	1410	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1449	0	20.8	0
DC-02	4 inches below grate	1448	0	20.8	0
DC-03	4 inches below grate	1447	0	20.8	0
DC-04	4 inches below grate	1446	0	20.8	0
DC-05	4 inches below grate	1445	0	20.8	0
DC-06	4 inches below grate	1444	0	20.8	0
DC-07	4 inches below grate	1443	0	20.8	0
DC-08	4 inches below manhole lid	1436	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1426	0	20.8	0
PG-02	2 inches above ground surface	1427	0	20.8	0
PG-03	2 inches above ground surface	1428	0	20.8	0
PG-04	2 inches above ground surface	1428	0	20.8	0
PG-05	2 inches above ground surface	1429	0	20.8	0
PG-06	2 inches above ground surface	1430	0	20.8	0
PG-07	2 inches above ground surface	1431	0	20.8	0
PG-08	2 inches above ground surface	1432	0	20.8	0

PG-09	2 inches above ground surface	1432	0	20.8	0
PG-10	2 inches above ground surface	1440	0	20.8	0
PG-11	2 inches above ground surface	1439	0	20.8	0
PG-12	2 inches above ground surface	1433	0	20.8	0
PG-13	2 inches above ground surface	1438	0	20.8	0
PG-14	2 inches above ground surface	1434	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1348	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1349	100	18.7	0
PS-03	at spinner (4 ft above pavement)	1352	100	18.8	0
PS-04	at spinner (4 ft above pavement)	1355	26	19.5	0
PS-05	at spinner (4 ft above pavement)	1357	100	11.3	0
PS-06	at spinner (4 ft above pavement)	1400	100	19.9	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 2/26/14 Barometric Pressure: 30.10 " Temperature: 36° F

Weather conditions: Mostly Sunny Wind Direction: E Wind Speed: 3 mph

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

Instrument: MSA Altair 5X #1307 Calibration method and date: Pentane gas 2/24/14

February Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1133	0	20.8	0
HP-02	2 inches above expansion joint*	1134	0	20.8	0
HP-03	2 inches above expansion joint*	1134	0	20.8	0
HP-04	2 inches above expansion joint*	1130	0	20.8	0
HP-05	2 inches above expansion joint*	1130	0	20.8	0
HP-06	2 inches above expansion joint*	1131	0	20.8	0
HP-07	2 inches above expansion joint*	1126	0	20.8	0
HP-08	2 inches above expansion joint*	1126	0	20.8	0
HP-09	2 inches above expansion joint*	1127	0	20.8	0
HP-10	2 inches above expansion joint*	1124	0	20.8	0
HP-11	2 inches above expansion joint*	1124	0	20.8	0
HP-12	2 inches above expansion joint*	1125	0	20.8	0
HP-13	2 inches above expansion joint*	1120	0	20.8	0
HP-14	2 inches above expansion joint*	1121	0	20.8	0
HP-15	2 inches above expansion joint*	1122	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1136	0	20.8	0
TD-02	4 inches below trench grate	1135	0	20.8	0
TD-03	4 inches below trench grate	1132	0	20.8	0
TD-04	4 inches below trench grate	1131	0	20.8	0
TD-05	4 inches below trench grate	1128	0	20.8	0
TD-06	4 inches below trench grate	1127	0	20.8	0
TD-07	4 inches below trench grate	1126	0	20.8	0
TD-08	4 inches below trench grate	1125	0	20.8	0
TD-09	4 inches below trench grate	1123	0	20.8	0
TD-10	4 inches below trench grate	1122	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1137	0	20.80	0
DC-02	4 inches below grate	1138	7	20.8	0
DC-03	4 inches below grate	1138	4	20.8	0
DC-04	4 inches below grate	1139	5	20.8	0
DC-05	4 inches below grate	1140	0	20.8	0
DC-06	4 inches below grate	1141	0	20.8	0
DC-07	4 inches below grate	1142	10	20.8	0
DC-08	4 inches below manhole lid	1147	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1229	0	20.8	0
PG-02	2 inches above ground surface	1228	0	20.8	0
PG-03	2 inches above ground surface	1227	0	20.8	0
PG-04	2 inches above ground surface	1226	0	20.8	0
PG-05	2 inches above ground surface	1225	0	20.8	0
PG-06	2 inches above ground surface	1150	0	20.8	0
PG-07	2 inches above ground surface	1149	0	20.8	0
PG-08	2 inches above ground surface	1149	0	20.8	0

PG-09	2 inches above ground surface	1148	0	20.8	0
PG-10	2 inches above ground surface	1151	0	20.8	0
PG-11	2 inches above ground surface	1151	0	20.8	0
PG-12	2 inches above ground surface	1148	0	20.8	0
PG-13	2 inches above ground surface	1152	0	20.8	0
PG-14	2 inches above ground surface	1147	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1109	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1110	100	15.8	0
PS-03	at spinner (4 ft above pavement)	1113	100	17.9	0
PS-04	at spinner (4 ft above pavement)	1114		20.8	0
PS-05	at spinner (4 ft above pavement)	1117	91	19.1	0
PS-06	at spinner (4 ft above pavement)	1119	100	20.3	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 3/4/14 Barometric Pressure: 30.09" Temperature: 38° F

Weather conditions: Mostly Cloudy Wind Direction: SE Wind Speed: 2 mph

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

Instrument: MSA Altair 5X #1501 Calibration method and date: Pentane gas 3/3/14

March Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1110	0	20.8	0
HP-02	2 inches above expansion joint*	1109	0	20.8	0
HP-03	2 inches above expansion joint*	1109	0	20.8	0
HP-04	2 inches above expansion joint*	1114	0	20.8	0
HP-05	2 inches above expansion joint*	1113	0	20.8	0
HP-06	2 inches above expansion joint*	1113	0	20.8	0
HP-07	2 inches above expansion joint*	1117	0	20.8	0
HP-08	2 inches above expansion joint*	1117	0	20.8	0
HP-09	2 inches above expansion joint*	1116	0	20.8	0
HP-10	2 inches above expansion joint*	1121	0	20.8	0
HP-11	2 inches above expansion joint*	1110	0	20.8	0
HP-12	2 inches above expansion joint*	1119	0	20.8	0
HP-13	2 inches above expansion joint*	1124	0	20.8	0
HP-14	2 inches above expansion joint*	1124	0	20.8	0
HP-15	2 inches above expansion joint*	1123	0	20.8	0

PG-09	2 inches above ground surface	1127	0	20.8	0
PG-10	2 inches above ground surface	1132	0	20.8	0
PG-11	2 inches above ground surface	1131	0	20.8	0
PG-12	2 inches above ground surface	1128	0	20.8	0
PG-13	2 inches above ground surface	1130	0	20.8	0
PG-14	2 inches above ground surface	1129	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1054	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1054	100	18.1	0
PS-03	at spinner (4 ft above pavement)	1057	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1058	1	20.8	0
PS-05	at spinner (4 ft above pavement)	1058	100	17.7	0
PS-06	at spinner (4 ft above pavement)	1101	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

***NA - No measurements collected because section of trench drain held standing water from rains on Saturday, 3/1/14**

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 3/12/14 Barometric Pressure: 30.30" Temperature: 31° F

Weather conditions: Mostly sunny Wind Direction: _____ Wind Speed: Calm

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

Instrument: MSA Altair 5X #1500 Calibration method and date: Pentane gas 3/4/14

March Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1116	0	20.8	0
HP-02	2 inches above expansion joint*	1115	0	20.8	0
HP-03	2 inches above expansion joint*	1115	0	20.8	0
HP-04	2 inches above expansion joint*	1111	0	20.8	0
HP-05	2 inches above expansion joint*	1112	0	20.8	0
HP-06	2 inches above expansion joint*	1112	0	20.8	0
HP-07	2 inches above expansion joint*	1108	0	20.8	0
HP-08	2 inches above expansion joint*	1109	0	20.8	0
HP-09	2 inches above expansion joint*	1110	0	20.8	0
HP-10	2 inches above expansion joint*	1105	0	20.8	0
HP-11	2 inches above expansion joint*	1106	0	20.8	0
HP-12	2 inches above expansion joint*	1106	0	20.8	0
HP-13	2 inches above expansion joint*	1102	0	20.8	0
HP-14	2 inches above expansion joint*	1102	0	20.8	0
HP-15	2 inches above expansion joint*	1103	0	20.8	0

PG-09	2 inches above ground surface	1123	0	20.8	0
PG-10	2 inches above ground surface	1127	0	20.8	0
PG-11	2 inches above ground surface	1126	0	20.8	0
PG-12	2 inches above ground surface	1124	0	20.8	0
PG-13	2 inches above ground surface	1125	0	20.8	0
PG-14	2 inches above ground surface	1125	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1056	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1057	32	20.8	0
PS-03	at spinner (4 ft above pavement)	1058	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1059	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1100	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1101	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 3/19/14 Barometric Pressure: 30.22" Temperature: 40° F

Weather conditions: Sunny Wind Direction: SE Wind Speed: 9 mph

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

Instrument: MSA Altair 5X #1552 Calibration method and date: Pentane gas 2/26/14

March Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1356	0	20.8	0
HP-02	2 inches above expansion joint*	1355	0	20.8	0
HP-03	2 inches above expansion joint*	1354	0	20.8	0
HP-04	2 inches above expansion joint*	1352	0	20.8	0
HP-05	2 inches above expansion joint*	1352	0	20.8	0
HP-06	2 inches above expansion joint*	1351	0	20.8	0
HP-07	2 inches above expansion joint*	1348	0	20.8	0
HP-08	2 inches above expansion joint*	1349	0	20.8	0
HP-09	2 inches above expansion joint*	1350	0	20.8	0
HP-10	2 inches above expansion joint*	1345	0	20.8	0
HP-11	2 inches above expansion joint*	1346	0	20.8	0
HP-12	2 inches above expansion joint*	1346	0	20.8	0
HP-13	2 inches above expansion joint*	1342	0	20.8	0
HP-14	2 inches above expansion joint*	1343	0	20.8	0
HP-15	2 inches above expansion joint*	1344	0	20.8	0

PG-09	2 inches above ground surface	1403	0	20.8	0
PG-10	2 inches above ground surface	1405	0	20.8	0
PG-11	2 inches above ground surface	1405	0	20.8	0
PG-12	2 inches above ground surface	1403	0	20.8	0
PG-13	2 inches above ground surface	1404	0	20.8	0
PG-14	2 inches above ground surface	1404	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1333	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1334	100	15.2	0
PS-03	at spinner (4 ft above pavement)	1339	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1340	55	19.7	0
PS-05	at spinner (4 ft above pavement)	1341	12	20.8	0
PS-06	at spinner (4 ft above pavement)	1342	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 3/26/14 Barometric Pressure: 29.89" Temperature: 48° F

Weather conditions: Mostly Sunny Wind Direction: W Wind Speed: 7 mph

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

Instrument: MSA Altair 5X #1584 Calibration method and date: Pentane gas 3/20/14

March Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1007	0	20.8	0
HP-02	2 inches above expansion joint*	1008	0	20.8	0
HP-03	2 inches above expansion joint*	1009	0	20.8	0
HP-04	2 inches above expansion joint*	1005	0	20.8	0
HP-05	2 inches above expansion joint*	1004	0	20.8	0
HP-06	2 inches above expansion joint*	1004	0	20.8	0
HP-07	2 inches above expansion joint*	1001	0	20.8	0
HP-08	2 inches above expansion joint*	1001	0	20.8	0
HP-09	2 inches above expansion joint*	1002	0	20.8	0
HP-10	2 inches above expansion joint*	0958	0	20.8	0
HP-11	2 inches above expansion joint*	0959	0	20.8	0
HP-12	2 inches above expansion joint*	0959	0	20.8	0
HP-13	2 inches above expansion joint*	0955	0	20.8	0
HP-14	2 inches above expansion joint*	0955	0	20.8	0
HP-15	2 inches above expansion joint*	0956	0	20.8	0

PG-09	2 inches above ground surface	1017	0	20.8	0
PG-10	2 inches above ground surface	1023	0	20.8	0
PG-11	2 inches above ground surface	1022	0	20.8	0
PG-12	2 inches above ground surface	1018	0	20.8	0
PG-13	2 inches above ground surface	1021	0	20.8	0
PG-14	2 inches above ground surface	1020	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)	0949	100	18.3	0
PS-03	at spinner (4 ft above pavement)	0952	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0952	18	19.8	0
PS-05	at spinner (4 ft above pavement)	0953	38	19.8	0
PS-06	at spinner (4 ft above pavement)	0954	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

**** NM = No measurements collected because this section of trench held standing water.**

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 4/3/14 Barometric Pressure: 29.81" Temperature: 31° F

Weather conditions: Partly Cloudy Wind Direction: SW Wind Speed: 8 mph

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

Instrument: MSA Altair 5X #1584 Calibration method and date: Pentane gas 3/20/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1019	0	20.8	0
HP-02	2 inches above expansion joint*	1019	0	20.8	0
HP-03	2 inches above expansion joint*	1020	0	20.8	0
HP-04	2 inches above expansion joint*	1016	0	20.8	0
HP-05	2 inches above expansion joint*	1016	0	20.8	0
HP-06	2 inches above expansion joint*	1017	0	20.8	0
HP-07	2 inches above expansion joint*	1013	0	20.8	0
HP-08	2 inches above expansion joint*	1013	0	20.8	0
HP-09	2 inches above expansion joint*	1014	0	20.8	0
HP-10	2 inches above expansion joint*	1010	0	20.8	0
HP-11	2 inches above expansion joint*	1010	0	20.8	0
HP-12	2 inches above expansion joint*	1011	0	20.8	0
HP-13	2 inches above expansion joint*	1007	0	20.8	0
HP-14	2 inches above expansion joint*	1007	0	20.8	0
HP-15	2 inches above expansion joint*	1008	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1021	0	20.8	0
TD-02	4 inches below trench grate	1020	0	20.8	0
TD-03	4 inches below trench grate	1018	0	20.8	0
TD-04	4 inches below trench grate	1017	0	20.8	0
TD-05	4 inches below trench grate	1015	0	20.8	0
TD-06	4 inches below trench grate	1014	0	20.8	0
TD-07	4 inches below trench grate	1012	0	20.8	0
TD-08	4 inches below trench grate	1011	0	20.8	0
TD-09	4 inches below trench grate	1009	0	20.8	0
TD-10	4 inches below trench grate	1008	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1039	0	20.8	0
DC-02	4 inches below grate	1039	0	20.8	0
DC-03	4 inches below grate	1038	0	20.8	0
DC-04	4 inches below grate	1037	0	20.8	0
DC-05	4 inches below grate	1037	0	20.8	0
DC-06	4 inches below grate	1036	0	20.8	0
DC-07	4 inches below grate	1035	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	1022	0	20.8	0
PG-02	2 inches above ground surface	1022	0	20.8	0
PG-03	2 inches above ground surface	1023	0	20.8	0
PG-04	2 inches above ground surface	1024	0	20.8	0
PG-05	2 inches above ground surface	1024	0	20.8	0
PG-06	2 inches above ground surface	1025	0	20.8	0
PG-07	2 inches above ground surface	1026	0	20.8	0
PG-08	2 inches above ground surface	1026	0	20.8	0

PG-09	2 inches above ground surface	1027	0	20.8	0
PG-10	2 inches above ground surface	1031	0	20.8	0
PG-11	2 inches above ground surface	1030	0	20.8	0
PG-12	2 inches above ground surface	1027	0	20.8	0
PG-13	2 inches above ground surface	1029	0	20.8	0
PG-14	2 inches above ground surface	1028	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1003	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1003	0	20.8	0
PS-03	at spinner (4 ft above pavement)	1004	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1005	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1005	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1006	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

Light snow showers morning of 4-3-14 but no accumulation at airport.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 4/10/14 Barometric Pressure: 30.19" Temperature: 54° F

Weather conditions: Fair Wind Direction: Calm Wind Speed: 0 mph

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

Instrument: MSA Altair 5X #1584 Calibration method and date: Pentane gas 3/20/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	0943	0	20.8	0
HP-02	2 inches above expansion joint*	0941	0	20.8	0
HP-03	2 inches above expansion joint*	0940	0	20.8	0
HP-04	2 inches above expansion joint*	0939	0	20.8	0
HP-05	2 inches above expansion joint*	0938	0	20.8	0
HP-06	2 inches above expansion joint*	0937	0	20.8	0
HP-07	2 inches above expansion joint*	0936	0	20.8	0
HP-08	2 inches above expansion joint*	0935	0	20.8	0
HP-09	2 inches above expansion joint*	0934	0	20.8	0
HP-10	2 inches above expansion joint*	0933	0	20.8	0
HP-11	2 inches above expansion joint*	0932	0	20.8	0
HP-12	2 inches above expansion joint*	0931	0	20.8	0
HP-13	2 inches above expansion joint*	0930	0	20.8	0
HP-14	2 inches above expansion joint*	0929	0	20.8	0
HP-15	2 inches above expansion joint*	0928	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1004	0	20.8	0
TD-02	4 inches below trench grate	1005	0	20.8	0
TD-03	4 inches below trench grate	1006	0	20.8	0
TD-04	4 inches below trench grate	1007	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	1012	0	20.8	0
TD-09	4 inches below trench grate	1013	0	20.8	0
TD-10	4 inches below trench grate	1014	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1017	0	20.8	0
DC-02	4 inches below grate	1018	0	20.8	0
DC-03	4 inches below grate	1019	0	20.8	0
DC-04	4 inches below grate	1020	0	20.8	0
DC-05	4 inches below grate	1021	0	20.8	0
DC-06	4 inches below grate	1022	0	20.8	0
DC-07	4 inches below grate	1023	0	20.8	0
DC-08	4 inches below manhole lid	1026	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0945	0	20.8	0
PG-02	2 inches above ground surface	0947	0	20.8	0
PG-03	2 inches above ground surface	0948	0	20.8	0
PG-04	2 inches above ground surface	0949	0	20.8	0
PG-05	2 inches above ground surface	0950	0	20.8	0
PG-06	2 inches above ground surface	0952	0	20.8	0
PG-07	2 inches above ground surface	0953	0	20.8	0
PG-08	2 inches above ground surface	0954	0	20.8	0

PG-09	2 inches above ground surface	0955	0	20.8	0
PG-10	2 inches above ground surface	0956	0	20.8	0
PG-11	2 inches above ground surface	0957	0	20.8	0
PG-12	2 inches above ground surface	0958	0	20.8	0
PG-13	2 inches above ground surface	0959	0	20.8	0
PG-14	2 inches above ground surface	1000	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0921	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0922	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0923	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0924	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0925	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0926	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 4/16/14 Barometric Pressure: 29.90" Temperature: 62° F

Weather conditions: Partly Sunny Wind Direction: W Wind Speed: 10 mph

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

Instrument: MSA Altair 5X #1411 Calibration method and date: Pentane gas 4/9/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1442	0	20.8	0
HP-02	2 inches above expansion joint*	1443	0	20.8	0
HP-03	2 inches above expansion joint*	1443	0	20.8	0
HP-04	2 inches above expansion joint*	1439	0	20.8	0
HP-05	2 inches above expansion joint*	1439	0	20.8	0
HP-06	2 inches above expansion joint*	1440	0	20.8	0
HP-07	2 inches above expansion joint*	1436	0	20.8	0
HP-08	2 inches above expansion joint*	1436	0	20.8	0
HP-09	2 inches above expansion joint*	1437	0	20.8	0
HP-10	2 inches above expansion joint*	1433	0	20.8	0
HP-11	2 inches above expansion joint*	1433	0	20.8	0
HP-12	2 inches above expansion joint*	1434	0	20.8	0
HP-13	2 inches above expansion joint*	1430	0	20.8	0
HP-14	2 inches above expansion joint*	1430	0	20.8	0
HP-15	2 inches above expansion joint*	1431	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1445	0	20.8	0
TD-02	4 inches below trench grate	1444	0	20.8	0
TD-03	4 inches below trench grate	1441	0	20.8	0
TD-04	4 inches below trench grate	1441	0	20.8	0
TD-05	4 inches below trench grate	1438	NM	NM	NM
TD-06	4 inches below trench grate	1437	0	20.8	0
TD-07	4 inches below trench grate	1435	0	20.8	0
TD-08	4 inches below trench grate	1434	8	20.8	0
TD-09	4 inches below trench grate	1432	0	20.8	0
TD-10	4 inches below trench grate	1431	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1506	0	20.8	0
DC-02	4 inches below grate	1505	0	20.8	0
DC-03	4 inches below grate	1504	0	20.8	0
DC-04	4 inches below grate	1503	0	20.8	0
DC-05	4 inches below grate	1502	5	20.8	0
DC-06	4 inches below grate	1501	0	20.8	0
DC-07	4 inches below grate	1500	0	020.8	0
DC-08	4 inches below manhole lid	1458	10	20.1	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1445	0	20.8	0
PG-02	2 inches above ground surface	1446	0	20.8	0
PG-03	2 inches above ground surface	1447	0	20.8	0
PG-04	2 inches above ground surface	1447	0	20.8	0
PG-05	2 inches above ground surface	1448	0	20.8	0
PG-06	2 inches above ground surface	1449	0	20.8	0
PG-07	2 inches above ground surface	1450	0	20.8	0
PG-08	2 inches above ground surface	1450	0	20.8	0

PG-09	2 inches above ground surface	1451	0	20.8	0
PG-10	2 inches above ground surface	1455	0	20.8	0
PG-11	2 inches above ground surface	1454	0	20.8	0
PG-12	2 inches above ground surface	1451	0	20.8	0
PG-13	2 inches above ground surface	1453	0	20.8	0
PG-14	2 inches above ground surface	1452	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1421	0	20.8	0
PS-02	at spinner (4 ft above pavement)	122	100	16.7	0
PS-03	at spinner (4 ft above pavement)	1424	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1425	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1426	100	18.8	0
PS-06	at spinner (4 ft above pavement)	1428	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

NM – Not Measured. Standing water in sampling location in trench drain.

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Derek Faulk Inspector Signature: _____

Date: 4/24/14 Barometric Pressure: 30.12" Temperature: 38° F

Weather conditions: Mostly Sunny Wind Direction: NW Wind Speed: 7 mph

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

Instrument: MSA Altair 5X #1310 Calibration method and date: Pentane gas 4/7/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	0756	0	20.8	0
HP-02	2 inches above expansion joint*	0757	0	20.8	0
HP-03	2 inches above expansion joint*	0758	0	20.8	0
HP-04	2 inches above expansion joint*	0753	0	20.8	0
HP-05	2 inches above expansion joint*	0754	0	20.8	0
HP-06	2 inches above expansion joint*	0755	0	20.8	0
HP-07	2 inches above expansion joint*	0751	0	20.8	0
HP-08	2 inches above expansion joint*	0751	0	20.8	0
HP-09	2 inches above expansion joint*	0752	0	20.8	0
HP-10	2 inches above expansion joint*	0747	0	20.8	0
HP-11	2 inches above expansion joint*	0748	0	20.8	0
HP-12	2 inches above expansion joint*	0749	0	20.8	0
HP-13	2 inches above expansion joint*	0744	0	20.8	0
HP-14	2 inches above expansion joint*	0745	0	20.8	0
HP-15	2 inches above expansion joint*	0745	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0759	0	20.8	0
TD-02	4 inches below trench grate	0758	0	20.8	0
TD-03	4 inches below trench grate	0756	0	20.8	0
TD-04	4 inches below trench grate	0755	0	20.8	0
TD-05	4 inches below trench grate	0753	0	20.8	0
TD-06	4 inches below trench grate	0752	0	20.8	0
TD-07	4 inches below trench grate	0750	0	20.8	0
TD-08	4 inches below trench grate	0749	0	20.8	0
TD-09	4 inches below trench grate	0747	0	20.8	0
TD-10	4 inches below trench grate	0746	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0825	0	20.8	0
DC-02	4 inches below grate	0824	0	00.8	0
DC-03	4 inches below grate	0823	0	20.8	0
DC-04	4 inches below grate	0823	0	20.8	0
DC-05	4 inches below grate	0822	0	20.8	0
DC-06	4 inches below grate	0821	0	20.8	0
DC-07	4 inches below grate	0819	0	20.8	0
DC-08	4 inches below manhole lid	0817	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0800	0	20.8	0
PG-02	2 inches above ground surface	0801	0	20.8	0
PG-03	2 inches above ground surface	0802	0	20.8	0
PG-04	2 inches above ground surface	0803	0	20.8	0
PG-05	2 inches above ground surface	0804	0	20.8	0
PG-06	2 inches above ground surface	0806	0	20.8	0
PG-07	2 inches above ground surface	0807	0	20.8	0
PG-08	2 inches above ground surface	0809	0	20.8	0

PG-09	2 inches above ground surface	0810	0	20.8	0
PG-10	2 inches above ground surface	0807	0	20.8	0
PG-11	2 inches above ground surface	0808	0	20.8	0
PG-12	2 inches above ground surface	0811	0	20.8	0
PG-13	2 inches above ground surface	0813	0	20.8	0
PG-14	2 inches above ground surface	0814	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0737	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0738	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0739	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0740	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0741	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0742	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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

LANDFILL GAS MONITORING FORM

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

Inspector Printed Name: Jeff Walterscheid Inspector Signature: _____

Date: 4/30/14 Barometric Pressure: 30.27 Temperature: 50 F

Weather conditions: Partly Cloudy Wind Direction: E Wind Speed: 7 mph

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

Instrument: MSA Altair 5X #1310 Calibration method and date: Pentane gas 5/7/14

April Weekly Monitoring

Sample Location	Height (ft)	Time	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*	1536	0	20.8	0
HP-02	2 inches above expansion joint*	1537	0	20.8	0
HP-03	2 inches above expansion joint*	1538	0	20.8	0
HP-04	2 inches above expansion joint*	1530	0	20.8	0
HP-05	2 inches above expansion joint*	1531	0	20.8	0
HP-06	2 inches above expansion joint*	1532	0	20.8	0
HP-07	2 inches above expansion joint*	1524	0	20.8	0
HP-08	2 inches above expansion joint*	1525	0	20.8	0
HP-09	2 inches above expansion joint*	1526	0	20.8	0
HP-10	2 inches above expansion joint*	1513	0	20.8	0
HP-11	2 inches above expansion joint*	1514	0	20.8	0
HP-12	2 inches above expansion joint*	1515	0	20.8	0
HP-13	2 inches above expansion joint*	1507	0	20.8	0
HP-14	2 inches above expansion joint*	1508	0	20.8	0
HP-15	2 inches above expansion joint*	1509	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1539	0	20.8	0
TD-02	4 inches below trench grate	1542	0	20.8	0
TD-03	4 inches below trench grate	1535	0	20.8	0
TD-04	4 inches below trench grate	1533	0	20.8	0
TD-05	4 inches below trench grate	1528	0	20.8	0
TD-06	4 inches below trench grate	1527	0	20.8	0
TD-07	4 inches below trench grate	1523	0	20.8	0
TD-08	4 inches below trench grate	1452	0	20.8	0
TD-09	4 inches below trench grate	1512	0	20.8	0
TD-10	4 inches below trench grate	1510	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1445	0	20.8	0
DC-02	4 inches below grate	1446	0	20.8	0
DC-03	4 inches below grate	1447	0	20.8	0
DC-04	4 inches below grate	1448	0	20.8	0
DC-05	4 inches below grate	1449	0	20.8	0
DC-06	4 inches below grate	1450	8	20.8	0
DC-07	4 inches below grate	1451	0	20.8	0
DC-08	4 inches below manhole lid	1455	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1433	0	20.8	0
PG-02	2 inches above ground surface	1432	0	20.8	0
PG-03	2 inches above ground surface	1431	0	20.8	0
PG-04	2 inches above ground surface	1430	0	20.8	0
PG-05	2 inches above ground surface	1429	0	20.8	0
PG-06	2 inches above ground surface	1501	0	20.8	0
PG-07	2 inches above ground surface	1500	0	20.8	0
PG-08	2 inches above ground surface	1459	0	20.8	0

PG-09	2 inches above ground surface	1458	0	20.8	0
PG-10	2 inches above ground surface	1502	0	20.8	0
PG-11	2 inches above ground surface	1503	0	20.8	0
PG-12	2 inches above ground surface	1457	0	20.8	0
PG-13	2 inches above ground surface	1504	0	20.8	0
PG-14	2 inches above ground surface	1456	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1420	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1421	100	15.8	0
PS-03	at spinner (4 ft above pavement)	1424	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1425	100	19.3	0
PS-05	at spinner (4 ft above pavement)	1427	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1428	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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: Derek Faulk Inspector Signature: _____

Date: 5/8/14 Barometric Pressure: 29.98" Temperature: 42° F

Weather conditions: Partly Cloudy Wind Direction: East Wind Speed: 3 mph

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

Instrument: MSA Altair 5X #1548 Calibration method and date: Pentane gas 5/2/14

Sample Location	Height (ft)	Time	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*	0835	0	20.8	0
HP-02	2 inches above expansion joint*	0836	0	20.8	0
HP-03	2 inches above expansion joint*	0836	0	20.8	0
HP-04	2 inches above expansion joint*	0832	0	20.8	0
HP-05	2 inches above expansion joint*	0833	0	20.8	0
HP-06	2 inches above expansion joint*	0833	0	20.8	0
HP-07	2 inches above expansion joint*	0829	0	20.8	0
HP-08	2 inches above expansion joint*	0829	0	20.8	0
HP-09	2 inches above expansion joint*	0830	0	20.8	0
HP-10	2 inches above expansion joint*	0826	0	20.8	0
HP-11	2 inches above expansion joint*	0827	0	20.8	0
HP-12	2 inches above expansion joint*	0827	0	20.8	0
HP-13	2 inches above expansion joint*	0823	0	20.8	0
HP-14	2 inches above expansion joint*	0824	0	20.8	0
HP-15	2 inches above expansion joint*	0824	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0838	0	20.8	0
TD-02	4 inches below trench grate	0837	0	20.8	0
TD-03	4 inches below trench grate	0834	0	20.8	0
TD-04	4 inches below trench grate	0834	0	20.8	0
TD-05	4 inches below trench grate	0831	0	20.8	0
TD-06	4 inches below trench grate	0831	0	20.8	0
TD-07	4 inches below trench grate	0828	0	20.8	0
TD-08	4 inches below trench grate	0828	0	20.8	0
TD-09	4 inches below trench grate	0826	0	20.8	0
TD-10	4 inches below trench grate	0825	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0858	0	20.8	0
DC-02	4 inches below grate	0858	0	20.8	0
DC-03	4 inches below grate	0857	0	20.8	0
DC-04	4 inches below grate	0856	0	20.8	0
DC-05	4 inches below grate	0855	0	20.8	0
DC-06	4 inches below grate	0854	0	20.8	0
DC-07	4 inches below grate	0853	0	20.8	0
DC-08	4 inches below manhole lid	0851	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0838	0	20.8	0
PG-02	2 inches above ground surface	0839	0	20.8	0
PG-03	2 inches above ground surface	0840	0	20.8	0
PG-04	2 inches above ground surface	0840	0	20.8	0
PG-05	2 inches above ground surface	0841	0	20.8	0
PG-06	2 inches above ground surface	0842	0	20.8	0
PG-07	2 inches above ground surface	0843	0	20.8	0
PG-08	2 inches above ground surface	0843	0	20.8	0

PG-09	2 inches above ground surface	0844	0	20.8	0
PG-10	2 inches above ground surface	0849	0	20.8	0
PG-11	2 inches above ground surface	0848	0	20.8	0
PG-12	2 inches above ground surface	0845	0	20.8	0
PG-13	2 inches above ground surface	0847	0	20.8	0
PG-14	2 inches above ground surface	0846	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0818	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0819	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0820	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0821	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0821	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0822	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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: Derek Faulk Inspector Signature: _____

Date: 5/14/14 Barometric Pressure: 30.51" Temperature: 40° F

Weather conditions: Sunny Wind Direction: N Wind Speed: 6 mph

Date and amount of last precipitation (within last 48 hours): 5/12/14 0.01" and 5/13/14 0.01"

Instrument: MSA Altair 5X #1307 Calibration method and date: Pentane gas 5/12/14

Sample Location	Height (ft)	Time	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*	1027	0	20.8	0
HP-02	2 inches above expansion joint*	1028	0	20.8	0
HP-03	2 inches above expansion joint*	1028	0	20.8	0
HP-04	2 inches above expansion joint*	1024	0	20.8	0
HP-05	2 inches above expansion joint*	1025	0	20.8	0
HP-06	2 inches above expansion joint*	1025	0	20.8	0
HP-07	2 inches above expansion joint*	1022	0	20.8	0
HP-08	2 inches above expansion joint*	1022	0	20.8	0
HP-09	2 inches above expansion joint*	1023	0	20.8	0
HP-10	2 inches above expansion joint*	1019	0	20.8	0
HP-11	2 inches above expansion joint*	1020	0	20.8	0
HP-12	2 inches above expansion joint*	1020	0	20.8	0
HP-13	2 inches above expansion joint*	1017	0	20.8	0
HP-14	2 inches above expansion joint*	1017	0	20.8	0
HP-15	2 inches above expansion joint*	1018	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1030	0	20.8	0
TD-02	4 inches below trench grate	1029	0	20.8	0
TD-03	4 inches below trench grate	1027	0	20.8	0
TD-04	4 inches below trench grate	1026	0	20.8	0
TD-05	4 inches below trench grate	1024	0	20.8	0
TD-06	4 inches below trench grate	1023	0	20.8	0
TD-07	4 inches below trench grate	1021	0	20.8	0
TD-08	4 inches below trench grate	1021	0	20.8	0
TD-09	4 inches below trench grate	1019	0	20.8	0
TD-10	4 inches below trench grate	1018	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1057	0	20.8	0
DC-02	4 inches below grate	1057	0	20.8	0
DC-03	4 inches below grate	1050	0	20.8	0
DC-04	4 inches below grate	1049	0	20.8	0
DC-05	4 inches below grate	1048	0	20.8	0
DC-06	4 inches below grate	1047	0	20.8	0
DC-07	4 inches below grate	1046	0	20.8	0
DC-08	4 inches below manhole lid	1044	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1030	0	20.8	0
PG-02	2 inches above ground surface	1031	0	20.8	0
PG-03	2 inches above ground surface	1032	0	20.8	0
PG-04	2 inches above ground surface	1032	0	20.8	0
PG-05	2 inches above ground surface	1033	0	20.8	0
PG-06	2 inches above ground surface	1034	0	20.8	0
PG-07	2 inches above ground surface	1035	0	20.8	0
PG-08	2 inches above ground surface	1036	0	20.8	0

PG-09	2 inches above ground surface	1036	0	20.8	0
PG-10	2 inches above ground surface	1041	0	20.8	0
PG-11	2 inches above ground surface	1040	0	20.8	0
PG-12	2 inches above ground surface	1037	0	20.8	0
PG-13	2 inches above ground surface	1039	0	20.8	0
PG-14	2 inches above ground surface	1038	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1011	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1011	100	19.3	0
PS-03	at spinner (4 ft above pavement)	1014	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1015	0	20.8	0
PS-05	at spinner (4 ft above pavement)	1015	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1016	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

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: Derek Faulk Inspector Signature: _____

Date: 5/21/14 Barometric Pressure: 30.24" Temperature: 60° F

Weather conditions: Partly Cloudy Wind Direction: S Wind Speed: 8 mph

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

Instrument: MSA Altair 5X #1552 Calibration method and date: Pentane gas 5/12/14

Sample Location	Height (ft)	Time	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*	1048	0	20.8	0
HP-02	2 inches above expansion joint*	1048	0	20.8	0
HP-03	2 inches above expansion joint*	1049	0	20.8	0
HP-04	2 inches above expansion joint*	1045	0	20.8	0
HP-05	2 inches above expansion joint*	1046	0	20.8	0
HP-06	2 inches above expansion joint*	1046	0	20.8	0
HP-07	2 inches above expansion joint*	1042	0	20.8	0
HP-08	2 inches above expansion joint*	1043	0	20.8	0
HP-09	2 inches above expansion joint*	1043	0	20.8	0
HP-10	2 inches above expansion joint*	1040	0	20.8	0
HP-11	2 inches above expansion joint*	1040	0	20.8	0
HP-12	2 inches above expansion joint*	1041	0	20.8	0
HP-13	2 inches above expansion joint*	1037	0	20.8	0
HP-14	2 inches above expansion joint*	1037	0	20.8	0
HP-15	2 inches above expansion joint*	1038	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1050	0	20.8	0
TD-02	4 inches below trench grate	1049	0	20.8	0
TD-03	4 inches below trench grate	1047	0	20.8	0
TD-04	4 inches below trench grate	1047	0	20.8	0
TD-05	4 inches below trench grate	1045	0	20.8	0
TD-06	4 inches below trench grate	1044	0	20.8	0
TD-07	4 inches below trench grate	1042	0	20.8	0
TD-08	4 inches below trench grate	1041	0	20.8	0
TD-09	4 inches below trench grate	1039	0	20.8	0
TD-10	4 inches below trench grate	1039	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1107	0	20.8	0
DC-02	4 inches below grate	1107	0	20.8	0
DC-03	4 inches below grate	1106	0	20.8	0
DC-04	4 inches below grate	1105	0	20.8	0
DC-05	4 inches below grate	1105	0	20.8	0
DC-06	4 inches below grate	1104	0	20.8	0
DC-07	4 inches below grate	1103	0	20.8	0
DC-08	4 inches below manhole lid	1101	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1050	0	20.8	0
PG-02	2 inches above ground surface	1051	0	20.8	0
PG-03	2 inches above ground surface	1052	0	20.8	0
PG-04	2 inches above ground surface	1053	0	20.8	0
PG-05	2 inches above ground surface	1053	0	20.8	0
PG-06	2 inches above ground surface	1054	0	20.8	0
PG-07	2 inches above ground surface	1054	0	20.8	0
PG-08	2 inches above ground surface	1055	0	20.8	0

PG-09	2 inches above ground surface	1055	0	20.8	0
PG-10	2 inches above ground surface	1058	0	20.8	0
PG-11	2 inches above ground surface	1058	0	20.8	0
PG-12	2 inches above ground surface	1056	0	20.8	0
PG-13	2 inches above ground surface	1057	0	20.8	0
PG-14	2 inches above ground surface	1057	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1029	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1031	50	20.3	0
PS-03	at spinner (4 ft above pavement)	1033	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1034	11	20.5	0
PS-05	at spinner (4 ft above pavement)	1035	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1036	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

Asphalt contractor on-site hot sealing asphalt cracks in MatCon and sealing concrete cracks in hangar pads.

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: Derek Faulk Inspector Signature: _____

Date: 5/28/14 Barometric Pressure: 30.30" Temperature: 76° F

Weather conditions: Partly Cloudy Wind Direction: S Wind Speed: 8 mph

Date and amount of last precipitation (within last 48 hours): 5/26/14 0.01"

Instrument: MSA Altair 5X #1307 Calibration method and date: Pentane gas 5/12/14

Sample Location	Height (ft)	Time	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*	1359	0	20.8	0
HP-02	2 inches above expansion joint*	1400	0	20.8	0
HP-03	2 inches above expansion joint*	1400	0	20.8	0
HP-04	2 inches above expansion joint*	1356	0	20.8	0
HP-05	2 inches above expansion joint*	1357	0	20.8	0
HP-06	2 inches above expansion joint*	1357	0	20.8	0
HP-07	2 inches above expansion joint*	1354	0	20.8	0
HP-08	2 inches above expansion joint*	1354	0	20.8	0
HP-09	2 inches above expansion joint*	1355	0	20.8	0
HP-10	2 inches above expansion joint*	1351	0	20.8	0
HP-11	2 inches above expansion joint*	1351	0	20.8	0
HP-12	2 inches above expansion joint*	1352	0	20.8	0
HP-13	2 inches above expansion joint*	1347	0	20.8	0
HP-14	2 inches above expansion joint*	1348	0	20.8	0
HP-15	2 inches above expansion joint*	1348	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	1401	0	20.8	0
TD-02	4 inches below trench grate	1401	0	20.8	0
TD-03	4 inches below trench grate	1359	0	20.8	0
TD-04	4 inches below trench grate	1358	0	20.8	0
TD-05	4 inches below trench grate	1356	NM	20.8	0
TD-06	4 inches below trench grate	1355	0	20.8	0
TD-07	4 inches below trench grate	1353	NM	20.8	0
TD-08	4 inches below trench grate	1352	0	20.8	0
TD-09	4 inches below trench grate	1350	NM	20.8	0
TD-10	4 inches below trench grate	1349	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	1422	0	20.8	0
DC-02	4 inches below grate	1421	0	20.8	0
DC-03	4 inches below grate	1421	0	20.8	0
DC-04	4 inches below grate	1420	0	20.8	0
DC-05	4 inches below grate	1419	0	20.8	0
DC-06	4 inches below grate	1418	0	20.8	0
DC-07	4 inches below grate	1417	0	20.8	0
DC-08	4 inches below manhole lid	1415	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	1403	0	20.8	0
PG-02	2 inches above ground surface	1404	0	20.8	0
PG-03	2 inches above ground surface	1405	0	20.8	0
PG-04	2 inches above ground surface	1405	0	20.8	0
PG-05	2 inches above ground surface	1406	0	20.8	0
PG-06	2 inches above ground surface	1407	0	20.8	0
PG-07	2 inches above ground surface	1408	0	20.8	0
PG-08	2 inches above ground surface	1408	0	20.8	0

PG-09	2 inches above ground surface	1409	0	20.8	0
PG-10	2 inches above ground surface	1412	0	20.8	0
PG-11	2 inches above ground surface	1412	0	20.8	0
PG-12	2 inches above ground surface	1410	0	20.8	0
PG-13	2 inches above ground surface	1411	0	20.8	0
PG-14	2 inches above ground surface	1410	0	20.8	0
PS-01	at spinner (4 ft above pavement)	1339	0	20.8	0
PS-02	at spinner (4 ft above pavement)	1340	100	19.3	0
PS-03	at spinner (4 ft above pavement)	1343	0	20.8	0
PS-04	at spinner (4 ft above pavement)	1344	35	20.1	0
PS-05	at spinner (4 ft above pavement)	1345	0	20.8	0
PS-06	at spinner (4 ft above pavement)	1346	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

NM – Not measured because standing water in trench drain.

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: _Jeff Walterscheid_____ Inspector Signature: _____

Date: _6/5/14_ Barometric Pressure: ___30.13”___ Temperature: ___70° F___

Weather conditions: ___Fair _____ Wind Direction: _NE __ Wind Speed: _3_ mph

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

Instrument: _MSA Altair 5X_#1584_Calibration method and date: _ Pentane gas 5/29/14_

Sample Location	Height (ft)	Time	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*	0904	0	20.8	0
HP-02	2 inches above expansion joint*	0905	0	20.8	0
HP-03	2 inches above expansion joint*	0906	0	20.8	0
HP-04	2 inches above expansion joint*	0859	0	20.8	0
HP-05	2 inches above expansion joint*	0900	0	20.8	0
HP-06	2 inches above expansion joint*	0901	0	20.8	0
HP-07	2 inches above expansion joint*	0854	0	20.8	0
HP-08	2 inches above expansion joint*	0855	0	20.8	0
HP-09	2 inches above expansion joint*	0855	0	20.8	0
HP-10	2 inches above expansion joint*	0851	0	20.8	0
HP-11	2 inches above expansion joint*	0851	0	20.8	0
HP-12	2 inches above expansion joint*	0852	0	20.8	0
HP-13	2 inches above expansion joint*	0846	0	20.8	0
HP-14	2 inches above expansion joint*	0847	0	20.8	0
HP-15	2 inches above expansion joint*	0848	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0907	0	20.8	0
TD-02	4 inches below trench grate	0910	0	20.8	0
TD-03	4 inches below trench grate	0902	0	20.8	0
TD-04	4 inches below trench grate	0903	0	20.8	0
TD-05	4 inches below trench grate	0856	0	20.8	0
TD-06	4 inches below trench grate	0857	0	20.8	0
TD-07	4 inches below trench grate	0852	0	20.8	0
TD-08	4 inches below trench grate	0853	0	20.8	0
TD-09	4 inches below trench grate	0849	0	20.8	0
TD-10	4 inches below trench grate	0850	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0930	0	20.8	0
DC-02	4 inches below grate	0929	0	20.8	0
DC-03	4 inches below grate	0928	0	20.8	0
DC-04	4 inches below grate	0927	0	20.8	0
DC-05	4 inches below grate	0926	0	20.8	0
DC-06	4 inches below grate	0925	0	20.8	0
DC-07	4 inches below grate	0924	0	20.8	0
DC-08	4 inches below manhole lid	0923	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0911	0	20.8	0
PG-02	2 inches above ground surface	0912	0	20.8	0
PG-03	2 inches above ground surface	0913	0	20.8	0
PG-04	2 inches above ground surface	0914	0	20.8	0
PG-05	2 inches above ground surface	0914	0	20.8	0
PG-06	2 inches above ground surface	0915	0	20.8	0
PG-07	2 inches above ground surface	0916	0	20.8	0
PG-08	2 inches above ground surface	0916	0	20.8	0

PG-09	2 inches above ground surface	0917	0	20.8	0
PG-10	2 inches above ground surface	0918	0	20.8	0
PG-11	2 inches above ground surface	0919	0	20.8	0
PG-12	2 inches above ground surface	0920	0	20.8	0
PG-13	2 inches above ground surface	0921	0	20.8	0
PG-14	2 inches above ground surface	0922	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0840	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0841	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0842	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0843	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0844	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0845	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

NM – Not measured, standing water in trench drain.

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: _Jeff Walterscheid_____ Inspector Signature: _____

Date: _6/13/14_ Barometric Pressure: ___30.27”___ Temperature: __ 65° F___

Weather conditions: __ Overcast ____ Wind Direction: _S __ Wind Speed: _9_ mph

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

Instrument: _MSA Altair 5X_#1552 Calibration method and date: _ Pentane gas 6/9/14

Week of June 9, 2014

Sample Location	**Height (ft)**	**Time**	**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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	0	20.8	0
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	0	20.8	0
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	0	20.8	0
TD-02	4 inches below trench grate	0919	0	20.8	0
TD-03	4 inches below trench grate	0920	0	20.8	0
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	0	20.8	0
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	100	20.8	0
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

NM – Not measured, standing water in trench drain.

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: _6/19/14_ Barometric Pressure: ___30.28”___ Temperature: __ 63° F___

Weather conditions: ___Mostly Sunny _____ Wind Direction: _E ___ Wind Speed: _8_ mph

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

Instrument: _MSA Altair 5X_#1552 Calibration method and date: _ Pentane gas 6/9/14

Week of June 9, 2014

Sample Location	**Height (ft)**	**Time**	**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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	0	20.8	0
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	0	20.8	0
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	0	20.8	0
TD-02	4 inches below trench grate	0919	0	20.8	0
TD-03	4 inches below trench grate	0920	0	20.8	0
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	0	20.8	0
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2

Comments:

NM – Not measured, standing water in trench drain.

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: _6/26/14_ Barometric Pressure: ___30.12”___ Temperature: __ 69° F___

Weather conditions: ___Mostly Sunny _____ Wind Direction: _S ___ Wind Speed: _10_ mph

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

Instrument: _MSA Altair 5X_#1552 Calibration method and date: _ Pentane gas 6/9/14

Week of June 9, 2014

Sample Location	**Height (ft)**	**Time**	**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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	0	20.8	0
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	0	20.8	0
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	NM	NM	NM
TD-03	4 inches below trench grate	0920	0	20.8	0
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	0	20.8	0
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	3	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	100	16	1% H2S
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	20	20.4	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
Hydrogen Sulfide = H2S

Comments:

NM – Not measured, standing water in trench drain.

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: 7/2/14 Barometric Pressure: 30.36" Temperature: 61° F

Weather conditions: Cloudy Wind Direction: W Wind Speed: 12 mph

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

Instrument: MSA Altair 5X #1552 Calibration method and date: Pentane gas 6/9/14

Week of July 1, 2014

Sample Location	Height (ft)	Time	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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	0	20.8	0
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	0	20.8	0
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	NM	NM	NM
TD-03	4 inches below trench grate	0920	0	20.8	0
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	0	20.8	0
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	0	20.8	0
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	10	20.8	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
Hydrogen Sulfide = H2S

Comments:

NM – Not measured, standing water in trench drain.

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: 7/10/14 Barometric Pressure: 30.31" Temperature: 68° F

Weather conditions: Mostly sunny Wind Direction: n/a Wind Speed: calm

Date and amount of last precipitation (within last 48 hours): 0.58"

Instrument: MSA Altair 5X #1501 Calibration method and date: Pentane gas 6/20/14

Week of July 7, 2014

Sample Location	Height (ft)	Time	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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	NM	NM	NM
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	NM	NM	NM
HP-08	2 inches above expansion joint*	0907	NM	NM	NM
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	NM	NM	NM
HP-11	2 inches above expansion joint*	0911	NM	NM	NM
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	NM	NM	NM
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	NM	NM	NM
TD-03	4 inches below trench grate	0920	NM	NM	NM
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	NM	NM	NM
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	NM	NM	NM
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	7%	20.8	0
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	0	20.8	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 7/17/14 Barometric Pressure: 30.22" Temperature: 64° F

Weather conditions: Fair Wind Direction: S Wind Speed: 7 mph

Date and amount of last precipitation (within last 48 hours): 1.26"

Instrument: MSA Altair 5X #1501 Calibration method and date: Pentane gas 6/20/14

Week of July 14, 2014

Sample Location	Height (ft)	Time	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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	NM	NM	NM
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	NM	NM	NM
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	0	20.8	0
TD-03	4 inches below trench grate	0920	NM	NM	NM
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	NM	NM	NM
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	100%	19.1	0
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	84	19.3	0
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 7/21/14 Barometric Pressure: 30.45" Temperature: 71° F

Weather conditions: Fair Wind Direction: E Wind Speed: 5 mph

Date and amount of last precipitation (within last 48 hours): 0.01"

Instrument: MSA Altair 5X #1550 Calibration method and date: Pentane gas 6/30/14

Week of July 24, 2014

Sample Location	Height (ft)	Time	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*	0900	0	20.8	0
HP-02	2 inches above expansion joint*	0901	0	20.8	0
HP-03	2 inches above expansion joint*	0902	0	20.8	0
HP-04	2 inches above expansion joint*	0903	0	20.8	0
HP-05	2 inches above expansion joint*	0904	0	20.8	0
HP-06	2 inches above expansion joint*	0905	0	20.8	0
HP-07	2 inches above expansion joint*	0906	NM	NM	NM
HP-08	2 inches above expansion joint*	0907	0	20.8	0
HP-09	2 inches above expansion joint*	0908	0	20.8	0
HP-10	2 inches above expansion joint*	0909	0	20.8	0
HP-11	2 inches above expansion joint*	0911	0	20.8	0
HP-12	2 inches above expansion joint*	0912	0	20.8	0
HP-13	2 inches above expansion joint*	0913	NM	NM	NM
HP-14	2 inches above expansion joint*	0915	0	20.8	0
HP-15	2 inches above expansion joint*	0916	0	20.8	0

Trench drains (west side of each hangar pad)					
TD-01	4 inches below trench grate	0918	NM	NM	NM
TD-02	4 inches below trench grate	0919	0	20.8	0
TD-03	4 inches below trench grate	0920	NM	NM	NM
TD-04	4 inches below trench grate	0921	0	20.8	0
TD-05	4 inches below trench grate	0923	NM	NM	NM
TD-06	4 inches below trench grate	0924	0	20.8	0
TD-07	4 inches below trench grate	0925	0	20.8	0
TD-08	4 inches below trench grate	0926	0	20.8	0
TD-09	4 inches below trench grate	0927	0	20.8	0
TD-10	4 inches below trench grate	0928	0	20.8	0
Drainage culverts (drainage inlets on the buried storm sewer lines)					
DC-01	4 inches below grate	0955	0	20.8	0
DC-02	4 inches below grate	0954	0	20.8	0
DC-03	4 inches below grate	0953	0	20.8	0
DC-04	4 inches below grate	0952	0	20.8	0
DC-05	4 inches below grate	0951	0	20.8	0
DC-06	4 inches below grate	0950	0	20.8	0
DC-07	4 inches below grate	0949	0	20.8	0
DC-08	4 inches below manhole lid	0948	0	20.8	0
Northern perimeter (ground and spinner [wind turbine] locations)					
PG-01	2 inches above ground surface	0931	0	20.8	0
PG-02	2 inches above ground surface	0932	0	20.8	0
PG-03	2 inches above ground surface	0933	0	20.8	0
PG-04	2 inches above ground surface	0934	0	20.8	0
PG-05	2 inches above ground surface	0935	0	20.8	0
PG-06	2 inches above ground surface	0936	0	20.8	0
PG-07	2 inches above ground surface	0938	0	20.8	0
PG-08	2 inches above ground surface	0939	0	20.8	0

PG-09	2 inches above ground surface	0940	0	20.8	0
PG-10	2 inches above ground surface	0942	0	20.8	0
PG-11	2 inches above ground surface	0943	0	20.8	0
PG-12	2 inches above ground surface	0945	0	20.8	0
PG-13	2 inches above ground surface	0946	0	20.8	0
PG-14	2 inches above ground surface	0947	0	20.8	0
PS-01	at spinner (4 ft above pavement)	0850	0	20.8	0
PS-02	at spinner (4 ft above pavement)	0851	100%	14.9	H2S: 5 ppm; CO 1 ppm
PS-03	at spinner (4 ft above pavement)	0853	0	20.8	0
PS-04	at spinner (4 ft above pavement)	0854	0	20.8	0
PS-05	at spinner (4 ft above pavement)	0855	38%	20.4	H2S: 1 ppm
PS-06	at spinner (4 ft above pavement)	0856	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 7/31/14 Barometric Pressure: 30.40" Temperature: 76° F

Weather conditions: Overcast Wind Direction: Calm Wind Speed: 0

Date and amount of last precipitation (within last 48 hours): 0.14"

Instrument: MSA Altair 5X #1543 Calibration method and date: Pentane gas 7/21/14

Week of July 28, 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	0	20.8	0
HP-04	2 inches above expansion joint*	0948	0	20.8	0
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	NM	NM	NM
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	NM	NM	NM
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%	18.9	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	24%	20.4	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 8/7/14 Barometric Pressure: 30.29" Temperature: 76° F

Weather conditions: Mostly Cloudy Wind Direction: S Wind Speed: 8

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

Instrument: MSA Altair 5X #1543 Calibration method and date: Pentane gas 7/21/14

Week of August 3, 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	0	20.8	0
HP-04	2 inches above expansion joint*	0948	0	20.8	0
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	NM	NM	NM
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	NM	NM	NM
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%	18.7	0
PS-03	at spinner (4 ft above pavement)	0942	100%	18.7	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 8/14/14 Barometric Pressure: 30.36" Temperature: 63° F

Weather conditions: Fair Wind Direction: Calm Wind Speed: NA

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

Instrument: MSA Altair 5X #1543 Calibration method and date: Pentane gas 7/21/14

Week of August 10, 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	0	20.8	0
HP-04	2 inches above expansion joint*	0948	0	20.8	0
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	NM	NM	NM
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%	19.7	0
PS-03	at spinner (4 ft above pavement)	0942	62%	19.7	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 8/21/14 Barometric Pressure: 30.29" Temperature: 67° F

Weather conditions: Fair Wind Direction: E Wind Speed: 3

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

Instrument: MSA Altair 5X #1410 Calibration method and date: Pentane gas 8/19/14

Week of August 17, 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	0	20.8	0
HP-04	2 inches above expansion joint*	0948	0	20.8	0
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	NM	NM	NM
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	82%	19.7	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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 8/28/14 Barometric Pressure: 30.32" Temperature: 58° F

Weather conditions: Fair Wind Direction: NE Wind Speed: 3

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

Instrument: MSA Altair 5X #1410 Calibration method and date: Pentane gas 8/19/14

Week of August 24, 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	0	20.8	0
HP-04	2 inches above expansion joint*	0948	0	20.8	0
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	NM	NM	NM
TD-06	4 inches below trench grate	1009	0	20.8	0
TD-07	4 inches below trench grate	1010	NM	NM	NM
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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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: 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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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 = CH_4
Oxygen = O_2
Carbon dioxide = CO_2
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.

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

Date: 9/18/14

Inspector Printed Name: Joseph Sena

Inspector Signature: Joseph J Sena

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

Wind Speed: 3mph 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 - RKI 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.

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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: Joseph J Sena

Barometric Pressure: 30.42in 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 RKI 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.~~ TMA					
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: 10-3-2021

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.45 Temperature: 54 Wind Direction: E

Wind Speed: 3 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:

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)	1033	0	20.9	0
PS-02	at spinner (4 ft above pavement)	1035	100	16.7	0
PS-03	at spinner (4 ft above pavement)	1038	0	20.9	0
PS-04	at spinner (4 ft above pavement)	1040	0	20.9	0
PS-05	at spinner (4 ft above pavement)	1043	0	20.9	0
PS-06	at spinner (4 ft above pavement)	1045	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: 10/9/14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.13 Temperature: 51 Wind Direction: N

Wind Speed: ~~calm~~ 7mph Weather Conditions: Overcast

Date and amount of last precipitation (within last 48 hours): 10/9/14 .06 in

Weather Data Source: Los Alamos Airport - National Weather Service

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

Comments: With little rain, puddling in expected areas as well as slight puddling on all pads.

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)	10:19	0	20.9	0
PS-02	at spinner (4 ft above pavement)	10:22	100%	15.2	0
PS-03	at spinner (4 ft above pavement)	10:24	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)	10:28	0	20.9	0
PS-06	at spinner (4 ft above pavement)	10:30	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: 10-16-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.27 Temperature: 58 Wind Direction: East

Wind Speed: 6 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:

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)	1130	0	20.9	0
PS-02	at spinner (4 ft above pavement)	1133	100	16.9	0
PS-03	at spinner (4 ft above pavement)	1136	0	20.9	0
PS-04	at spinner (4 ft above pavement)	1138	0	20.9	0
PS-05	at spinner (4 ft above pavement)	1142	100	17.9	0
PS-06	at spinner (4 ft above pavement)	1145	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: 10-22-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.29 Temperature: 54 Wind Direction: NE

Wind Speed: 3 Weather Conditions: Fair

Date and amount of last precipitation (within last 48 hours): .02 in

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) %
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)	1122	0	20.9	0
PS-02	at spinner (4 ft above pavement)	1125	98	18.3	0
PS-03	at spinner (4 ft above pavement)	1127	0	20.9	0
PS-04	at spinner (4 ft above pavement)	1130	0	20.9	0
PS-05	at spinner (4 ft above pavement)	1133	46	18.6	0
PS-06	at spinner (4 ft above pavement)	1135	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: 10-29-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T. Sena

Barometric Pressure: 30.37 Temperature: 49 Wind Direction: NE

Wind Speed: 5 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 RK14-600

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)	11:18	0	20.9	0
PS-02	at spinner (4 ft above pavement)	11:21	100	13.4	0
PS-03	at spinner (4 ft above pavement)	11:23	0	20.9	0
PS-04	at spinner (4 ft above pavement)	11:24	0	20.9	0
PS-05	at spinner (4 ft above pavement)	11:28	~~96~~ EMM 100	16.3	0
PS-06	at spinner (4 ft above pavement)	11:29	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: 11-5-14

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:
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: 11-19-114

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

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: 11/26/14

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

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: 12-4-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.12 Temperature: 40 Wind Direction: Calm

Wind Speed: Calm Weather Conditions: Fog

Date and amount of last precipitation (within last 48 hours): 12-4-14 .03

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX-2012 Calibration method and date: 9-18-14 RK14-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)	10:05	0	20.9	0
PS-02	at spinner (4 ft above pavement)	10:08	100	13	0
PS-03	at spinner (4 ft above pavement)	10:12	100	8.5	0
PS-04	at spinner (4 ft above pavement)	10:14	0	20.9	0
PS-05	at spinner (4 ft above pavement)	10:16	100	11.8	0
PS-06	at spinner (4 ft above pavement)	10:18	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: 12/11/14

Inspector Printed Name: Felicia Aguilar

Inspector Signature: Felicia M. Aguilar

Barometric Pressure: 30.20 Temperature: 53°F Wind Direction: E

Wind Speed: 6 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 RK14-gas

Comments: none

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)	1:33	0	20.9	0
PS-02	at spinner (4 ft above pavement)	1:35	100	14.4	0
PS-03	at spinner (4 ft above pavement)	1:37	0	20.9	0
PS-04	at spinner (4 ft above pavement)	1:38	0	20.9	0
PS-05	at spinner (4 ft above pavement)	1:39	100	17.6	0
PS-06	at spinner (4 ft above pavement)	1:41	100	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: 12-19-14

Inspector Printed Name: Joseph T. Sena

Inspector Signature: Joseph T Sena

Barometric Pressure: 30.20 Temperature: 30 Wind Direction: NE

Wind Speed: 7 Weather Conditions: fair

Date and amount of last precipitation (within last 48 hours): 12-17-14 .03

Weather Data Source: Los Alamos Airport - National Weather Service

Instrument: GX-2012 Calibration method and date: 9-18-14 RKI 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)	12:38	0	20.9	0
PS-02	at spinner (4 ft above pavement)	12:48	100	15.4	0
PS-03	at spinner (4 ft above pavement)	12:56	0	20.9	0
PS-04	at spinner (4 ft above pavement)	13:04	0	20.9	0
PS-05	at spinner (4 ft above pavement)	13:12	100	16.3	0
PS-06	at spinner (4 ft above pavement)	13:20	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)
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WEEKLY, AIRPORT LANDFILL SWMU 73-001(a) and DEBRIS DISPOSAL AREA, SWMU 73-001(d GAS MONITORING

Date: 12/26/14

Inspector Printed Name: Felicia Aguilar

Inspector Signature: Felicia M. Aguilar

Barometric Pressure: 29.81 Temperature: 27° Wind Direction: W

Wind Speed: 16 Weather Conditions: Partly 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 - RKI 4gas

Comments: none

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)	15:15	0	20.9	0
PS-02	at spinner (4 ft above pavement)	15:17	0	20.9	0
PS-03	at spinner (4 ft above pavement)	15:19	0	20.9	0
PS-04	at spinner (4 ft above pavement)	15:21	0	20.7	0
PS-05	at spinner (4 ft above pavement)	15:23	7	20.5	0
PS-06	at spinner (4 ft above pavement)	15:24	0	20.7	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.

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: 12/29/14

Inspector Printed Name: Felicia Aguilar

Inspector Signature: Felicia M Aguilar

Barometric Pressure: 29.95 in Temperature: 29°F Wind Direction: SE

Wind Speed: 8 mph 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: none

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)	1255	0	20.9	0
PS-02	at spinner (4 ft above pavement)	1257	100	11.8	0
PS-03	at spinner (4 ft above pavement)	1258	0	20.9	0
PS-04	at spinner (4 ft above pavement)	1259	0	20.9	0
PS-05	at spinner (4 ft above pavement)	1301	68	18.6	0
PS-06	at spinner (4 ft above pavement)	1303	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.

Appendix F, After Significant Rainfall Inspection Checklists

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: July 16, 2014 Time: 0900 Printed Name: John Wilcox Signature: _____
Figure(s): Photos attached.
Weather: temperature: 59 degrees wind: calm, last significant rain/snow: Approximately 1.13 inches of rain July 15-16, 2014.
Weather Data Source: Los Alamos Airport - National Weather Service.

Significant Rainfall Inspection July 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M				
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Intact	No		
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR	Intact and functional	No		

Inspection Checklist Airport Landfill (form modified April, 2011)

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	No evidence of cracks, bulges, separation, spalling or pop-outs was observed. Due to the large amount of rain and saturated soil conditions some minor erosion was observed directly above and along the edges of the rock retaining walls, this is not expected to be of concern.	No		
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR	Grated trenches have previously identified cracks and subsidence; they are clear of trash and any blockages. Subsidence of the northern end of the concrete pads has caused improper drainage of all trenches associated with the hangar pads. Sediment has accumulated in the trenches, standing water is evident. Cracking and subsidence are not associated with the significant rainfall event.	Yes		
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR	All 8 inlets are functional	No		
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR	No evidence that pollutants from spills have entered the storm water system.	No		
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR	No	Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR	Functional	No		
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR	Wattles have sediment retention in some areas, but appear functional and intact.	No		
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Functional with no concerns noted during the inspection	No		

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Inspection covers rain event on July 15-16, 2013. .

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009*.

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.
Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1. Trench drain north side of hangar pad #3.

Photo 2. Trench drain north side of hangar pad #2.

Photo 3. Rock drainage channel at east end of site.

Photo 4. East-west rock drainage channel at site.

Photo 5. View of vegetated slopes.

Photo 6. West rock retaining wall with straw wattle area.

Photo 7. East rock retaining wall.

Photo 8. Concrete retaining wall and wattle slope.

Photo 9. Wattle slope and retention area.

Photo 10. Retention area at base of concrete retaining wall.

Photo 11. Wattle slope.

Photo 12. Perimeter fence has been repaired.

Photo 13. Perimeter fence damage has been repaired.

Photo 14. View of debris disposal area.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: Aug 1, 2014 Time: 1000 Printed Name: John Wilcox Signature: _____
Figure(s): Photos attached.
Weather: temperature: 60 degrees wind: calm, last significant rain/snow: Approximately 0.85 inches of rain July 31, 2014.
Weather Data Source: Los Alamos Airport - National Weather Service.

Significant Rainfall Inspection July 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M				
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Intact	No		
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR	Intact and functional	No		

Inspection Checklist Airport Landfill (form modified April, 2011)

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	No evidence of cracks, bulges, separation, spalling or pop-outs was observed. Due to the large amount of rain and saturated soil conditions some minor erosion was observed directly above and along the edges of the rock retaining walls, this is not expected to be of concern.	No		
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR	Grated trenches have previously identified cracks and subsidence; they are clear of trash and any blockages. Subsidence of the northern end of the concrete pads has caused improper drainage of all trenches associated with the hangar pads. Sediment has accumulated in the trenches, standing water is evident. Cracking and subsidence are not associated with the significant rainfall event.	Yes		
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR	All 8 inlets appear to be functional	No		
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR	No evidence that pollutants from spills have entered the storm water system.	No		
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR	Some sediment is being carried off site through the retention area and chain link fence.	Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR	Functional.	No		
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR	Wattles have sediment retention in some areas, but appear functional and intact.	No		
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Functional with no concerns noted during the inspection.	No		

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Inspection covers rain event on July 31, 2013. .

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009*.

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.
Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1. Trench drain north side of hangar pad #3.

Photo 2. Trench drain north side of hangar pad #2.

Photo 3. Rock drainage channel at east end of site.

Photo 4. East-west rock drainage channel at site.

Photo 5. View of vegetated slopes.

Photo 6. West rock retaining wall with straw wattle area.

Photo 7. East rock retaining wall.

Photo 8. Wattle slope and retention area.

Photo 9. Concrete retaining wall and wattle slope.

Photo 10. Retention area at base of concrete retaining wall.

Photo 11. Wattle slope.

Photo 12. Perimeter fence is still intact.

Photo 13. Perimeter fence damage has been repaired.

Photo 14. View of debris disposal area.

Inspection Checklist for the Airport Landfill, SWMU 73-001(a) and Debris Disposal Area, SWMU 73-001(d)

Date: Sep 8, 2014 Time: 1055 Printed Name: John Wilcox Signature: _____
Figure(s): Photos attached.
Weather: temperature: 68 degrees wind: S 7, last significant rain/snow: Approximately 0.37 inches of rain on September 5, 2014.
Weather Data Source: Los Alamos Airport - National Weather Service.

Significant Rainfall Inspection September 8, 2014

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Airport Landfill					
MatCon Asphalt Pavement: cracks, gaps, spalling, subsidence	M				
Concrete Hangar Pads (5) and expansion joints: cracks, gaps, spalling, pop-outs, separation of pad from asphalt, subsidence	M				
Survey Benchmark on each hangar pad: accessible, attached to concrete pad	M				

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Gas Collection System: Turbines (6) along northern edge of asphalt pavement and 1 stub-out on southern edge of asphalt pavement: debris, functional, accessible	A				
Measure landfill-gas concentrations using Landfill Gas Monitoring Form: any values greater than 25% of the methane LEL (lower explosive limit)?	Q or B				
Seeded Areas & Turf Reinforcement Mats: barren areas >1,000 square feet, tears, animals burrows >4 inches deep, subsidence >1 ft, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Intact	No		
Gravel drainage channels (3): subsidence, erosion, clear of trash, soil, other blockages	A, ASR	Intact and functional	No		

Inspection Checklist Airport Landfill (form modified April, 2011)

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Concrete Retaining Wall & 2 Rock Retaining Walls: cracks, bulges, separation, rotation, nearby erosion, spalling, pop-outs, drain pipes (3) open at gravel drainage channel	A, ASR	No evidence of cracks, bulges, separation, spalling or pop-outs was observed. Due to the large amount of rain and saturated soil conditions some minor erosion was observed directly above and along the edges of the rock retaining walls, this is not expected to be of concern.	No		
Grated Trenches (6): cracks; clear of trash, soil, other blockages, draining properly, standing water, subsidence	A, ASR	Grated trenches have previously identified cracks and subsidence; they are clear of trash and any blockages. Subsidence of the northern end of the concrete pads has caused improper drainage of all trenches associated with the hangar pads. Sediment has accumulated in the trenches, standing water is evident. Cracking and subsidence are not associated with the significant rainfall event.	Yes		
Drainage inlets (8): functional, grates not blocked by trash, soil, other material	A, ASR	All 8 inlets appear to be functional	No		
Evidence that pollutants (spills) have entered the storm-water system?	A, ASR	No evidence that pollutants from spills have entered the storm water system.	No		
Sediment washing off the site? If so, map the location[s] in logbook	A, ASR	Some sediment is being carried off site through the retention area and chain link fence.	Yes		

Component: Concern(s)	Inspection Frequency*	Inspection Findings	Corrective Action Needed Yes/No?	Description of Corrective Action	Corrective Action Completion Date
Outfall Pipe: secure, blockage, significant erosion, soil staining, manhole in place	A, ASR	Functional.	No		
Straw-wattle areas between retaining walls and fence: wattles in place, erosion, rills	A, ASR	Wattles have sediment retention in some areas, but appear functional and intact.	No		
Debris Disposal Area					
Seeded (hydromulched) Areas: animals burrows >4 inches deep, barren areas >1,000 square feet, subsidence >1 ft deep, rills/cracks >4 inches deep, large vegetation (trees, shrubs, bushes, deep-rooting weeds)	A, ASR	Functional with no concerns noted during the inspection.	No		

Comments:

1. Inspection form modified per DOE verbal instruction May 3, 2011 to include inspection findings.
2. Inspection covers rain event on July 31, 2013. .

Component locations are shown on Figure 2 of the *Final Implementation Strategy for Post Closure and Maintenance of the DOE/NNSA LASO Airport Landfill SWMU 73-001(a) and Debris Disposal Area SWMU 73-001(d), Los Alamos County Airport, New Mexico, July 2009.*

*Inspection Frequency: A= annual, ASR = After Significant Rainfall, B = biannual (twice a year), M = Monthly, Q = quarterly.
Note: If an additional component(s) is installed for the Airport Landfill, the component(s) can be added in the blank row.

Photo 1. Trench drain north side of hangar pad #3.

Photo 2. Asphalt area on north side of hangar pad #2.

Photo 3. Rock drainage channel at east end of site.

Photo 4. View of vegetated slopes.

Photo 5. Wattle slope and retention area.

Photo 6. Concrete retaining wall and wattle slope.

Photo 7. View of debris disposal area.